Revised
Public Review Draft

Oregon Highway 140 Corridor Strategy

Medford *to* Lakeview
(Region 4 portion)

Oregon Department of Transportation

Region 4
P.O. Box 5309
Bend, Oregon 97708

September 1995

Oregon Highway 140 Corridor Strategy

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Introduction

The Oregon Department of Transportation (ODOT) has embarked on a new approach to identify projects for the Oregon Transportation Improvement Program. This new approach, named Corridor Planning, is intended to implement the goals and policies set forth by the 1992 Oregon Transportation Plan (OTP), the 1991 Highway Plan and the recent Modal Plans for rail, freight, bike/pedestrian, aeronautics and transit.

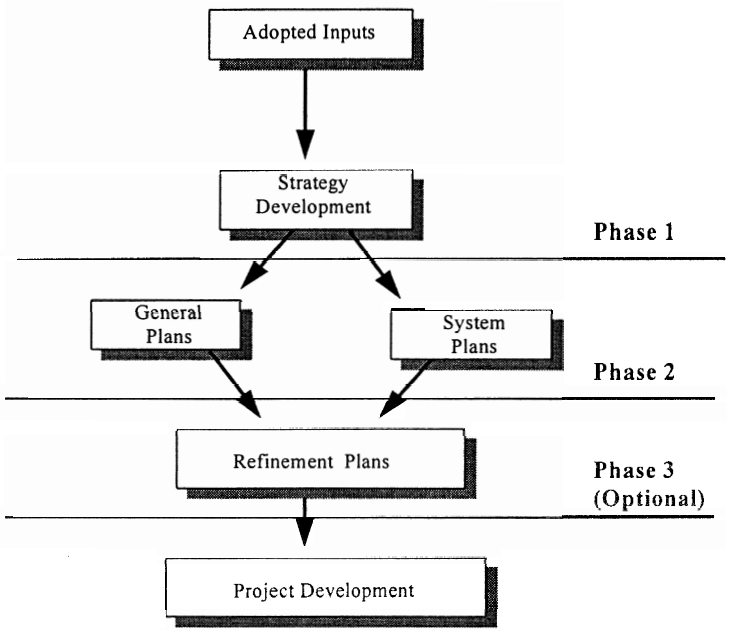
The OTP, Oregon Highway Plan and Modal Plans provide statewide transportation goals and policies, and identify transportation corridors and facilities of statewide importance. Corridor Plans are intended to build upon this multimodal statewide planning framework by focusing on long-term planning and development of all modes within specific transportation corridors. Transportation corridors are identified as major or high volume routes for moving people, goods and services from one point to another.

Over the next six years, ODOT will complete Corridor Plans for 30 transportation corridors throughout Oregon, including Oregon Highway 140 (OR 140). Generally, each corridor plan will:

- Translate the policies of the OTP into specific actions;
- Describe the functions of each transportation mode, consider trade offs, and show how they will be managed;
- Identify and prioritize improvements for all modes of travel;
- Indicate where improvements should be made;
- Resolve any conflicts with local land use ordinances and plans; and
- Establish guidelines for how transportation plans will be implemented.

Corridor Planning Process

Corridor planning is a three-phased approach toward project development and construction, as illustrated below.



This Draft Corridor Strategy document is the outcome of the initial Strategy Development phase of Corridor Planning. The Corridor Strategy is intended to set the stage for more detailed analysis of modal trade offs and improvement priorities during the next two phases of Corridor Planning. The Corridor Strategy evaluates long-term transportation requirements, multimodal issues and recommends general improvement objectives to address corridor-wide issues and requirements.

The second phase of Corridor Planning will specifically address the objectives set forth in the Corridor Strategy. During this phase, specific transportation improvements will be identified and prioritized as two types of transportation plans, General Plans for counties and Systems Plans for cities, will be prepared. The third and final phase leads to project development through Refinement Planning for specific projects to resolve any outstanding environmental, land use and design issues.

Corridor Planning will be used by ODOT to guide its stewardship of the corridor, including the update of the Statewide Transportation Improvement Program (STIP). Also, the Oregon Transportation Planning Rule (TPR), OAR 660 Division 12, requires

jurisdictions to prepare and adopt local or regional transportation plans (Phase 2 of Corridor Planning) and incorporate them into city and county comprehensive plans.

Corridor Strategy Document

As the first step in the Corridor Planning process, this Public Review Draft describes long-term (20 year) transportation improvement and performance objectives along OR 140. General planning objectives have been identified for all modes of transportation in the corridor. These objectives, in combination, formulate the Corridor Strategy for OR 140.

This Public Review Draft is an interim working document that has been developed by the Corridor Planning Management Team (CPMT) with involvement by local citizens and other stakeholders. The CPMT is composed of representatives from ODOT Region 4 and local governments within the Highway 140 Corridor. A series of workshops, CPMT meetings and Corridor Advisory Group (CAG) stakeholder meetings will be held to review and refine the Corridor Strategy in an effort to complete a draft final Corridor Strategy document by fall/winter 1995.

Corridor Description

The OR 140 Corridor stretches approximately 167.6 miles from Medford to Lakeview, as shown on Maps 1A and 1B. The corridor includes sections of Highway 62 from Medford to Eagle Point (5.5 miles), OR 140 from Eagle Point to the junction with Highway 39 in Klamath Falls (74.9 miles), and OR 140 from Highway 39 to Highway 395 in Lakeview(92.7 miles). The portion of OR 140 within Region 4, which extends from east of Eagle Point to Lakeview, is the subject of this corridor strategy. However, at the request of Corridor Management Team representatives, a specific objective pertaining to the Lakeview to Nevada segment has been added. OR 140 is considered the vital east-west connector to Lakeview and is an important route for local traffic, agricultural and wood product distribution and tourism.

Relevant information includes:

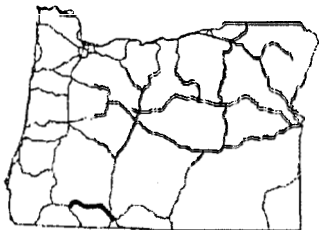
- The route was originally developed to connect several remote logging roads.

- The corridor passes through significant natural resource areas including the Rogue River, National Forest, Winema National Forest, Fremont National Forest, the Cascades and Upper Klamath Lake Basin.

MAP 1A

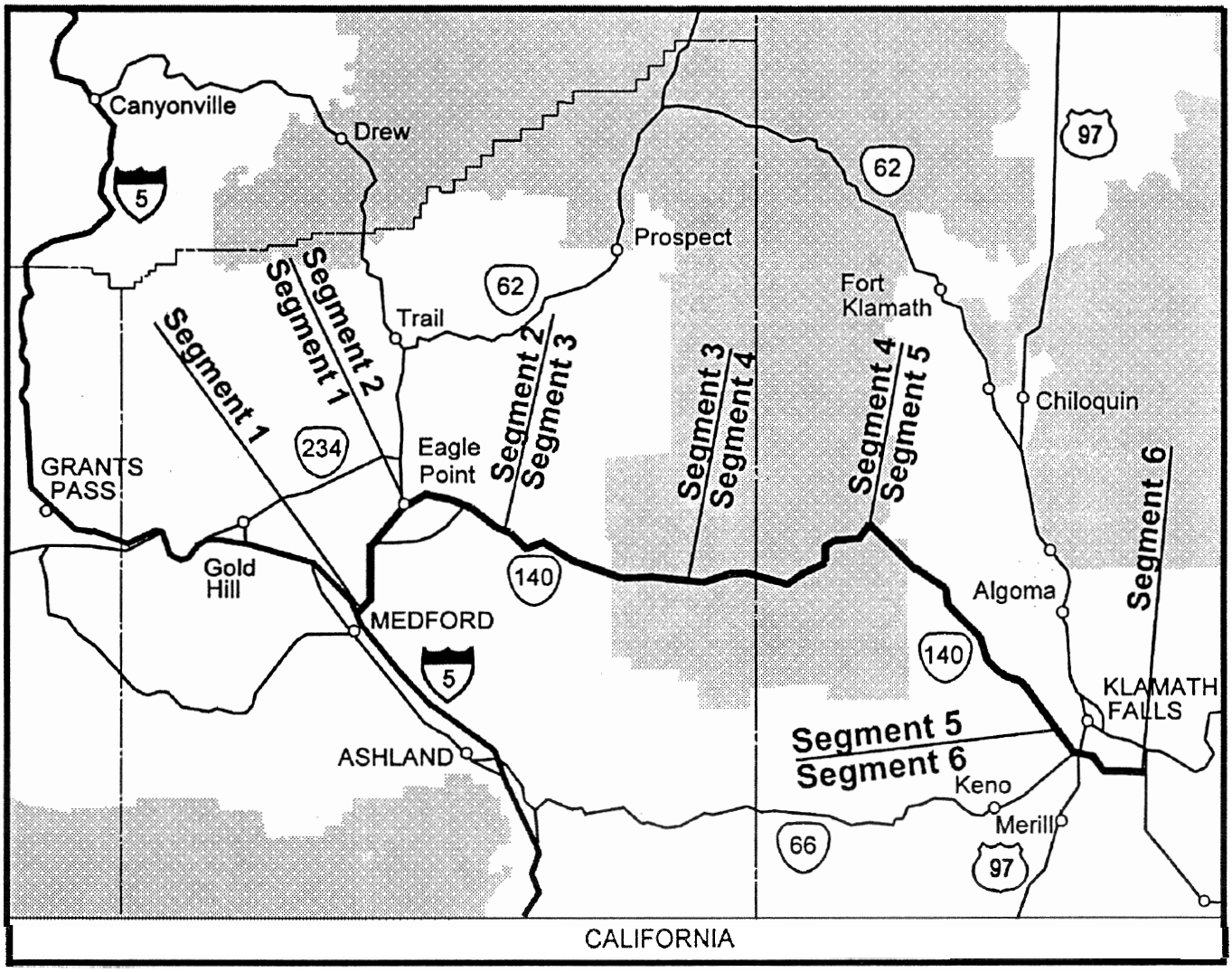
OR 140 Corridor Plan

Medford-Klamath Falls



CORRIDOR LOCATION

Segments 1 - 6

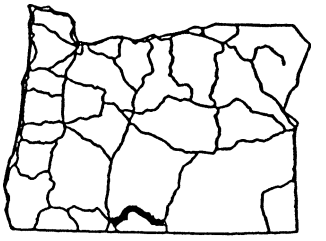


Segment Number	Segment Milepoints	Segment Miles	Begin Segment	End Segment
1	0.50 - 6.0	5.5	Jct. 1-5	OR 140
2	0.00 - 14.8	14.8	OR 140	Lake Creek Rd.
3	14.8 - 28.2	13.4	Lake Creek Rd.	Karen Rd.
4	28.2 - 44.5	16.3	Karen Rd.	Rocky Point Rd.
5	44.5 - 64.6	20.1	Rocky Point Rd.	Klamath Falls UGB
6	64.6 - 68.7	4.1	Klamath Falls UGB	End of Hwy. 270

MAP 1B

OR 140 Corridor Plan

Klamath Falls-Lakeview



CORRIDOR LOCATION

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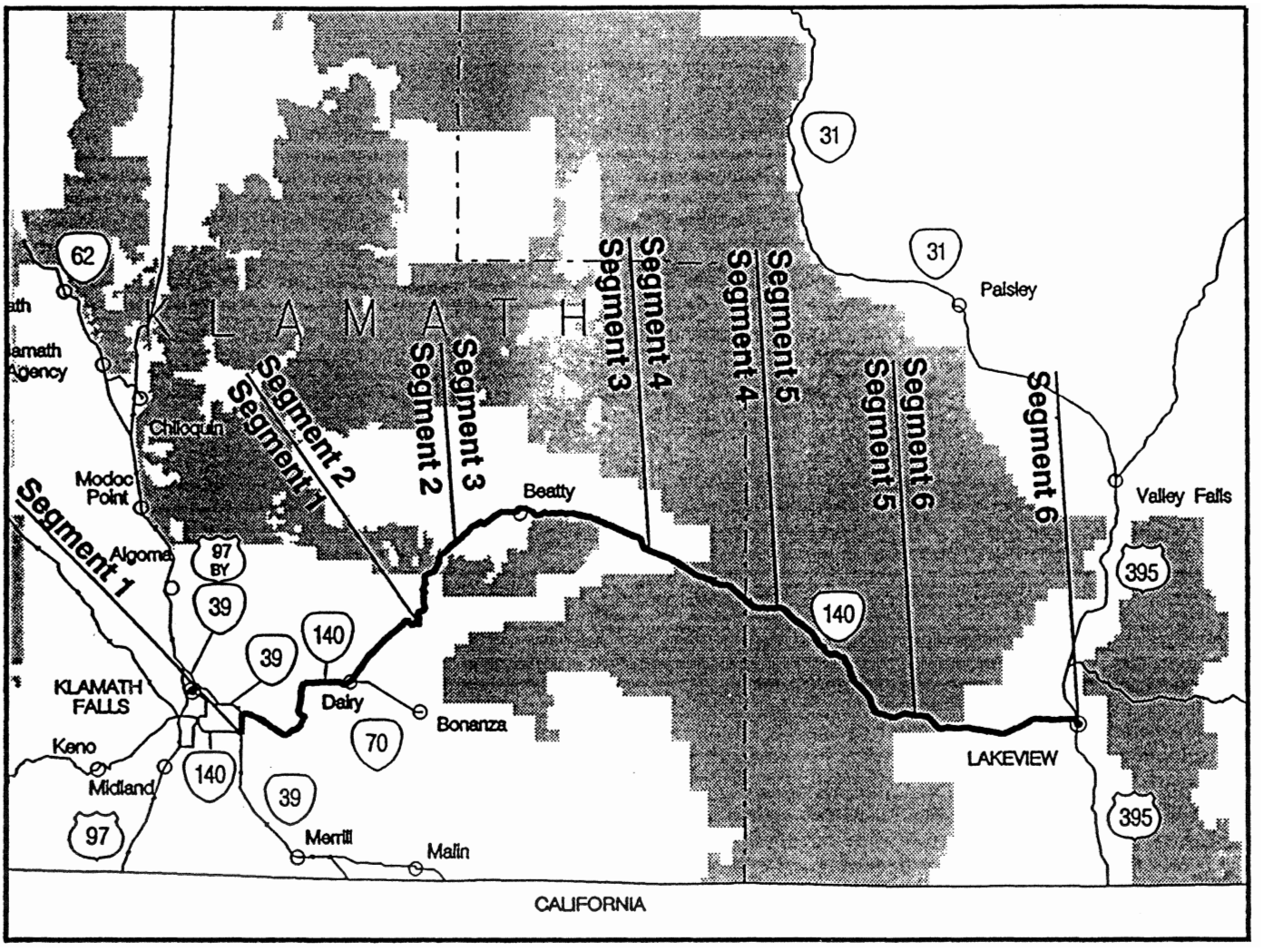

Segment Number	Segment Milepoints	Segment Miles	Begin Segment	End Segment
1	0.0 - 1.8	1.8	Jct. OR 140/OR 39	Jct. OR 140
	5.5 - 27.4	21.9	Jct. OR 140 at OR 39	Bly Mountain Cut-off Rd.
2	27.4 - 35.9	8.5	Bly Mountain Cut-off Rd.	Sprague River Rd.
3	35.9 - 54.5	18.6	Sprague River Rd.	Fish Hole Creek
4	54.5 - 67.3	12.8	Fish Hole Creek	Quartz Mtn. Summit
5	67.3 - 82.8	15.5	Quartz Mtn. Summit	Drews Gap
6	82.7 - 96.4	13.6	Drews Gap	US 395

- OR 140 is classified by the Oregon Department of Motor Vehicles Motor Services Group as a "Green" roadway with few restrictions between I-5 and Klamath Falls, a "Black" roadway (with restrictions) between Klamath Falls and Lakeview and a "Red" roadway (most restrictive) between Lakeview and Nevada. As such, significant length restrictions and permit requirements apply to the Klamath Falls to Lakeview section (including a 65-foot overall length restriction by permit). Trucks of 48 feet or longer are not allowed in the Lakeview to Nevada section.

- Average daily corridor truck traffic volumes along the OR 140 range from 500 to 1,499 trucks per day. The section between Klamath Falls and Lakeview is an important truck linkage for agriculture and wood products. Current truck restrictions limit shipping activity.

- Average annual corridor traffic growth between 1972 and 1992 was in the range of 2.0 to 2.9 percent. Trucking growth averaged 1.0 to 1.9 percent annually between 1972 and 1992.

  Despite truck restrictions, the corridor provides the major east-west access between southeast Oregon, south central and south west Oregon, and is considered to be the most utilized route between the Rogue River Valley and the Klamath Basin.

General Description Of Transportation Facilities in the Corridor

OR 140 provides fairly direct east-west access between two major interstates, including I-5 to the west at Medford and I-80 to the east at Winnemucca; thereby providing linkages with the Port of Coos Bay and Port of Portland, major recreational attractions and industry/residential origination points.

The highway linkages with OR 140 are listed below:

- U.S. 62 junction at Eagle Point which connects to Crater Lake.

- U.S. 97 junction at Klamath Falls which is the main north-south corridor along the east side of the Cascades.

- OR 70 junction at Dairy which connects to Bonanza.

- OR 66 junction at Klamath Falls which connects to Ashland.

- OR 39 junction east of Klamath Falls which connects to Northern California.

  U.S. 395 junction at Lakeview which provides north-south connections with eastern Oregon (including OR 31) and California.

There are also dozens of county and local arterals that feed into OR 140.

General features of other transportation modes are listed below. Additional discussion of these modes is provided in the Technical Appendix.

- The Burlington Northern Bend Branch and the Southern Pacific Cascade Line are important rail freight lines and carry over 20 million tons of freight each year. These rail lines cross OR 140 in Klamath Falls. The Southern Pacific Modoc line generally parallels OR 39 south of Klamath Falls and the former Central Oregon and Pacific Siskiyou line is located just west of the corridor limits in the Medford area. The Lake County-Great Western Railway serves Lakeview from Alturas California, which has connections to Klamath Falls.

- The Medford-Jackson County Airport and Klamath Falls International Airport both provide non-stop commercial air passenger service to Portland. Two general aviation airports serve the corridor, Lake County-Lakeview and Malin.

- Amtrack's Coast Starlight train runs between Seattle and Los Angeles, along the Cascade Line, with daily a.m. northbound and p.m. southbound stops in Chemult and Klamath Falls. Total passenger ridership (on and off) activity at these stations has remained fairly flat, which is consistent with overall statewide Amtrak ridership.

- Western Transportation Lines provides intercity bus service between Medford and Klamath Falls, linking Basin Transportation District in Klamath Falls with Rogue Valley Transit District in Medford. Red Ball Stage Line provides service between Lakeview and Klamath Falls, and Greyhound Bus Lines provides service between Medford and Klamath Falls and points north/south along I-5 and U.S. 97. Amtrak passenger rail service is provided between Oregon and California with a station in Klamath Falls.

- OR 140 is designated as a statewide bicycle route with a rating ranging from "most suitable" to "less suitable".

  The former California/Eastern railroad right-of-way has been purchased by the Oregon State Parks and the Fremont National Forest for development of a Rails to Trails project from Klamath Falls east toward Bly, and north from Beatty to Sycommarsh.

- The Medford and Klamath Falls areas are provided with natural gas service from the Pacific Gas Transmission Company.

More detailed descriptions of the transportation characteristics, physical, environmental and cultural features and land use patterns within each segment of OR 140 Corridor are provided in the Technical Appendix.

Assumptions

The corridor objectives that follow are based on the statewide plan requirements described in the OTP, the Oregon Highway Plan and the Modal Plans, and take into account the issues identified by CPMT members and state and local stakeholders. Supporting technical analysis includes an analysis of the ODOT's Highway Performance Monitoring System (HPMS) and the Safety Priority Index System (SPIS) databases. Also, the Oregon Department of Fish and Wildlife (ODFW) is in the process of performing an environmental audit for the corridor.

The Corridor Strategy assumes implementation of near-term projects within the Corridor that have been previously approved for construction. These capital projects are expected to meet federal, state and local standards for roadway design and construction. In addition to capital construction projects, standard levels of roadway maintenance and repair will be maintained.

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Corridor Strategy Objectives

The strategy development process for OR 140 included stakeholder interviews and surveys, and public meetings and workshops where corridor issues, concerns and opportunities was discussed. Based on the input received and relevant technical information on transportation trends, projections and safety issues, an overall goal for the OR 140 Corridor was developed.

Given that there has been coordination with local stakeholders, a *draft* goal, as well as draft key themes and objectives for the Region 4 portion of the OR 140 Corridor have been developed for this public review draft. **The draft overall goal for the corridor is: *to accommodate safe and efficient movement of through travel, while protecting environment integrity and enhancing regional quality of life.***

The detailed strategy objectives are intended to embody this overall goal for the corridor, and to set direction and provide guidance for corridor-wide transportation plans and improvements over the next 20 years.

Strategy Themes

There are five underlying *themes* of the Corridor Strategy that were identified during the strategy development process. They include:

1) Working closely with the local jurisdictions, state agencies, National Park Service, National Forest Service, Bureau of Land Management, Native American Tribes and other stakeholders to protect the physical and cultural environment along the corridor.

2) Addressing a wide range of safety issues, including vehicular conflicts, rockfalls icy conditions and maintenance-related concerns.

3) Maintaining or improving overall travel times along the corridor and improving public transportation connections.

4) Assisting local jurisdictions with special economic development related improvements that embody corridor goals and objectives.

5) Identifying opportunities for partnerships between ODOT, local jurisdictions, state and federal agencies, and the private sector to achieve the Corridor Strategy goals and objectives, and to implement the level and quality of transportation facilities and services that meet the needs of the corridor.

The detailed Corridor Strategy is comprised of a series of transportation performance and impact objectives. Transportation performance objectives relate to transportation balance/intermodal connectivity, regional connectivity, highway congestion, facility management, roadway conditions, and safety. Transportation impact objectives include environmental, social, land use, energy, and economic development.

Transportation Performance Measures

A. Transportation Balance/Intermodal Connectivity — It is the policy of the State of Oregon to provide a balanced transportation system. A balanced transportation system is one that provides transportation options at appropriate minimum service standards, reduces reliance on the single-occupant automobile where other modes or choices can be made available, particularly in urban areas, and takes advantage of inherent efficiencies of each mode.

The policy for the OR 140 Corridor is to maintain and improve auto and truck travel needs as the primary modes in this corridor, while enhancing and encouraging the use of alternative modes, especially intercity bus service throughout the corridor. The objectives described for each travel mode are intended to create a more balanced transportation system over time.

Objective A1 — Automobiles and Trucks

In concert with improving systems and facilities that accommodate alternative modes of travel (e.g., rail, bike, pedestrian), the Highway Plan indicates that Oregon must commit to protecting and improving its highway system or risk losing its economic base and potential economic expansion. As a statewide highway, the management objective for OR 140, as stated in the Highway Plan, is *to provide for safe and efficient high-speed continuous flow operation in rural areas and moderate-speed operations of flow in urban and urbanizing areas, and rural development centers.* Specific performance objectives for the highway are described in Section C, Highway Congestion, Facility Management and Roadway Conditions.

Objective A2 — Freight Rail Service

The OTP calls for rail lines, including the Burlington Northern Bend Branch and the Southern Pacific (SP) Cascade Line, to be operated at not less than a minimum speed of 25 mph. These rail lines cross OR 140 near Klamath Falls and are discussed in the Corridor Plans for U.S. 97 and OR 58. The SP Modoc line generally parallels OR 39 and the former Central Oregon and Pacific Siskiyou line is located in the Medford area which is outside the limits of this Corridor Strategy. The Great Western Railway, which crosses OR 140 in Lakeview, connects Lakeview with the SP trunk line in Alturas, California which in turn connects with the SP main line in Klamath Falls.

- Specific freight rail service objectives for the Burlington Northern Bend Branch and the Southern Pacific Cascade Line are stated in the Corridor Plans for Highways 97 and 58.
- Partner with Lake County to consider improvements that are required to maintain or expand existing Great Western Railway freight service. Increased freight volumes are expected in light of planned expansion of a woodchip operation in Lakeview and a new pearlite mine near Paisley.

Objective A3 — Highway/Rail Freight Connectivity

In addition to minimum level of service standards for highway freight, the OTP calls for major intermodal rail/truck reload facilities on rail mainlines with service areas of 150 miles, including Klamath Falls on the Southern Pacific Cascade Line.

- **Partner with carriers and receivers to facilitate transfer of highway freight to rail** where economically feasible. Explore feasibility and need for improved rail/truck reload facilities at Klamath Falls and Lakeview.
- Support long-term improvements in connections to major manufacturing and distribution facilities in Klamath Falls and Lakeview, as the market demands.
- Work with local jurisdictions to avoid new or eliminate existing at-grade rail crossings.

Objective A4 — Public Transportation Service

The policy of the OTP is to provide intercity passenger transit service to/from cities or groups of cities with a population more than 2,500 and located 20 miles or more from the nearest Oregon City with a larger population. The targeted minimum of one round trip per day is currently provided by Red Ball Stage Line between Klamath Falls and Lakeview. Western Transportation Lines runs two daily round trip buses between Klamath Falls and Medford. Basin Transportation District (BTD) and Rogue Valley Transit District (RVTD) provide public transportation service within the Klamath Falls and Medford areas, respectively.

- Support OTP policies to develop a "seamless" public transportation system over-time with multi-modal alternatives and proper facilities.
- Work with existing intercity bus districts (i.e., BTD and RVTD) and special needs transportation operations to maintain or increase bus service frequency. Explore rideshare, park and ride and other pilot program for providing amenities and unique services that may benefit or supplement public transportation service expansion.
- Work with local jurisdictions, Amtrak and Southern Pacific Railroad to plan and implement improvements to Amtrak Station facilities in Klamath Falls. Consider improvements such as enhanced waiting areas, parking and amenities.

Objective A5 — Bicycle/Pedestrian Facilities

Developing safe and convenient pedestrian crossings and bicycle pathways are goals of the OTP. In addition, the Transportation Planning Rule advocates the provision of pedestrian facilities that allows direct, hazard-free travel, such as sidewalks in urban areas.

- Through Klamath Falls and Lakeview develop sidewalks and bike lanes on both sides of OR 140 and safe and convenient pedestrian crossings over time. Improvements should occur primarily in conjunction with new highway projects or major reconstruction. Retrofit projects will be programmed based on need.
- All pedestrian facilities and crossings should be accessible to people with disabilities, including hearing, visual mobility and cognitive disabilities.

Objective A6 — Pipelines

In order to make alternative fuel widely available and to support regional economic development opportunities, the OTP calls for adequate natural gas to be available every 100 to 150 miles on major transportation corridors, when economically feasible.

- Encourage the Public Utilities Commission (PUC) and Pacific Gas Transmission Company (PGTC) to maintain or improve the natural gas transmission line and the service provided to communities within the corridor. Support expansion of the natural gas transmission line east to Lakeview.

B. Regional Connectivity — *It is the policy of the state of Oregon to identify and develop a statewide transportation system of corridors and facilities that ensures appropriate access to all areas of the state, nation and the world. (OTP Policy 1E).* The stated overall goal for the corridor includes promoting commerce through the efficient distribution of goods and services. This will involve coordinating interstate transportation linkages and intra-state services, particularly for the transportation disadvantaged.

Objective B1 — Transportation Disadvantaged Services

Transportation disadvantaged populations in the corridor have their transportation needs met by a variety of service agencies. Coordination of these services could save money and allow for more efficient levels of transit service, and reduced reliance on the automobile.

- Work with local jurisdictions, public transportation providers and community-based social service agencies to identify and respond to the needs of the transportation disadvantaged population. Coordinate the services of existing providers to serve all population segments more effectively.

Objective B2 — Interstate Transportation Connections

OR 140 in combination with Highway 39 in Oregon and Highways 139, 299 and 395 in California provide alternative northwest/southeast access between Oregon, Northern California and Interstate 80 at Winnemucca, Nevada.

- Work with the California and Nevada Departments of Transportation and Federal Highway Administration to coordinate policies and to enhance the connection between the OR 140 Corridor, Interstate 5 in Oregon, and Interstate 80 in Nevada.

C. Highway Congestion, Facility Management and Roadway Conditions — It is the policy of the state of Oregon to define minimum levels of service and assure balanced, multimodal accessibility to existing and new development within urban areas to achieve the state goal of compact, highly livable urban areas. It is also the policy of the State of Oregon to provide interurban mobility through and near urban areas in a manner which minimizes adverse effects on land use and urban travel patterns. (OTP Policies 2B and 2C).

Objective C1 — Highway Level of Service and Travel Time

Establishing minimum level of service (LOS) standards are important for maintaining the quality of life of residents in the corridor and effectively moving commerce throughout the state.

- Maintain existing average overall travel times within the corridor.
- Provide highway design-hour LOS B in rural areas and C or better in Klamath Falls and Lakeview urban areas. Lower levels of service in selected urbanized segments may be acceptable, as determined during the systems planning process.

Objective C2 — Transportation Demand Management/Rideshare Measures

TDM measures include facilities and services designed to reduce peak period highway congestion and reduce single vehicle occupancy. Measures include park and ride facilities, vanpool, carpool, express bus, local bus system, parking management programs, flex time, telecommuting and impact fees.

- Step up outreach programs to help facilitate TDM objectives particularly in Klamath Falls and Medford. Programs should focus on informing and educating local residents, employees and employers about available TDM measures, efforts, and transportation options.

Objective C3 — Geometric and Capacity Improvements

Specific highway capacity improvements, such as construction of passing lanes, widened shoulders and possibly grade-separated intersections may be required to address congestion and safety issues.

Partner with local jurisdictions to plan, design and construct highway improvements along OR 140 in accordance with volume/capacity, safety, environmental and needs analyses.

- Within rural highway segments (between communities), focus capital improvements on providing high-speed, safe and continuous flow operation. Rural capacity improvements, particularly those near urban areas, should be designed to limit unplanned development, changes in rural land use and negative level of service impacts.
- Cooperate with systems planning efforts to evaluate the need and feasibility of passing lane sections, left turn refuges and grade separations at key intersections.
- As funding becomes available, proceed with developing construction projects identified in the statewide Transportation Improvement Program.

Objective C4 — Roadway Widening, Passing Lanes and Slow-Moving Vehicles

Local traffic, truck through traffic, agriculture and tourism generate a traffic mix that often leads to safety conflicts because of speed differentials, high traffic volumes and varying familiarity with the corridor. As traffic volumes increase, highways are typically developed in phases, as follows: 1) intermittent passing lanes with 3-4 mile spacing; 2) continuous four-lane roadway profiles; 3) grade separation for high-volume intersections; and 4) frontage roads and median treatments. The sequence of these phases may vary depending upon special circumstances.

- Provide roadway widening and passing lanes in segments that have favorable cost/benefit ratios in relation to regional and statewide transportation improvement priorities.

Objective C5 — Access Management

Access management helps avoid premature obsolescence of highways and related transportation facilities by safely accommodating growth and increased traffic. Examples include: regulating the number, type and location of driveways and intersections, and; enhancing the utilization of parallel local streets. The OTP calls for adopting specific access management classifications, ranging from full access control (freeways) to partial control (regional or district highways).

Work with local jurisdictions to adopt and implement consistent access management policies along the entire corridor. Specific access management classifications should be adopted along OR 140 during the General Planning process.

- In Klamath Falls and Lakeview, ODOT and local jurisdictions should adopt and implement consistent design standards regarding left turn lanes, raised medians, driveway spacing, acceleration/deceleration lanes, turn refuges and means to enhance the local street network (e.g., better use of parallel local streets and service roads) to handle local traffic and relieve congestion.

Objective C6 — Interchanges and Grade Separations

Increased through and cross-traffic volumes, particularly in Klamath Falls will likely generate higher levels of congestion and poor safety performance at some intersections. ODOT policy does not allow signalization of intersections in rural, 55 mph highway segments.

In rural highway segments, when intersections are projected to meet signal warrants, plan for interchanges or simple grade separations. As appropriate, seek cost participation by private developer(s) and local jurisdictions.

Objective C7 — Right-of-Way Preservation

In growth areas such as Klamath Falls, transportation requirements and capital costs increase along with property values, as new development occupies needed right-of-way. As available and environmentally suitable land diminishes, transportation improvements tend to have a greater negative impact on the character of the natural and manmade environment.

- Where cost effective, sufficient right-of-way should be preserved for planned transportation improvements. This step should occur through the local land use process, whenever practical.

Objective C8 — Roadway Conditions

During the strategy development process, poor roadway conditions, particularly with respect to lane width, inadequate shoulders and poor pavement, was frequently mentioned by corridor stakeholders as major concerns. OR 140 should be designed to meet the Highway Plan's definition of minimum tolerable conditions (MTCs) for statewide highways. This includes upgrading the highway to meet geometric and pavement MTCs over time.

- Focus improvements on segments with above average accident rates, high congestion and a favorable cost/benefit ratio.
- In areas experiencing economic downturns from reduced timber revenues, consider new regional partnerships between ODOT and counties to share roadway maintenance funding and facilities.
- Provide minimum paved shoulder of six to eight feet, in accordance with design standards, as roadway segments are modernized. In particular cases, shoulders should be minimal or fenced near sensitive riparian areas.
- Develop an aggressive surface preservation program that achieves 88 percent fair or better conditions and reduces the "winter breakup" pavement problem.

D. Safety — It is the policy of the State of Oregon to continually improve the safety of all facets of statewide transportation for system users including operators, passengers, pedestrians, recipients of goods and services and property owners. (OTP Policy 1G). According to the Safety Priority Index System, in 1992 there were .28 high-accident locations per mile along OR 140/39 between Medford and California and only 0.06 high accident locations between Klamath Falls and Lakeview (compared to 0.54 locations/mile statewide). The 1992 accident rate (accidents per million vehicle miles of travel) was significantly higher in the Medford to California Segment (1.05) than the statewide average (0.83).

Objective D1 —Vehicle Recovery Zones

OR 140 is predominantly a two-lane highway with moderate volumes of east and westbound through traffic.

- Provide tree thinning in segments of Corridor to reduce sun glare/strobe effect, improve driver visibility, help melt snow/ice and reduce wildlife-vehicle collisions. Preserve selected trees and shrubs to improve aesthetics and ecological conditions.
- Consider a runaway truck ramp and brake check lane as the Dourghty Slide area to address truck/vehicular conflicts and safety issues.
- Consider means of safety to accommodate livestock crossings.

Objective D2 — Rest Stops and Driving Experience

Although ODOT has difficulty in funding the maintenance for existing rest areas in the state and does not foresee construction new public rest stops, opportunities to "partner" with commercial establishments, (e.g., gas stations and truck stops), local jurisdictions and state or federal agencies will be considered to provide new or enhanced facilities.

- Ensure some type of a "rest area," with access to public or private commercial restroom facilities, is provided between Lakeview and Klamath Falls, and meets federal Americans with Disabilities Act (ADA) standards for motorists.

Transportation Impacts

E. Environmental Impacts — *It is the policy of the State of Oregon to provide a transportation system that is environmentally responsible and encourages conservation of natural resources.* Also, to protect and enhance the aesthetic value of transportation corridors in order to support economic development and preserve quality of life are also policies of the OTP. (OTP Policies, 1D and 2H).

The Corridor goal is to promote the efficient and effective movement of goods, services and passengers and to avoid, whenever possible, impacts to areas/locations of environmental and cultural significance and to assure consistency with local and state agency policies.

Objective E1 — Scenic Resources

- In cooperation with federal and state resource agencies, local governments, and the public at large, avoid impacting identified scenic, environmental wetlands or riparian areas, and cultural resources along the corridor that are to be protected and/or enhanced.
- Visual resource management and aesthetic improvements should be considered along the entire corridor and should attempt to display the scenic, geological and recreational values of the area.

  New or expanded borrow pits should be carefully planned to coordinate site clearances for cultural areas, threatened or endangered species and ground water concerns.
- In cooperation with federal and state resource agencies, local governments, and the public at large, develop strategies that will educate people about, and provide opportunities to enjoy, the natural resource attributes found along highways. Work with the Lake County Chamber of Commerce to help explain how agencies are working cooperatively to assure continuance of these natural attributes, and explain how those traveling within corridors can help conserve these attributes.

Objective E2 — Emergency Response, Hazardous Materials Accident and Spill Management

Concerns regarding emergency vehicle access (i.e., forest fire trucks, police, ambulance), and remediation of accidents involving hazardous materials were raised during meetings with federal and state/local agency staff. Specific objectives regarding facilities and programs to address accidents, fires, hazardous spills and related issues were requested.

- Prepare and adopt a wild land fire hazard reduction program, with capital and program elements, including minimum shoulder width for emergency response vehicles, such as fire trucks.
- In cooperation with local governments, federal/state agencies, participate in regional emergency response and hazardous materials accident and spill management programs for the Corridor.

Objective E3 — Maintenance Plans for Environmentally and Culturally Sensitive Areas

The corridor contains several significant cultural and environmental sites, some of which are not readily apparent. Highway maintenance activities can negatively impact these resources.

- In cooperation with state and federal agencies, develop maintenance plans, including special signing and crew training to avoid, minimize, or mitigate adverse effects of highway maintenance operations on environmentally sensitive portions of the corridor (e.g., scenic resources, wild and scenic waterways, state scenic waterways, wetlands and riparian habitats.).
- Highway geometric and capacity improvements (e.g., roadway widening and passing lanes) should not impact wetlands or riparian areas, whenever practical.

Objective E4 — Air Quality

Presently, the City of Klamath Falls in nonattainment for meeting the Oregon Department of Environmental Quality (DEQ) air quality standards. Klamath Falls was found to be a nonattainment area for Particulate Matter 10 (PM10).

- Work with DEQ, the City of Klamath Falls and others to bring the Klamath Falls area into attainment for the PM10 standard.
- Work with other jurisdictions to maintain their attainment status.

F. Social and Land Use — It is the policy of the State of Oregon to develop transportation plans and policies that implement Oregon's Statewide Planning Goals, as adopted by the Land Conservation and Development Commission. It is also the policy of the State of Oregon to provide a transportation system consistent with, yet recognizing differences in, local and regional land use and an economic development plan. (OTP Policies 2A and 2E).

Objective F1 — Transportation and Land Use Integration

Planning within the Corridor must attempt to balance the expansion of transportation facilities and enhanced management of local roadway systems, with new development and the protection of social, cultural and environmental resources.

- Work with local jurisdictions to optimize the local street network, utilize access management, and proactively manage land use development patterns. Support patterns of development that avoid or eliminate significant at-grade railroad crossings, whenever possible. Assist local jurisdictions in amending local comprehensive plans to avoid, consolidate and/or eliminate at-grade crossings.
- Rural capacity improvements, particularly those near urban areas, should be designed to limit unplanned development, changes in rural land use and negative level of service impacts.

Objective F2 — Social, Cultural and Recreational Resources

The existing parks, historic resources and cemeteries that exist within the Corridor should be preserved and protected, whenever possible.

G. Energy — It is the policy of the State of Oregon to assure provision of an efficient transportation system. (OTP Policy 1B). The OR 140 Corridor policy is to minimize transportation-related energy consumption through the use of fuel-efficient modes of travel, enhanced vehicle efficiencies, and improved design, construction and operation of transportation facilities. Implementation of the other corridor objectives regarding transportation balance, highway congestion and safety is expected to improve energy efficiency through the reduction in highway congestion and an increase in alternative mode usage.

H. Economic Development — OTP Goal 4 is *to promote the expansion and diversity of Oregon's economy through the efficient and effective management of goods, services and passengers in a safe, energy efficient and environmentally sound manner.* (OTP Goal 4).

As population within the state and Klamath Falls and Medford urban areas increases, and the economic base shifts from timber and agriculture to manufacturing, trades and services, the corridor will become increasingly utilized for recreational trips and local/ regional trip distribution.

Objective H1 — Strengthen Business and Industrial Base

The economic base within the corridor is projected to continue to shift away from the traditional forest and agricultural industries to service, trades, tourism and other industry sectors.

- Assist communities and counties within the corridor in identifying new resources for financing roadway maintenance as timber receipts decline.
- Continue to work with existing business and industry to identify issues and concerns within the OR 140 Corridor, while promoting intercity transit, and Travel Demand Management (TDM) programs, including telecommunications.

Objective H2 — Intermodal Reload Facility

Large volumes of rail and highway freight pass through the central and southwest Oregon through Klamath Falls. An updated intermodal truck/rail reload facility would provide an opportunity for the local economy to further tap into this stream of commerce and enhance local and statewide economic development.

- Work with the Burlington Northern and Southern Pacific railroads and Klamath County Economic Development staff, key businesses, and other interested parties to explore new or redevelopment of a rail/truck intermodal facility in the Klamath Falls Urban Area.

Objective H3 — International Air Freight Facility

The OTP indicates the potential of an international air freight facility being developed at the Klamath Falls International Airport.

- Work in cooperation with Klamath County and Klamath Falls jurisdictions, and the airport to evaluate long-term potential of developing new international air freight facility at the Klamath Falls International Airport.

Objective H4 — Reclassification of OR 140 Lakeview to Nevada Section

The Oregon Highway Plan currently classifies OR 140 as a District highway between Lakeview and Nevada, which is the lowest level of importance standard for the state highway system. During the strategy development process, public sentiment favored upgrading the highway condition on this particular section, given that trucks are no longer permitted on this section, safety is a concern, pavement conditions are poor, and road width is considered to be inadequate.

- Consider upgrading the level of service standard for the Lakeview to Nevada section of OR 140 from a "District" to "Regional" standard during the next scheduled update of the Oregon Highway Plan.

Technical Appendix

Appendix A
Population and Employment Projections

Table 1
Population Projections
Selected Counties along the Corridor (1990-2012)

	Population		
	1990	*2012*	*% Change*
OR 140			
Jackson County	146,400	191,351	30.7
Klamath County	57,800	63,447	9.8
Lake County	7,200	7,892	9.6
Three County Total	211,400	262,690	24.3
State of Oregon	2,846,990	3,809,309	33.8

	Employment		
	1990	*2012*	*% Change*
OR 140			
Jackson County	54,693	74,438	36.1%
Klamath County	20,949	25,127	19.9%
Lake County	2,376	2,798	17.8%
Three County Total	78,018	102,363	31.2%
State of Oregon	1,248,100	1,771,216	41.9%

Source: Oregon Department of Transportation, Policy and Strategic Plan

Appendix B
Corridor Characteristics and HPMS Anlaysis

Corridor Characteristics

The corridor is a diverse multimodal transportation system. While each mode plays an important part in moving goods and people throughout the corridor, the highway is the predominant transportation facility. To understand system dynamics, the existing conditions of the system and its facilities were analyzed. In addition, potential future conditions are presented based on information from ODOT's Highway Performance Monitoring System (HPMS) data and other sources.

For planning and analysis purposes some of the HPMS data is portrayed by segments. The portion of OR 140 from Medford to Klamath Falls includes 6 segments (See Map 1A), and HPMS data is currently available by segment. The portion from Klamath Falls to Lakeview (See Map 1B) includes six segments also, but HPMS segment data is not available at this time.

Medford to Klamath Falls

Medford to Klamath Falls segments 1 and 2 will be addressed by ODOT Region 3, as part of the Corridor Strategy for OR 140. The Region 4 segments within the Medford to Klamath Falls Corridor are described below.

Segment 3 - Lake Creek Road to Karen road (Milepost 14.8 to 28.2)
Segment 3 is 13.4 miles in length. The ODOT Region 4 western boundary is actually at Milepost 16.4, however HPMS Segment 3 begins at Lake Creek Road (Milepost 14.8).

Segment 4 - Karen Road to Rocky Point road (Milepost 28.2 to 44.5)
This segment is 16.3 miles in length.

Segment 5 - Rocky Point Road to the Klamath Falls UGB (Milepost 44.5 to 64.6)
This segment is 20.1 miles in length.

Segment 6 - Klamath Falls UGB to end of Highway 270 (Milepost 64.6 to 68.7)
This segment is 3.9 miles in length.

Klamath Falls to Lakeview

Segment 1 - Junction OR 140/OR 39 to Junction OR 140 (Mile post 0.0 to 1.8)
Segment 1 is 1.8 miles in length.

Segment 2 - Bly Mountain Cut-off Road to Sprague River Road (Milepost 27.4 to 35.9)
Segment 2 is 8.5 miles in length.

Segment 3 - Sprague River Road to Fish Hole Creek (Mile post 35.9 to 54.5)
Segment 3 is 18.6 miles in length.

Segment 4 - Fish Hole Creek to Quartz Mtn. Summit (Mile post 54.5 to 67.3)
Segment 4 is 12.8 miles in length.

Segment 5 - Quartz Mtn. Summit to Drews Gap (Mile post 67.3 to 82.8)
Segment 5 is 15.5 miles in length.

Segment 6 - Drews Gap to U.S. 395 (Mile post 82.7 to 96.4)
Segment 6 is 13.6 miles in length.

Detailed descriptions of selected segments are included in Technical Appendix C, Affected Environment.

A. Highway System

The portion of OR 140 from the western boundary of Region 4 (1.6 miles east of Lake Creek Road) to Lakeview is the subject of this Corridor Strategy.

The Oregon Department of Transportation (ODOT) maintains and regularly updates the Highway Planning Management System (HPMS) database for all highways of statewide significance. HPMS information helps in understanding existing and projected transportation performance, and is useful in comparing state highway corridors and segments within corridors. A summary of HPMS results for OR 140 discussed above is provided below. Summaries by corridor segment are provided where available.

Highway User Intercept Survey

The results of the highway user intercept survey are useful in understanding the reasons why people use the highway, the frequency of use, likes and dislikes and preferred improvements. Results comparing OR 140 to the statewide average are provided in Figures 1A and 1B. Pertinent findings include:

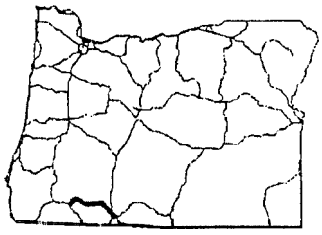
- The Corridor is used primarily for "recreation/pleasure" purposes.
- Most drivers use the Corridor only a "few times yearly".
- "Scenery" and "short travel time" are what travelers like most about the Corridor.

  Most of the Corridor's users would like discretionary funds allocated for "travel time" and "safety" improvements.

MAP 1A

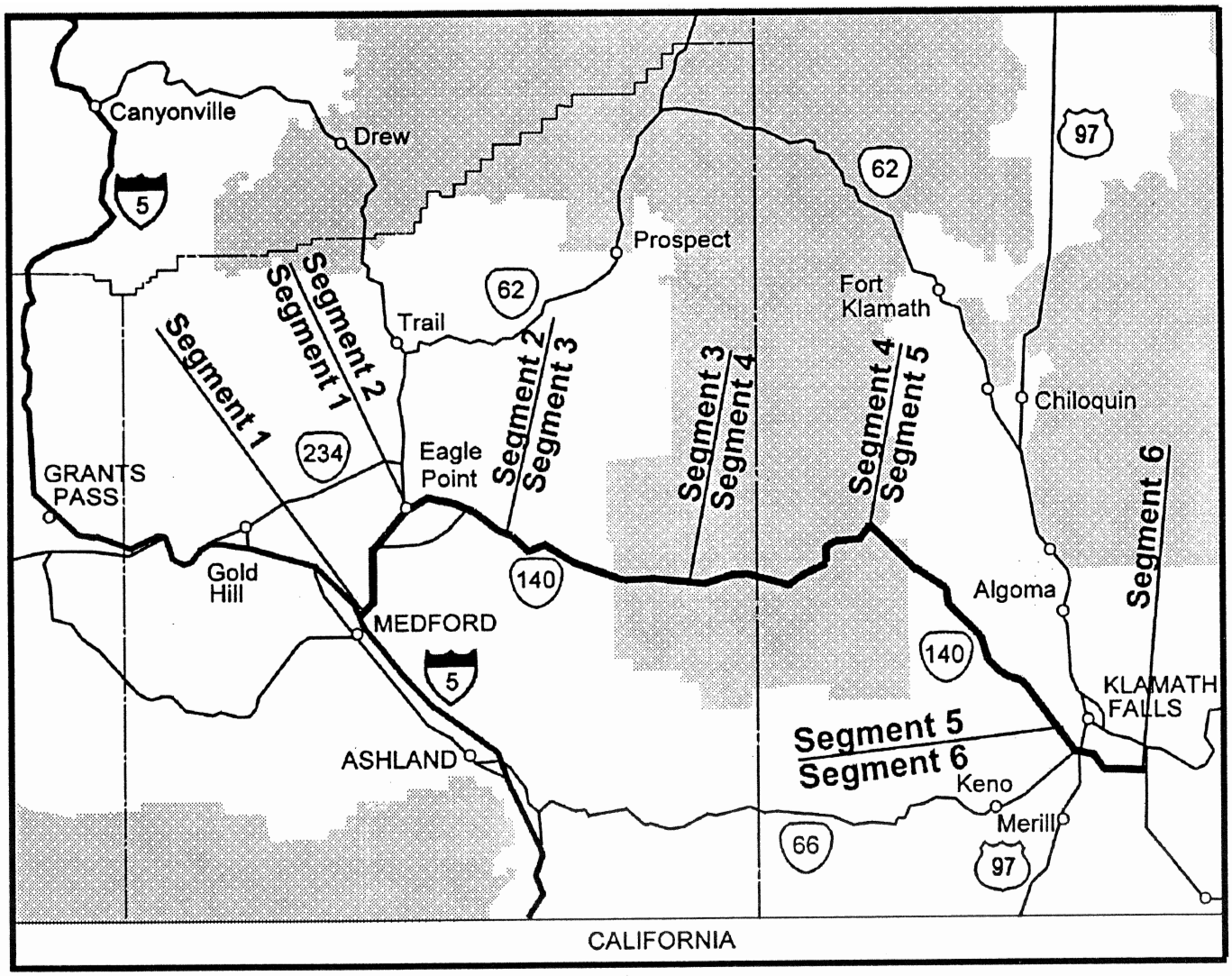
OR 140 Corridor Plan

Medford-Klamath Falls



CORRIDOR LOCATION

Segments 1 - 6

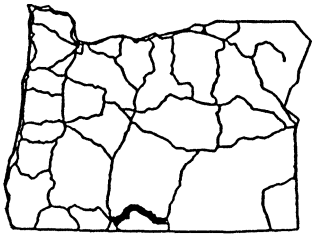


Segment Number	Segment Milepoints	Segment Miles	Begin Segment	End Segment
1	0.50 - 6.0	5.5	Jct. 1-5	OR 140
2	0.00 - 14.8	14.8	OR 140	Lake Creek Rd.
3	14.8 - 28.2	13.4	Lake Creek Rd.	Karen Rd.
4	28.2 - 44.5	16.3	Karen Rd.	Rocky Point Rd.
5	44.5 - 64.6	20.1	Rocky Point Rd.	Klamath Falls UGB
6	64.6 - 68.7	4.1	Klamath Falls UGB	End of Hwy. 270

MAP 1B

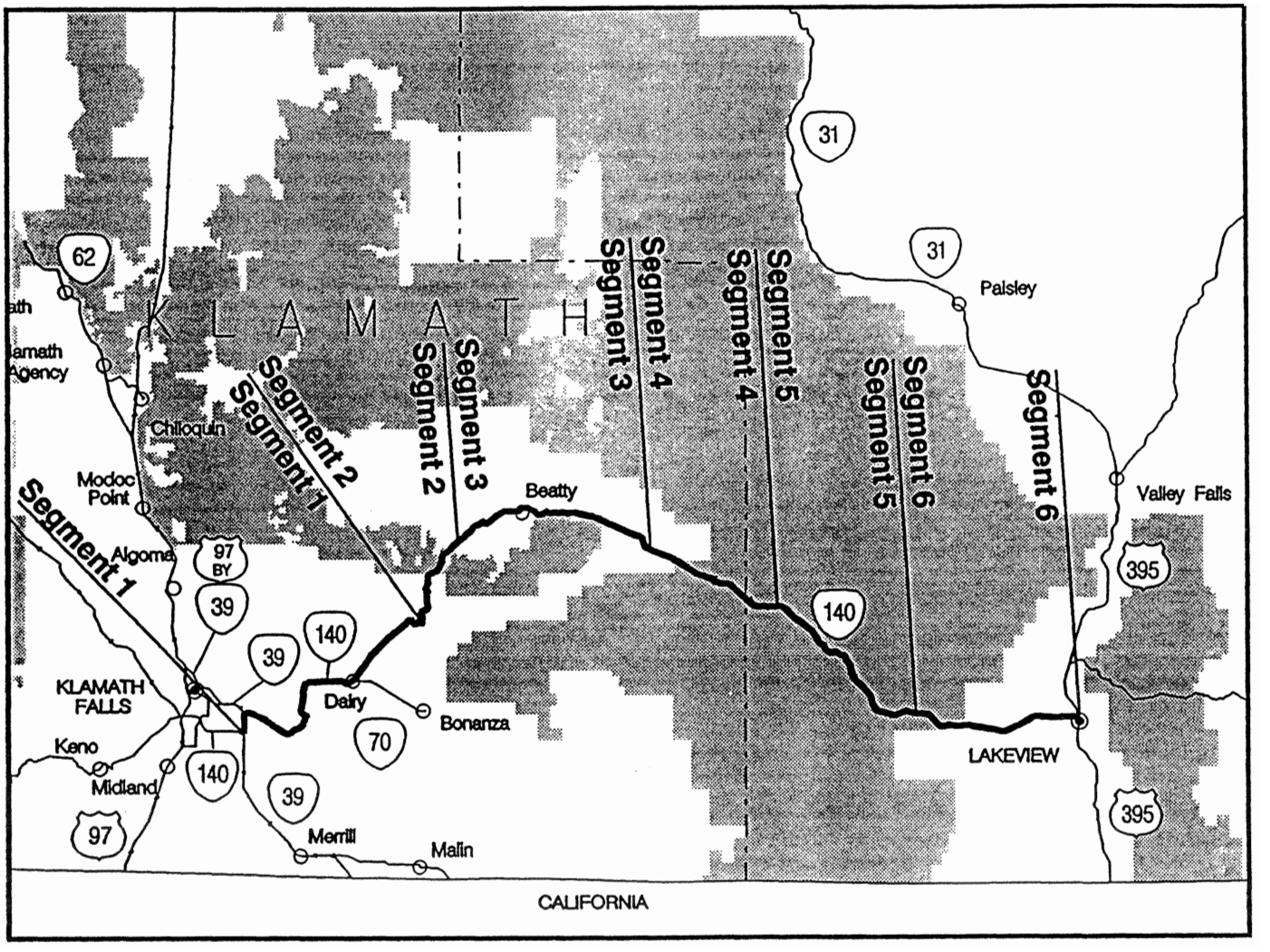
OR 140 Corridor Plan

Klamath Falls-Lakeview



CORRIDOR LOCATION

Segments 1 - 6



Segment Number	Segment Milepoints	Segment Miles	Begin Segment	End Segment
1	0.0 - 1.8	1.8	Jct. OR 140/OR 39	Jct. OR 140
	5.5 - 27.4	21.9	Jct. OR 140 at OR 39	Bly Mountain Cut-off Rd.
2	27.4 - 35.9	8.5	Bly Mountain Cut-off Rd.	Sprague River Rd.
3	35.9 - 54.5	18.6	Sprague River Rd.	Fish Hole Creek
4	54.5 - 67.3	12.8	Fish Hole Creek	Quartz Mtn. Summit
5	67.3 - 82.8	15.5	Quartz Mtn. Summit	Drews Gap
6	82.7 - 96.4	13.6	Drews Gap	US 395

Figure 1A
OR Highway 140 Corridor
Medford - California

ODOT Highway Uses Survey Results

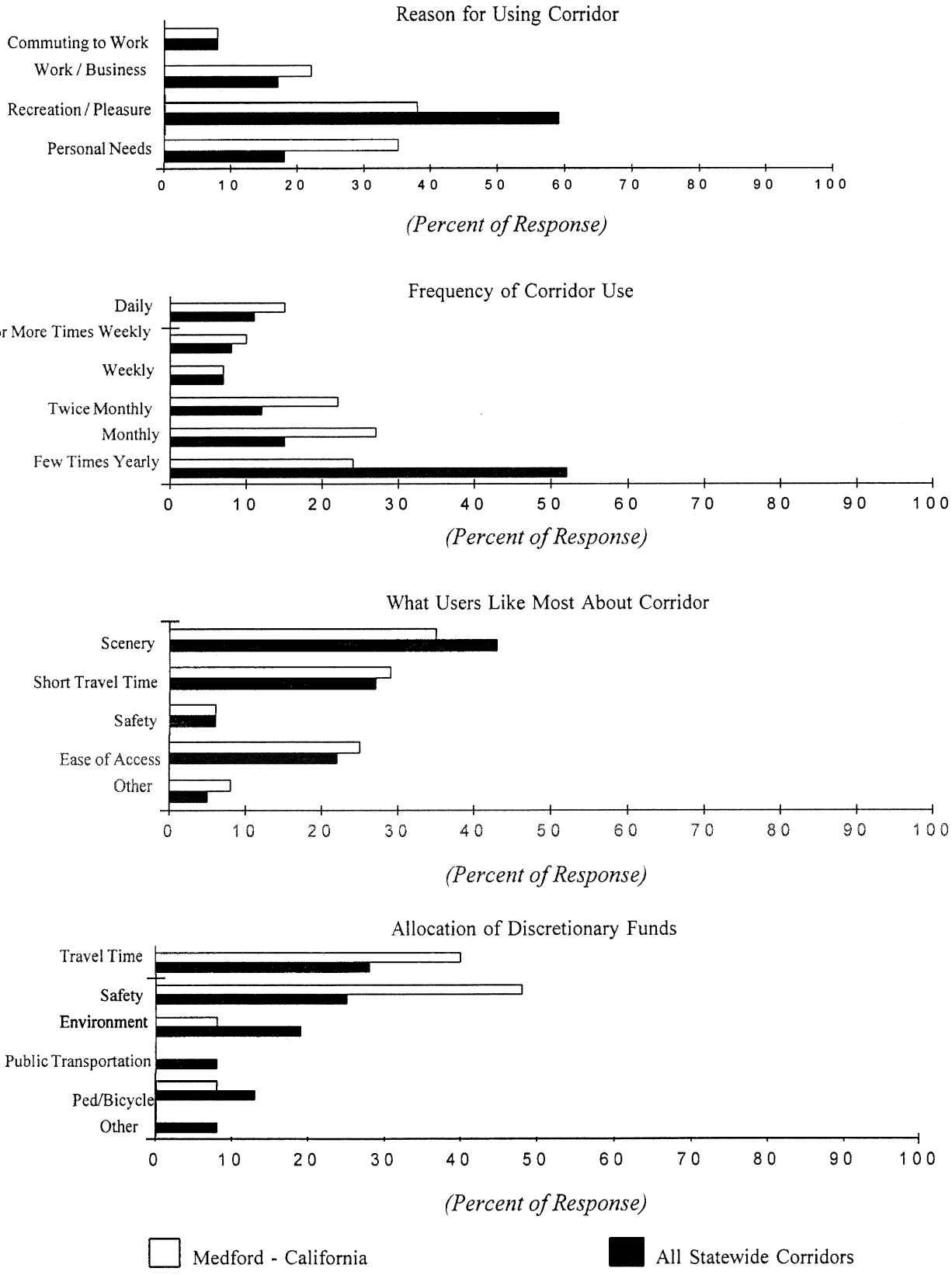
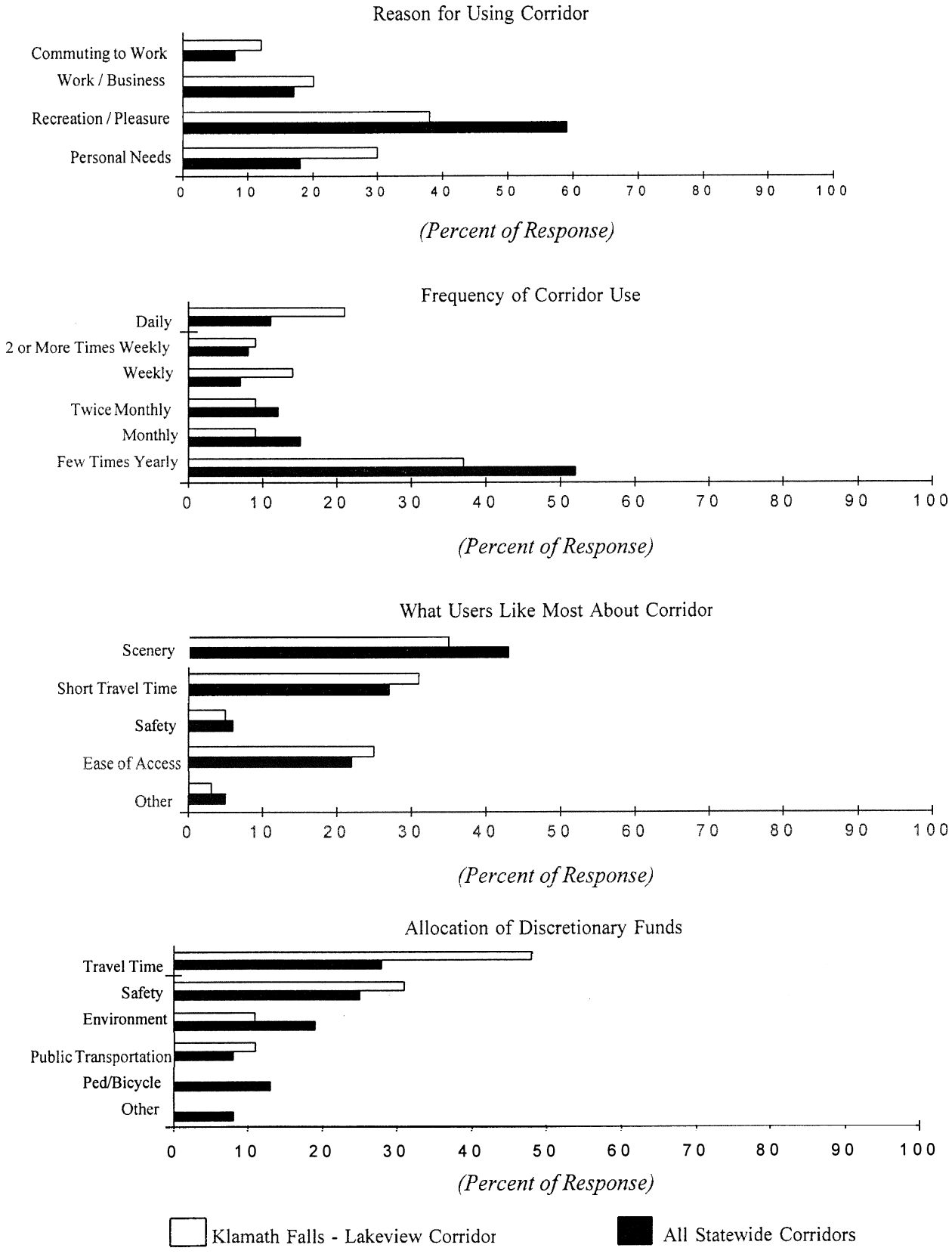


Figure 1B
OR Highway 140 Corridor
Klamath Falls - Lakeview

ODOT Highway Uses Survey Results



1. Volume

The average daily traffic (ADT) on OR 140 is generally less than the statewide average. Corridor ADT is generally less than 5,000 for the Medford to Klamath Falls section below and 1,500 vehicles per day for the Klamath Falls to Lakeview section. Truck volumes have ADT less than 500, far less than the statewide average (See Table 2A and 2B). Truck traffic comprises only about 8% of total traffic on OR 140. A large majority of the roadway (79%) experienced a traffic growth rate of 2 to 2.99 percent from 1972 to 1992 (See Figures 2A and 2B).

2. Highway Congestion

The HPMS analytical process measures relative congestion in terms of level of service (LOS), which is derived from a composite analysis of volume/service flow (V/SF) ratios. The lowest congestion is indicated by LOS A, B and C. Moderate congestion is indicated by LOS D. High congestion is indicated by LOS F.

Figure 3 portrays congestion by percent distribution of highway miles under two scenarios: 1996 Existing Condition and 2016 No Improvements. There are no areas with moderate or high congestion under the Existing Conditions scenario. The percentage of High Congestion is projected to increase to only 1% of the corridor miles by year 2016 if no capacity improvements are made. These projected congestion levels are far better than the projected 2016 statewide averages. Figure 4 provides congestion information for relevant segments.

3. Corridor Travel Time

The analysis of average travel time is intended to measure the efficiency of vehicular through traffic movement from one end of the Corridor to the other. Figure 5 illustrates the projected change in total travel time by 2016, considering improvement and management alternatives. Actual travel times are slightly shorter for cars and longer for trucks.

For the sections between Medford and Klamath Falls, and Klamath Falls to Lakeview, as indicated by Figure 5, without improvements and with high facilities and access management, travel time is projected to increase by 6 minutes. A combination of capital improvements and facilities management is expected to result in only two minutes of travel time savings between Medford and Lakeview. These data indicate the relatively low benefit of facilities management and capital improvements on the reduction of travel time in the OR 140 corridor.

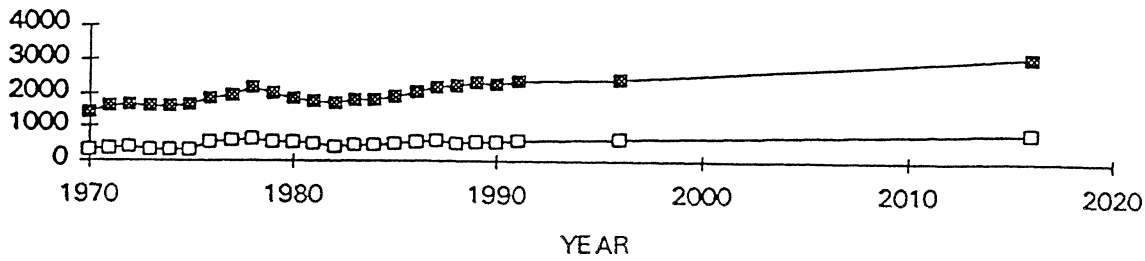
Table 2A ***Highway Traffic in the OR 140 Medford to Klamath Falls***		
	Distribution of Corridor Miles	
1992 Traffic Volumes*	OR 140 Corridor	Statewide Average
0-1,999	---	37%
2,000-4,999	81%	36%
5,000-9,999	13%	16%
10,000-19,999	---	6%
20,000-29,999	6%	3%
30,000-49,999	---	2%
>50,000	---	--
**Average daily traffic for all motorized vehicles*		
1992 Truck Traffic Volumes		
0-499	75%	52%
500-1,499	19%	41%
1,500-2,999	6%	6%
>3,000	---	1%
1972-1992 Annual Traffic Growth Rates (%)		
1-1.99	51%	38%
2.00-2.99	43%	46%
3.00-4.00	6%	16%
Source: Oregon Department of Transportation; compiled by Otak, Inc.		

Table 2B ***Highway Traffic in the OR 140 Klamath Falls - Lakeview Corridor***		
	Distribution of Corridor Miles	
1992 Traffic Volumes*	OR 140 Corridor	Statewide Average
0-1,999	66%	37%
2,000-4,999	29%	36%
5,000-9,999	5%	16%
10,000-19,999	--	6%
20,000-29,999	--	3%
30,000-49,999	--	2%
>50,000	--	--
**Average daily traffic for all motorized vehicles*		
1992 Truck Traffic Volumes		
0-499	100%	52%
500-1,499	--	41%
1,500-2,999	--	6%
>3,000	--	1%
1972-1992 Annual Traffic Growth Rates (%)		
1-1.99	29%	38%
2.00-2.99	71%	46%
3.00-4.00	--	16%
Source: Oregon Department of Transportation; compiled by Otak, Inc.		

Figure 2A
OR Highway 140 Corridor
Medford - California

Traffic Volume Trends

Automatic Recorder 15-020
Mile Post 16.03 (East of Lake Creek Rd.)



Automatic Recorder 18-020
Mile Post 16.15 (West of Karen Rd.)

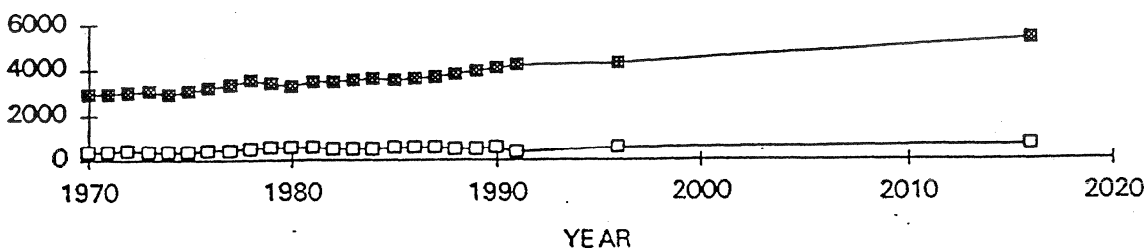
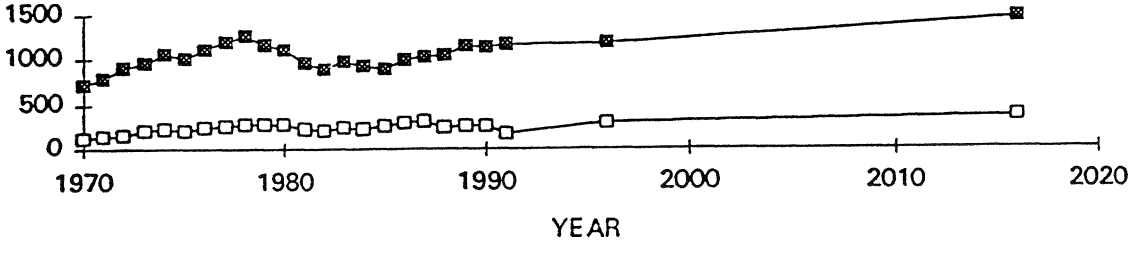


Figure 2B
OR Highway 140 Corridor
Klamath Falls - Lakeview

Traffic Volume Trends

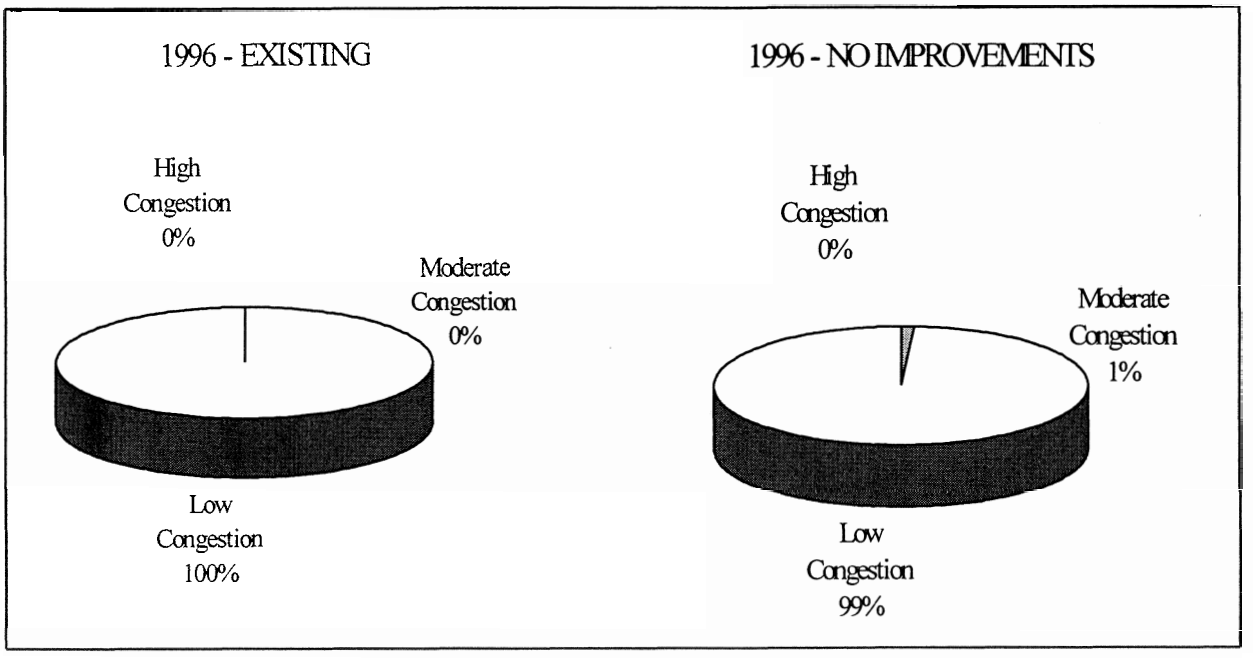
Automatic Recorder 18-017
Mile Post 44.98 (East of Sprague River Rd.)



ADT No. of Trucks

Figure 3
OR Highway 140 Corridor

Klamath Falls - Lakeview



Medford - California

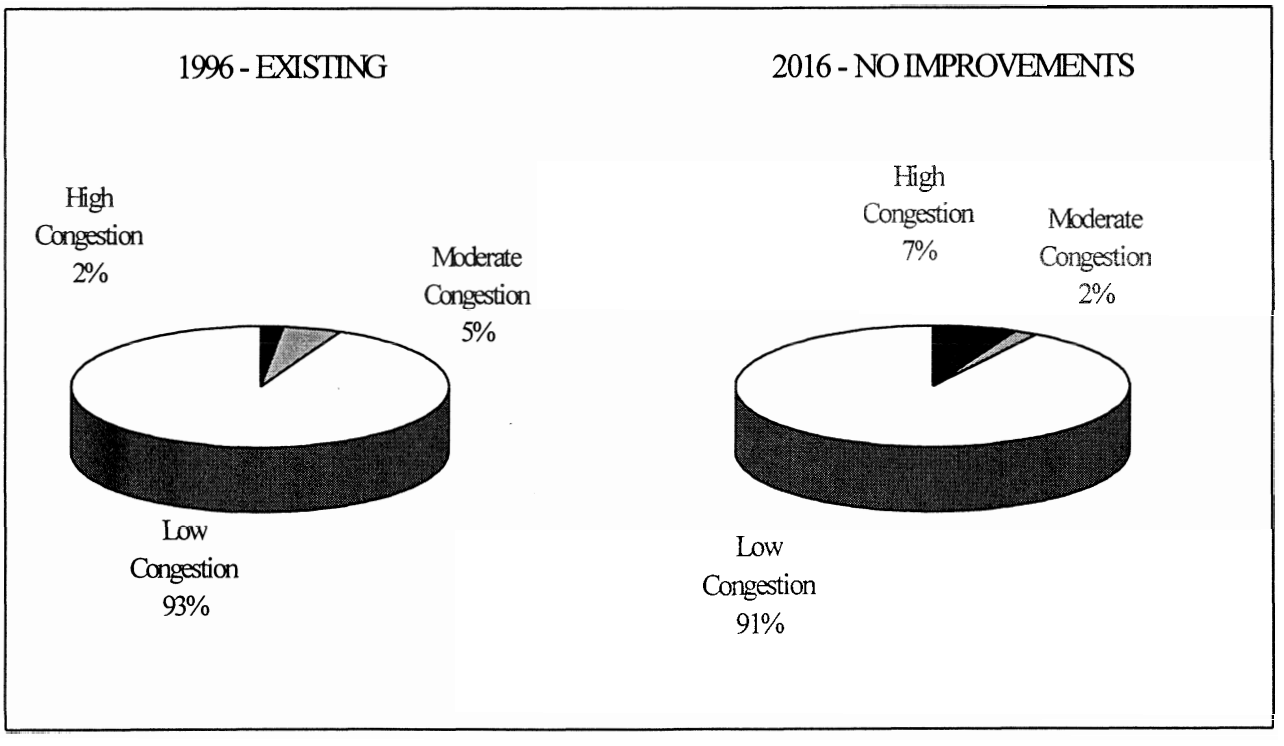
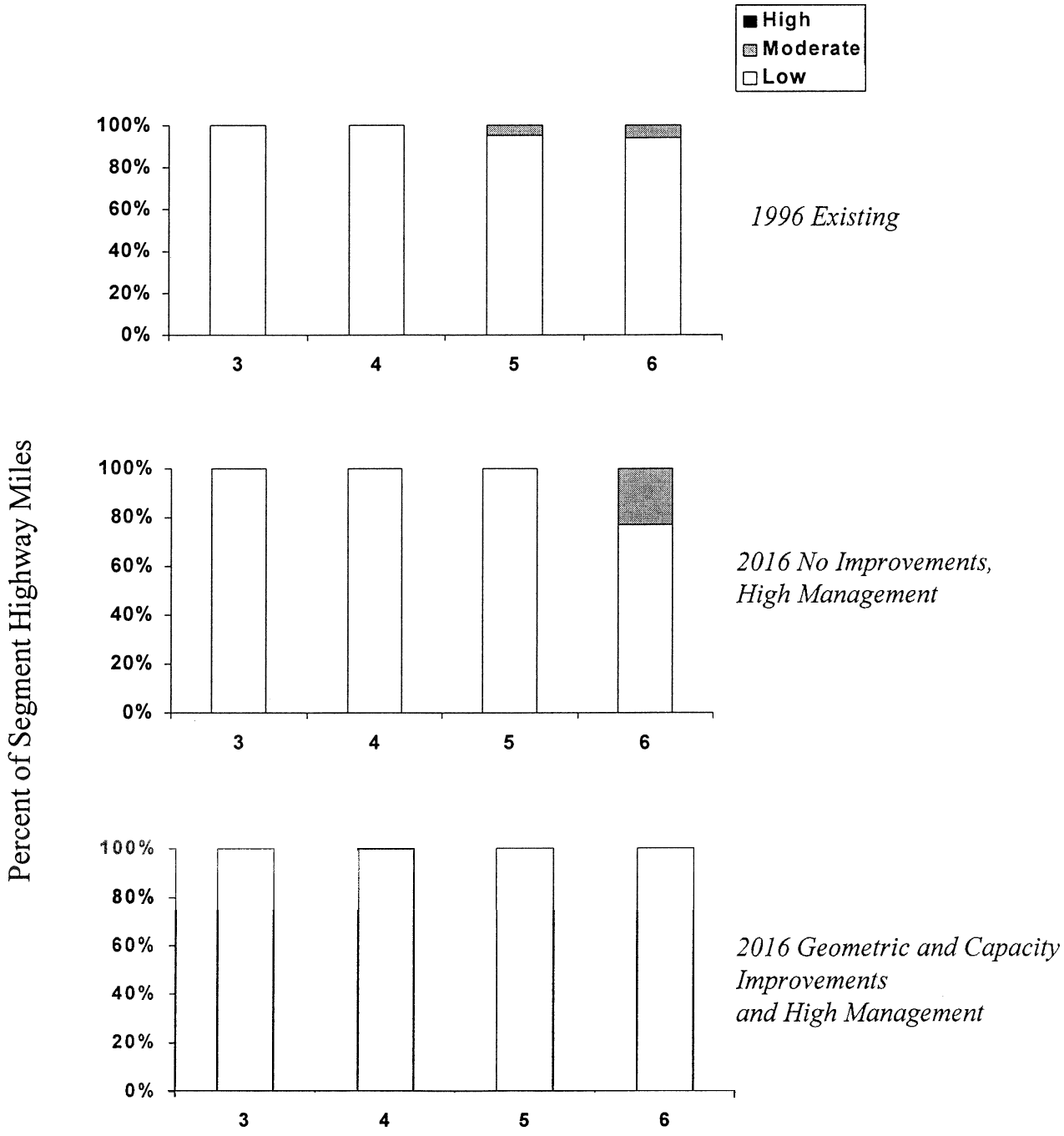


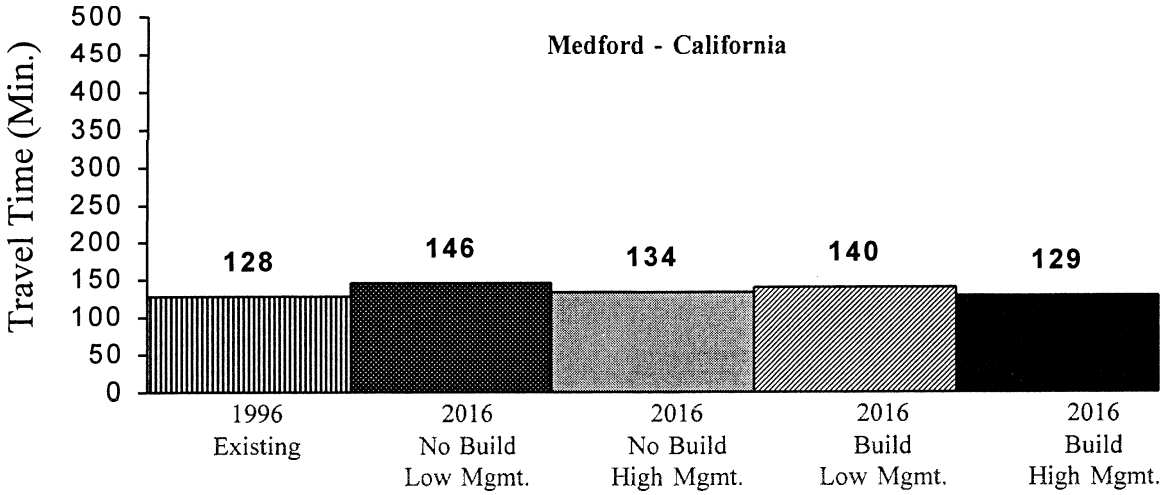
Figure 4
Analysis of Highway Congestion by Corridor Segments Medford to Klamath Falls

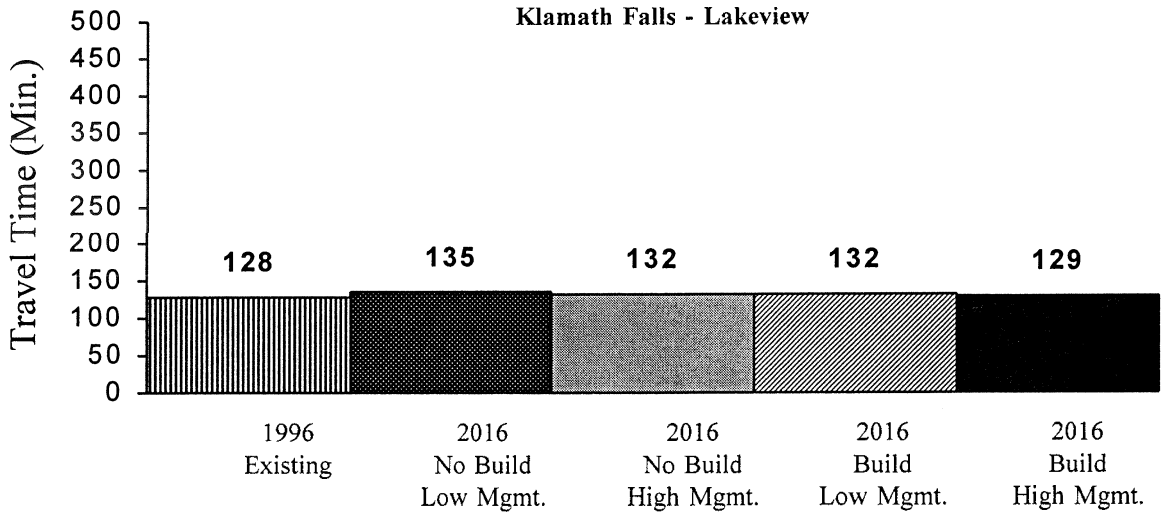


Segment 3 - Lake Creek Road to Karen Road
Segment 4 - Karen Road to Rocky Point Road
Segment 5 - Rocky Point Road to Klamath Falls UGB
Segment 6 - Klamath Falls UGB to end of Hwy. 270

Figure 5
OR Highway 140 Corridor

Effects of Improvements and Facilities Management on Travel Time





4. Safety

The Safety Priority Index System (SPIS) is a method used by ODOT for identifying and prioritizing locations in need of safety improvements. The SPIS index has three parameters: accident frequency, accident rate, and accident severity. For corridor planning, a location with a SPIS number in the top 10% of statewide SPIS values is considered to be a "high accident location".

In the Klamath Falls to Lakeview section of OR 140, the number of high accident locations 0.6 locations per mile, far below the statewide average of 0.54. The Corridor's accident rate is also below the statewide average, 0.75 versus 0.83 accidents per million vehicle miles, respectively.

In the Medford to Klamath Falls section of OR 140, the number of high accident locations .28 locations per mile, far below the statewide average of 0.54. However, the corridor's accident rate (accidents per million vehicle miles traveled) is far above the statewide average, 1.05 versus 0.83 accidents per million vehicle miles.

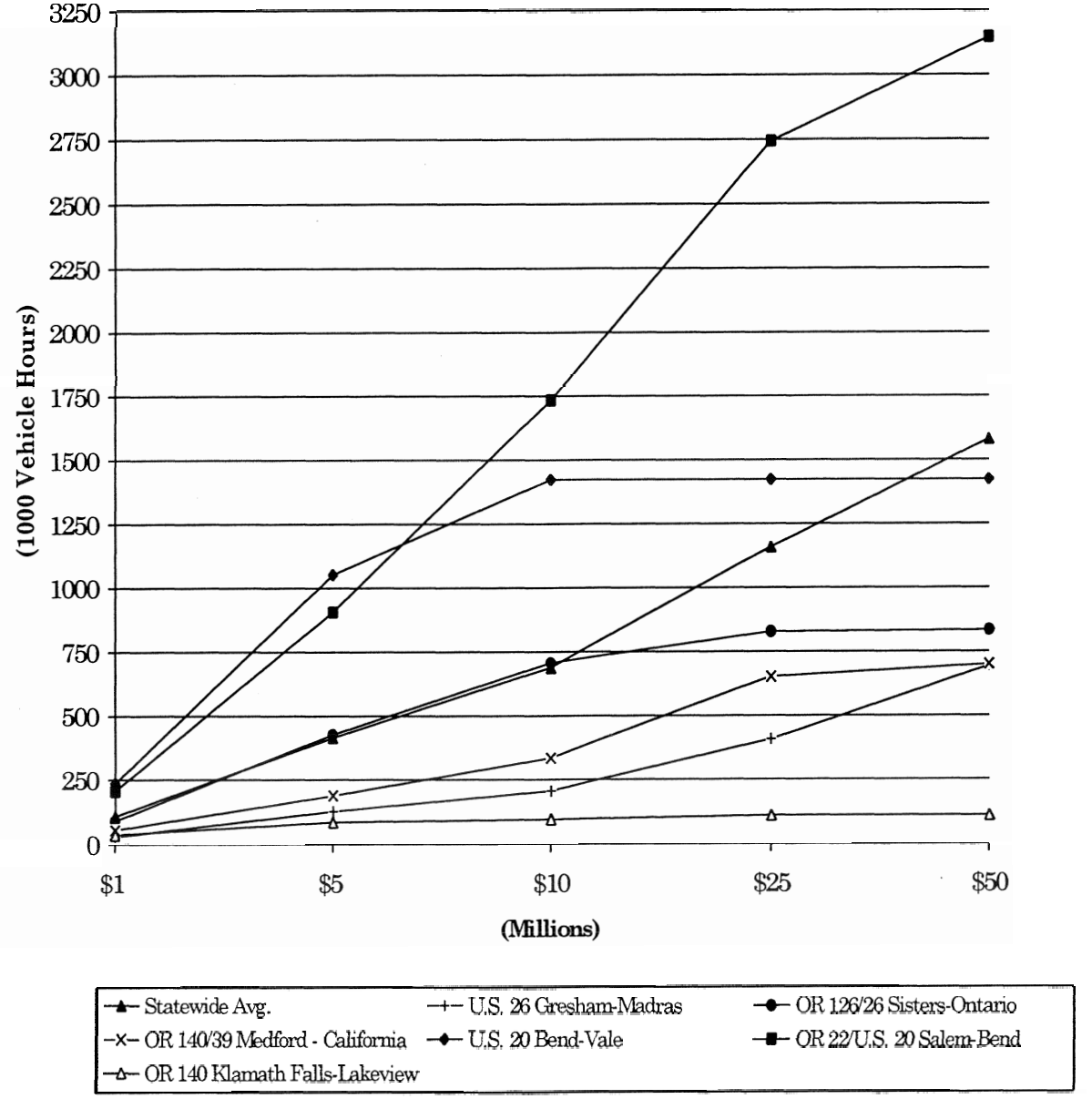
5. Cost Effectiveness

There are many ways to compare the costs and benefits of major transportation improvements, such as the construction of a new highway or a widened roadway. The cost-benefit methodology being applied to the strategy development phase of corridor planning focuses on the amount of time savings generated per investment in geometric and capacity improvements to the highway. Time savings is measured in vehicle hours and investment is measured in millions of dollars. The analysis assumes that vehicle hour savings is positive since it would tend to reduce congestion and vehicle emissions, and enhance air quality.

This type of cost-benefit analysis is useful in comparing the relative benefit of investing in one corridor versus another. The analysis also provides a ready comparison to the average benefit/cost of all statewide corridors. As indicated by Figure 6, of the six selected statewide corridors in Region 4, only OR 22/U.S. 20 and U.S. 20 Bend-Vale exceed the average cost/benefit relationship for all statewide corridors. OR 140 Medford-Lakeview is well below the statewide average cost/benefit ratio. In this case, a $10 million investment in transportation improvements on the OR 140 Medford-Lakeview corridor would result in annual savings of approximately 97,000 vehicle hours. This compares to a statewide average of 688,000 annual vehicle hour savings per $10 million investment.

Figure 6
OR Highway 140 Corridor

Annual Time Saved Per Investment on Selected Corridors



B. Rail Service

South Pacific Cascade Line — The Cascade route, which crosses OR 140 in Klamath Falls, is the main line of the Southern Pacific (SP) between Eugene and Black Butte, California, a distance of 280 miles, including 215 in Oregon. In addition, Burlington Northern railroad (BN) has trackage rights from Chemult to Klamath Falls and Amtrak's Coast Starlight uses the route daily with a stop in Klamath Falls. Over 25 million gross tons per mile are transported over the line which is designated as FRA Class 4. There are, however, speed restrictions between Eugene and Chemult as a result of grades and curvature. Carload weights of up to 315,000 pounds are permitted and there are no dimensional restrictions.

Southern Pacific Siskiyou Branch — The former Southern Pacific Siskiyou branch line provides rail service to the Medford area, which is west of the corridor limits. The Southern Pacific main line runs through Klamath Falls and is crossed by OR 140 there. Southern Pacific and Burlington Northern trunk lines connect to the Southern Pacific main line in Klamath Falls and run southwesterly into California and Nevada. The trunk lines share the corridor with OR 39 and are located next to or nearby each other.

Lake County-Great Western Branch — The Lake County-Great Western Railway connects Lakeview with the Southern Pacific trunk line in Alturas California. This truckline connects to the Southern Pacific main line in Klamath Falls. The line has no dimensional restrictions and the maximum gross weight of equipment and lading is 315,000 pounds. Local on-line traffic consists mainly of wood products. In addition, the line carries bridge traffic between the BN's Columbia River mainline and its Bieber Line at Klamath Falls.

C. Air Service

The Medford-Jackson County Airport is north of OR 62 in Medford just west of the corridor limits. Non-stop air passenger flights are available to Portland (7 flights) and Klamath Falls (1 flight). From Portland, connecting flights can be made to the following destinations: North Bend (3 flights), Klamath Falls (6 flights), Eugene (7 flights), Salem (airport limousine), Redmond (7 flights), Pendleton (3 flights), Boise (4 flights), Pasco (4 flights) and Walla Walla (3 flights).

The Klamath Falls International Airport is located to the south of OR 140 in Klamath Falls. Non-stop air passenger flights are available to Portland (4 flights). From Portland, connecting flights can be made to the following destinations: North Bend (4 flights), Medford (3 flights), Eugene (4 flights), Salem (airport limousine), Redmond (4 flights), Pendleton (2 flights), Boise (2 flights), Pasco (4 flights) and Walla Walla (3 flights).

The Lake County-Lakeview airport is a general aviation airport located east of Lakeview and about a mile south of OR 140.

The Malin Airport is a general aviation airport located east of OR 39 in the town of Malin.

D. Water

There are no port facilities in the corridor.

E. Transit

Basin Transit provides regional transit service in the Klamath Falls Urban Growth area. Approximately 40 percent of its 25,000 to 27,000 monthly riders are elderly or disabled. East-west intercity routes are planned between Klamath Falls and Medford through a partnership among Basin Transit and Rogue Valley Transit, as the initial step in creating a "seamless" public transportation link between Lakeview and Grants Pass.

In addition to intercity and regional transit providers, several private and community-based transit entities serve the corridor, including:

- Klamath Basin Senior Center
- Spokes Unlimited Dial-A-Ride Service for elderly and disabled clients
- Cleo's Children's Community Dial-A-Ride for disabled children
- Klamath County mental Health Client Transportation Service
- REACH, Inc. Developmentally Disabled Client Transportation Service
- Klamath Tribe Bus Ticket Subsidy Program
- Veterans Council Bus Ticket Subsidy Program

Western Transportation Lines runs two daily round trip busses between Medford and Klamath Falls. Bus stations are located in both of these cities. Medford is a stop for Greyhound buses serving the I-5 corridor. Klamath Falls is a stop for Greyhound buses and Amtrak trains serving the I-5 and U.S. 97 corridors.

Red Ball Stage Line runs one daily round trip bus between Lakeview and Klamath Falls.

F. Bicycle

OR 140 is a designated statewide bicycle route. The Oregon Bicycle Guide rates the Corridor as "most suitable" from the junction with OR 227 to the east end of Lake of the Woods, near Dairy and east of Bly. It is rated "moderately suitable" north of Medford, between Lake of the Woods and Klamath Falls, from Beatty to Bly and east of Quartz Mountain to Lakeview. Bly Mountain Pass and Quartz Mountain Pass are rated "less

suitable".

G. Pedestrians

Pedestrian activity is concentrated in the urban areas and at major recreation sites within the corridor. Future pedestrian activity is anticipated to be concentrated in the same areas.

H. Pipelines

The Pacific Gas Transmission Company natural gas transmission line crosses the U.S. 140 Corridor east of Klamath Falls near Hildebrand. The Klamath Falls area is provided with natural gas service.

No oil or gas transmission lines are present on the portion of the corridor between Medford and Klamath Falls. Natural gas service is available in the Medford area.

Appendix C
Affected Environment

Affected Environment

For planning purposes, the U.S. 140 Corridor has been divided into segments as indicated on Maps 1A and 1B. A description of each segment follows.

The portion of OR 140 from Medford to Klamath Falls includes 6 segments (see Map 1A), and has data by segment. The portion from Klamath Falls to the Nevada border (see Map 1B) does not have segment data available.

Medford to Klamath Falls segments 1 and 2 are to be addressed in a separate Corridor Plan that shall be directed by ODOT Region 2.

Medford to Klamath Falls

Segment 3 - Lake Creek Road to Karen road (Milepost 14.8 to 28.2)
Segment 3 is distinct in that it consists of the portion of highway in the western High Cascades. There are no communities along this segment. The Rogue River National Forest (western boundary at milepost 21.52) is the site of a number of sensitive environmental features, including spotted owl habitat and stands of old growth forest.

Segment 4 - Karen Road to Rocky Point road (Milepost 28.2 to 44.5)
This segment is 16.3 miles in length. OR 140 in Segment 4 leaves Jackson County and enters Klamath County near milepost 32. The segment is distinct in that it consists of the Cascade Mountain uplands and the descent to the Klamath basin. There are no communities in this segment. The summit area of this segment has impaired driving conditions in winter due to freezing temperatures, snow and fog. This segment is home to a number of summer and winter recreation sites and facilities.

Segment 5 - Rocky Point Road to the Klamath Falls UGB (Milepost 44.5 to 64.6)
This segment is 20.1 miles in length. Segment 5 traverses the northern portion of the Klamath basin and has only one community, Odessa, which provides the only commercial services in the segment. Most of this segment is at an elevation of 4,000 to 5,000 feet with the primary land use being farm and forestry. Lakeshore Drive, an alternative route into Klamath Falls that joins OR 140 at milepost 62, mainly serves recreationists and dispersed rural residents.

Segment 6 - Klamath Falls UGB to end of Highway 270 (Milepost 64.6 to 68.7)
This segment is 3.9 miles in length. Segment 6 includes the Klamath Falls urban area. Dense fog can be a driving hazard at times. The development of a commercial strip along South 6th Avenue in combination with a declining timber industry have led to deterioration of downtown Klamath Falls. Attempts to induce tourism have not to date yielded positive results. Klamath Falls International Airport (Kingsley Field) has been the catalyst to some light industrial development in the area. Two four-way

intersections of local roads with the OR 140 bypass create congestion at peak travel times because of the lack of signalization.

Klamath Falls to Lakeview

Segment 1 - Junction OR 140/OR 39 to Junction OR 140 (Mile post 0.0 to 1.8)
Segment 1 is 1.8 miles in length. Segment 1 is distinct in that it consists of the most easterly portion of the Klamath River Basin and the Poe and Yonna Valleys. Snow and fog are common in the winter months. Agricultural activities dominate the economy in this area.

Segment 2 - Bly Mountain Cut-off Road to Sprague River Road (Milepost 27.4 to 35.9)
Segment 2 is 8.5 miles in length. Segment 2 consists of the Bly Mountain Pass area with no other transportation facilities of any significance. The primary land use is farm/forest with the highway passing through the Winema National Forest.

Segment 3 - Sprague River Road to Fish Hole Creek (Mile post 35.9 to 54.5)
Segment 3 is 18.6 miles in length. Segment 3 consists of the Sprague River Valley which has two unincorporated communities and surrounding rural residential areas. There is no commercial economic activity to speak of with only some small scale farming and no recent development of any sort.

Segment 4 - Fish Hole Creek to Quartz Mtn. Summit (Mile post 54.5 to 67.3)
Segment 4 is 12.8 miles in length. Segment 4 incorporates a desolate area that consists of the ascent to the divide between the Sprague River Valley and the Great Basin. The Fremont National Forest is the predominant land use in this area where winters are extremely harsh.

Segment 5 - Quartz Mtn. Summit to Drews Gap (Mile post 67.3 to 82.8)
Segment 5 is 15.5 miles in length. There are no communities in this segment which runs from the Quartz Mountain Summit to Drews Gap. Extensive snow periods dominate the winter weather in this area which has almost no economic activities.

Segment 6 - Drews Gap to U.S. 395 (Mile post 82.7 to 96.4)
Segment 6 is 13.6 miles in length. Segment 6 runs from Drews Gap to the junction with Highway 395 in Lakeview. Relatively prosperous agriculture is the prominent land use in this segment. Lakeview is suffering a significant economic crisis with tourism the only industry with any potential for growth, other than the natural commercial activities which come with being at the junction of the only major highways in the region (OR 140 and U.S. 395).

Limited information on road status and conditions on OR 140 is available from ODOT and, more detailed environmental information is forthcoming from the Oregon Department of Fish and Wildlife (ODFW).

Appendix D
Plan Requirements

Corridor Plan Requirements

A. TRANSPORTATION BALANCE/INTERMODAL CONNECTIVITY

In accordance with the Oregon Transportation Plan (OTP), "it is the policy of the State of Oregon to provide a balanced transportation system. A balanced transportation system is one that provides transportation options at appropriate minimum service standards, reduces reliance on the single occupant automobile where other modes or choices can be made available, particularly in urban areas, and takes advantage of the inherent efficiencies of each mode."

Applicable plan requirements, issues and objectives that pertain to truck freight, automobiles, passenger and freight rail service, air, bicycle/pedestrian, urban/intercity transit and pipelines are described below.

Truck Freight

1. Open access should be provided to and from all reload facilities and to major ports (e.g., Medford, Klamath Falls).

2. Highways which are not Access Oregon Highways and which have a high percentage of trucks, provide regional freight access, and handle long-distance traffic to out-of-state destinations should be designated as primary freight corridors and incorporated into corridor plans and projects (e.g., Highway 62/140 Medford to Klamath Falls). (OTP, pp. 92-93)

Automobiles

1. It is the policy of the OTP to achieve modal balance, overall transportation efficiency and environmental responsibility, in part, through efforts to reduce vehicle miles of automobile travel per capita.

Rail Service

1. Increase economic opportunities for the State by having a viable and competitive rail system. (OFR, Policy 1)

2. Strengthen the retention of local rail service where feasible. (OFR, Policy 2)

3. Protect abandoned rail rights-of-way for alternative or future use. (OFR, Policy 3)

4. Integrate rail freight considerations into the State's land use planning process. (OFR, Policy 4)

5. Branch lines within Oregon should be maintained to allow a minimum speed of 25 miles per hour whenever upgrading can be achieved with a favorable benefit-cost ratio. (OTP, p. 93)

6. Rail mainlines within Oregon should provide convenient ramp, terminal and reload facilities for transfers from truck to rail for long haul movement of freight. High quality highway access should be provided to these sites (mainlines, Oregon Trunk, Siskiyou branch). (OTP, p. 93)

7. Priority rights of way should be preserved for potential public use or ownership when abandonment proceedings are initiated. (OTP, p. 93)

8. Open access should be provided to and from all reload facilities and to major ports (e.g., Medford, Klamath Falls). (OTP, p. 93)

9. To the extent possible, major intermodal rail/truck facilities should exist on rail mainlines with a service area of 150 miles (e.g., Klamath Falls). Intermodal reload facilities are to be encouraged at other locations as the market demands (e.g., Medford). (OTP, p. 91)

Air

1. To the extent possible, direct interconnections should be available between intercity bus, air, rail, airport, limousine services, and local transit service. (OTP, p. 88)

2. Air service connections between Portland, or other West Coast hubs, and other areas of Oregon should be provided whenever commercially viable (three round trip planes per day of 19 passengers as a minimum measure of commercial viability) or whenever intercity air connections are more economic than providing operating assistance to other modes (e.g., Medford, Klamath Falls). (OTP, p. 91)

Bicycle/Pedestrian

OR 140 between Medford and Klamath Falls is a designated Statewide Bicycle Route. As such, this section of OR 140 is to be preserved and improved to safely accommodate bicycle travel (OBP).

1. Statewide and regional bicycle systems should be integrated with other transportation systems in urban and rural areas to accommodate commuting and other trips by bicycle. Safe, direct and continuous bikeways free of unnecessary delays should be provided along all urban arterial and major collector routes. Paved shoulders should be provided on highways in rural areas. (OTP, p. 94)

2. As a designated Statewide Bicycle Route, OR 140 is to be preserved and improved to safely accommodate statewide bicycle travel. (OBP)

3. Footpaths and bike trails are to be provided wherever a highway, road, or street is being constructed, reconstructed, or relocated except in certain circumstances (i.e., ORS 366.514). (OBP, p. 20)

4. Bikeways must be provided along all arterial and major collectors except in certain circumstances. (OBP, p. 20)

Public Transportation

1. Local public transit services and elderly and disadvantaged service providers should regularly connect with intercity passenger services. (OTP, p. 88)

2. Intercity passenger terminals should be subject to public control in order to assure open access to all intercity carriers. (OTP, p. 88)

3. Services shall be provided in compliance with the Americans with Disabilities Act (ADA) requirements for all modes and transfer facilities. (OTP, p. 88)

4. Intercity passenger service should be available for an incorporated city or groups of cities within five miles of one another having a combined population of over 2,500 and located 20 miles or more from the nearest Oregon city with a larger population and economy. Services should allow a round trip to be made within one day. (OTP, p. 89)

5. Market areas over 50,000 population and over 70 miles from Portland (e.g., Medford, Klamath Falls), should have at least three (3) minimum round trip connections to Portland available per day via intercity passenger modes. (OTP, p. 88)

6. To the extent possible, direct interconnections should be available between intercity bus, air, rail, airport limousine services, and local transit services (e.g., Medford, Klamath Falls). (OTP, p. 88)

7. Local transit and elderly and disadvantaged services should be coordinated with intercity bus services. (OTP, p. 90)

8. Bus passenger terminals should be publicly controlled to ensure all carriers have access to the terminal under open access term (e.g., Medford, Klamath Falls). (OTP, p. 90)

9. Intercity bus lines and local transit services should be coordinated with intercity rail services to provide for timely and convenient connections (e.g., Medford, Klamath Falls) (OTP, pp. 90-91)

10. High quality transit services should be provided in all interstate corridors and other highway corridors of statewide function in which level of service E or worse is experienced or anticipated (Medford) (OTP, p. 95)

11. Park and Ride facilities along major rail or busway corridors should provide convenient connections to all intercity passenger modes and terminals. (Medford) (OPT, p. 96)

12. Urban transit services should provide convenient connections to all intercity passenger modes and terminals. (Medford) (OTP, p. 96)

13. Urban transit services should be available to the general public to provide a modal alternative to automobile travel. (OTP, p. 96)

Pipelines

The Pacific Gas Transmission Company (PGTC) natural gas transmission line is located at the western half of the OR 140 corridor.

1. In order to make alternative fuel widely available to the transportation user and to support regional economic development opportunities, adequate natural gas should be available every 100 to 150 miles on major interstate/statewide transportation corridors throughout the state when economically feasible. (OTP, p. 93)

Water/Ports

There are no ports within the OR 140 corridor.

B. REGIONAL CONNECTIVITY

The efficient movement of people and goods among places and between modes and carriers is a goal of the Oregon Transportation Pan (OTP). Specific plan requirements, issues and objectives regarding regional connectivity are described below.

1. It is the policy of the State of Oregon to identify and develop a statewide transportation system of corridors and facilities that ensures appropriate access to all areas of the state, nation and the world. (OTP, p. 41)

C. HIGHWAY CONGESTION

1. OR 140 has a Statewide Level of Importance. The primary function of statewide highways is to provide connections and links to larger urban areas, ports and major recreation areas. A secondary function is to provide links and connections for intra-urban and intra-regional trips. The management objective is to provide for safe and efficient high-speed continuous-flow operation in rural areas and high to moderate-speed operations with limited interruptions of flow in urban and urbanizing areas. (OHP, pp. A-2, A-5)

2. OR 140 from Klamath Falls to Lakeview has a Regional Level of Importance. The primary function of regional highways is to provide connections and links to areas within regions of the state, between small urbanized areas and larger population centers, and to higher level facilities. A secondary function is to serve land uses in the vicinity of these highways. The management objective is to provide for safe and efficient high-speed continuous-flow operation in rural areas, except where there are significant environmental constraints, and moderate to low-speed operation in urban and urbanizing areas with moderate interruptions to flow. (OHP, p. A-2)

3. Provide traffic flow for Access Oregon Highway corridors at Level of Service A through C in rural areas and A through D in urban areas during peak traffic periods. (AOH, p. 9)

4. Provide traffic flow for urban, urbanizing and rural development center areas at LOS C, for rural areas at LOS B and for Special Transportation Areas at LOS E. (OHP, p. A-3)

5. Where a highway section is severely constrained by intensive land use or other physical or environmental limitations, and where service levels are substandard, the division's objective will be to maintain current service levels. (OTP, p. 142)

D. FACILITY MANAGEMENT

1. Access management categories will ordinarily be applied in conjunction with the development of highway corridor plans. The assignment of access management categories shall be consistent with the state Access Management Policy, the classification of the highway and be adequate to meet the operating level of service standard which applies to the highway section. (OHP, pp. B-2, B-3)

E. ROADWAY CONDITIONS

1. Provide minimum lane widths of 12 feet on entire highway. (AOH, p. 9)

2. Provide minimum paved shoulders of 6 feet on all highway sections with 2,000 or over Average Daily Traffic (ADT) and 3 foot paved shoulders on those sections with less than 2,000 ADT. On bridges, provide a useable bridge width of four feet greater than the approach lane width if the ADT is 2,000 to 4,000 and six feet greater if the ADT is over 4,000 ADT. (AOH, p. 9)

3. Improve and maintain pavement surface to good or better condition. (AOH, p. 9)

F. SAFETY

1. It is the policy of the State of Oregon to improve continually the safety of all facets of statewide transportation for system users including operators, passengers, pedestrians, recipients of goods and services, and property owners. (OTP, p. 43)

G. ENVIRONMENTAL IMPACTS

It is the policy of the State of Oregon to provide a transportation system that is environmentally responsible and encourages conservation of natural resources. (OTP, p. 40)

More specific plan requirements, issues and objectives in regard to scenic resources, wildlife habitats, natural resource protection, air quality and water quality are described below.

Issues

Klamath Lake is heavily polluted by non-point? source pollution (nps).

New view corridors have been established as a result of the pine beetle infestation of several years ago.

H. SOCIAL AND LAND USE IMPACTS

Given projected increases in local and through traffic on OR 140, planning within the corridor will need to include expanded transportation facilities, improved local management, enhanced protection of social and cultural resources, along with new recreational and other development opportunities.

I. ENERGY IMPACTS

1. Minimize transportation-related energy consumption through improved vehicle efficiencies, use of clean burning motor fuels, and increased use of fuel efficient modes which may include railroads, transit, carpools, vanpools, bicycles, and walking. OTP, p. 40)

J. ECONOMIC IMPACTS

1. The goal of the AOH system is to provide for the economic growth of Oregon by moving through traffic safely and efficiently through and between geographic and major economic areas within Oregon, between Oregon and adjacent states, and to and through major metropolitan areas. (OHP, p. C-2)

2. Increase economic opportunities for the State by having a viable and competitive rail system. (OFR, Policy 1)

Sources:

AOH: Access Oregon Highway Study, 1990
OTP: Oregon Transportation Plan, September 15, 1992
OBP: Oregon Bicycle Plan, 1992
Oregon Bicycle/Pedestrian Plan (Public Review Draft), December 1994
OHP: Oregon Highway Plan, June 1991
ORP: Oregon Rail Passenger Policy and Plan, 1992
OFR: Oregon Freight Rail Plan, August 17, 1994