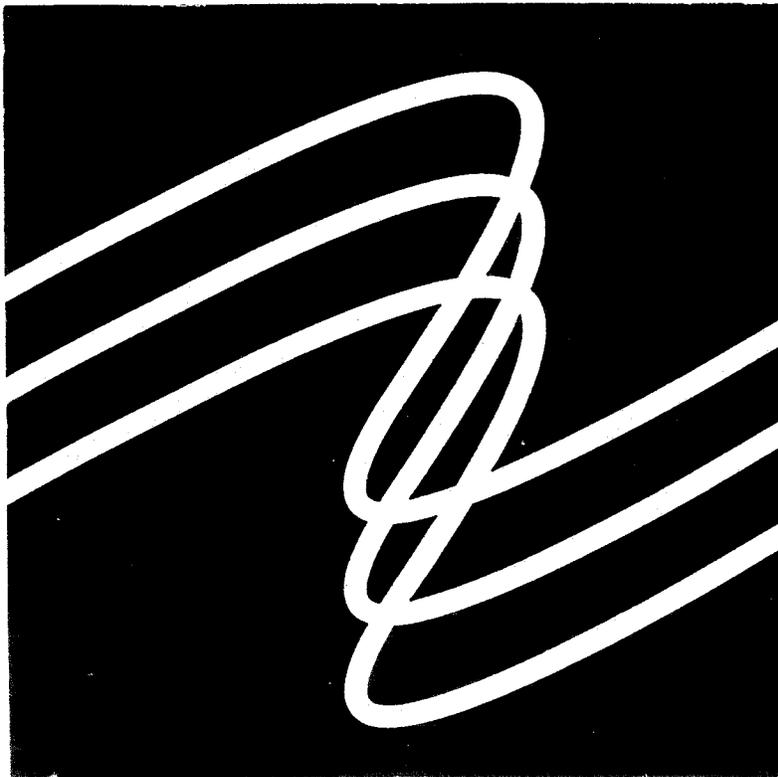


HOOD RIVER – MT. HOOD  
(OR 35)  
CORRIDOR PLAN  
OTC Adopted

**VOLUME 1  
CORRIDOR PLAN**



An Element of the Oregon Transportation Plan

Oregon Department Of Transportation  
Region 1

August 13, 1999

ODOT R1  
Planning-Major Projects  
~~Check Out/Check In Only~~

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HOOD RIVER – MT. HOOD  
(OR 35)  
CORRIDOR PLAN

**VOLUME 1**

**CORRIDOR PLAN**

An Element of the Oregon Transportation Plan

Adopted by the Oregon Transportation Commission  
on August 13, 1999

Implementation of the Corridor Plan is dependent upon the availability of funding. Adoption of the plan by the Oregon Transportation Commission does not guarantee adequate financial resources to carry out the projects nor can the Commission commit the financial resources of other agencies or public bodies.

Oregon Department Of Transportation  
*Region 1*

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## ACRONYMS

The following acronyms and terms are used throughout this document:

CAT	Columbia Area Transit
CIP	Capital Improvement Program
Corridor	Hood River-Mt. Hood (OR 35) Corridor
CRGNSA	Columbia River Gorge National Scenic Area
HCRH	Historic Columbia River Highway
HPMS	Highway Performance Monitoring System
LOS	Level of Service
MHNF	Mount Hood National Forest
ODOT	Oregon Department of Transportation
OHP	Oregon Highway Plan
OTC	Oregon Transportation Commission
OTP	Oregon Transportation Plan
SOV	Single Occupant Vehicle
SPIS	Safety Priority Index System
STIP	Statewide Transportation Improvement Program
TAC	Technical Advisory Committee
TDM	Transportation Demand Management
TEA-21	Transportation Equity Act for the 21 <sup>st</sup> Century
TIP	Transportation Improvement Program
TPR	Transportation Planning Rule
TSM	Transportation System Management
TSP	Transportation System Plan

## SCOPE

The Hood River-Mt. Hood Summit (OR 35) Corridor consists of two interconnected portions of the statewide highway system:

- US 30 from its intersection with I-84 at the East Hood River Interchange to its intersection with the Historic Columbia River Highway (HCRH)/State Street (commonly referred to as Button Junction); and
- OR 35 from Button Junction to its intersection with US 26 near the Mt. Hood summit.

In order to define the long-term management direction for the entire countrywide transportation system, the Corridor Plan addresses:

- The Hood River-Mt. Hood Summit (OR 35) Corridor as defined above;
- District Highways 281 and 282;
- HCRH/US 30 through Hood River and Cascade Locks; and
- I-84 through Hood River County.

A separate ODOT planning process is underway to develop detailed management direction for the HCRH. Long-term management direction for I-84 will be defined as part of a future planning effort for the length of this interstate highway through Oregon. Consequently, while recognizing them as part of the countywide transportation system, this Corridor Plan defers detailed planning for these two facilities to their separate processes.

## Corridor Plan Organization

The Hood River-Mt. Hood Corridor Plan is organized into two volumes.

The first Volume is titled *Corridor Plan* and is the heart of the Plan. Volume 1 includes an introduction (Chapter I), an overview of the Corridor (Chapter II), direction for management of the Corridor (Chapter III), and Corridor Decisions (Chapter IV). Chapter III presents the overall management direction for the Corridor, along with specific management objectives for all the issues identified in the Plan. Chapter IV provides detail on implementing the objectives, including a matrix of solutions for each objective, a prioritized list of all the solutions, and maps showing the location of all the solutions in the Corridor. Volume 1 documents the decisions made in the Corridor Plan to be adopted by the Oregon Transportation Commission.

Volume 2 is titled *Supporting Documentation* and provides additional details on the decisions in Volume 1. It also provides the adopted findings of consistency with other state and local plans and policies. Key chapters in Volume 2 include: Chapter I – Development of Corridor Plan Objectives and Implementation Program, Chapter II – Decision Detail Sheets, and Chapter III – Consistency Analysis. Chapter I presents details on existing policy direction, issues, opportunities, and constraints present in the Corridor that led to a recommendation to adopt a given objective and solution or project. Chapter II presents a single page summary of information on each individual solution or project in the plan. Chapter III provides a review of consistency with all relevant federal, state and local plans. Volume 2 will be particularly useful for local planners and project development staff as the plan is implemented, as it includes details on the solutions as well as information on planning requirements needed to implement the projects. There is also information useful to ODOT Maintenance Districts for both day-to-day practices and for several minor projects that can be implemented by District staff.

*Technical Appendices*, on file at ODOT Region 1, include additional details, data and technical memoranda on a variety of topics, such as:

1. Public involvement documentation / Committee rosters
2. Potential development impact analysis (PDIA)
3. Environmental overview/analysis
4. Highway performance monitoring system (HPMS) data
5. Safety data
6. Traffic operations data
7. Issues, opportunities and constraints

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HOOD RIVER-MT. HOOD  
(OR 35)  
CORRIDOR PLAN

# Executive Summary

An Element of the Oregon Transportation Plan

Oregon Department of Transportation  
*Region 1*

Adopted  
August 13, 1999

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## A. INTRODUCTION

### Corridor Plan Purpose and Scope

The Hood River-Mt. Hood (OR 35) Corridor Plan is the product of a cooperative effort between the Oregon Department of Transportation (ODOT), Hood River County, the cities of Hood River and Cascade Locks, ports of Hood River and Cascade Locks, Confederated Tribes of the Warm Springs, transportation service providers, other interest groups, and the general public to develop a long-term program for management of and improvements to the Hood River-Mt. Hood Corridor.

This Corridor Plan is one of over 30 similar plans being prepared by ODOT statewide for key transportation corridors identified in the Oregon Transportation Plan (OTP) and for urban area arterials and interchange areas where development pressures have threatened operation. In ODOT Region 1, there are five priority corridors, including the Hood River-Mt. Hood (OR 35) Corridor. Corridor planning is a new approach to transportation planning in which ODOT and the communities bordering major transportation corridors work together to create plans for managing and improving transportation modes along entire corridors.

*The purpose of the Corridor Plan is to establish both short and long-term management direction for all modes of transportation in the Corridor and to make major transportation tradeoff decisions.* Management objectives address the corridor as a whole, as well as specific sites and transportation improvements. The Corridor Plan also identifies priorities and timing for the various actions and responsible public agencies and other service providers.

Prioritized improvements to corridor facilities, systems and management identified in the Corridor Plan provide the basis for updating the Statewide Transportation Improvement Program (STIP), which, in turn, is the basis for distributing the State's limited transportation resources. Corridor planning helps ODOT, with the cooperation of local governments and input from the citizens of Oregon, make difficult funding decisions necessary to build and maintain a statewide transportation system that meets the growing demand for transportation for the next 20 years. Inclusion of any improvements in the Corridor Plan does not represent a funding commitment by ODOT or any local government, however, until programmed in the STIP and/or a local CIP.

Key elements of the Corridor Plan include:

- Description of existing and future conditions for all modes in the Corridor;
- Forecasts of future available funding for transportation projects in the Corridor;
- Summary of existing state, regional and local policy direction and analysis of its compliance or consistency with the Corridor Plan;
- Future vision for management of each element of the Corridor's transportation system;
- Corridor Plan Objectives that define the policy direction for all modes in the corridor, as well as for functional issues such as connectivity, congestion and environmental and energy impacts;
- Solutions or implementation programs comprised of proposed projects, strategies and other actions to be taken to implement the Corridor Plan Objectives;
- Prioritization of improvement projects based upon scenarios of anticipated available funding; and
- Detailed information and mapping for all projects.

Unique to this Corridor Plan process has been the simultaneous development of Transportation System Plans (TSPs) for the cities of Hood River and Cascade Locks. ODOT funding and staffing has been provided to ensure that the TSPs are coordinated with and build upon the Corridor Plan and vice-versa. Although exempt from Transportation Planning Rule requirements for a TSP, Hood River County has fully participated in this comprehensive planning process to ensure that all of the countywide transportation system is addressed. A Technical Advisory Committee (TAC) developed common goals and objectives for the Corridor Plan and TSPs and identified implementation strategies and projects (solutions) specific to each document. A separate planning process is underway to develop detailed management direction for the Historic Columbia River Highway. Long-term management direction for I-84 will be defined as part of a future planning effort for the length of this interstate highway through Oregon. The intent is to ultimately combine these products into a countywide transportation plan which defines the long-term management direction for all elements of the countywide transportation system.

The Hood River-Mt. Hood Corridor Plan builds on the strategies and policies found in the Oregon Transportation Plan (OTP), the Oregon Highway Plan (OHP) and other modal plans. As noted above, it has also been closely coordinated with the development of local transportation system plans. Through this local transportation system planning, refinement planning for the corridor plan, periodic review, and local plan amendments, ODOT and the local governments in the Corridor are cooperatively working together to ensure that city and county comprehensive plans and zoning ordinances achieve Corridor Plan management objectives. The Oregon Transportation Commission (OTC) will adopt the final Corridor Plan as an element of the OTP.

## **B. CORRIDOR PLANNING PROCESS**

### **Corridor Planning Concept**

A corridor plan is a long-range (20-year) program for managing transportation systems that move people, goods and services within a specific transportation corridor. While many modes of transportation and transportation facilities are not owned or operated by the state (e.g., railroads, transit systems, port facilities), the state has a special interest in their performance given their interaction with ODOT facilities and collective significance to the statewide transportation system.

Benefits of long-term planning for the Hood River-Mt. Hood Corridor include:

*Resolution of Major Planning Issues Prior to the Initiation of Project Development.* Consensus among local, regional, and state governments regarding project purpose and needs is essential to successful project development. Corridor planning provides a framework within which individual projects located in corridor communities can be reviewed and prioritized.

*Protection of Transportation Investments.* To prevent premature obsolescence of highways and other facilities, corridor planning examines alternate means to accommodate transportation needs with and without capital-intensive improvements. Alternatives such as access management, utilization of parallel local streets, reconfigured land use patterns and demand management programs (i.e., rideshare, public transportation, flex-time, etc.) are considered in lieu of or in addition to major capital improvements.

*Partnerships with Diverse Public and Private Agencies and Organizations.* Corridor planning provides a forum for resolution of policy issues and negotiation of strategic partnerships between organizations striving to fulfill complementary missions with limited resources. Examples include local, state and federal agencies, Native American tribes, and transportation associations.

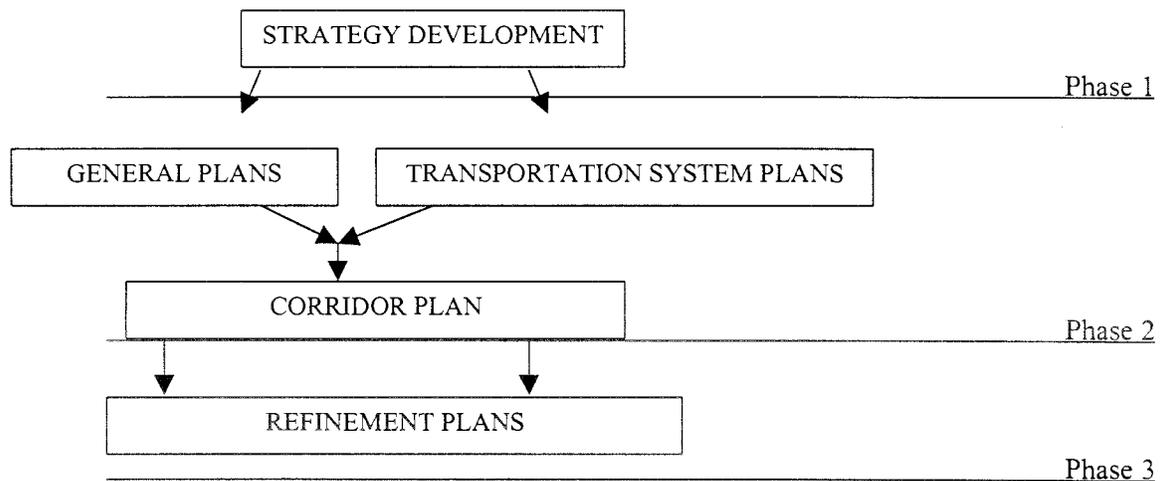
There are several federal and state mandates impacting how corridor planning is to be undertaken. The three most important of these are: the Transportation Equity Act for the 21st Century (TEA-21); the Oregon Transportation Plan (OTP); and the Oregon Transportation Planning Rule (TPR). While very different policy initiatives, all three share several common requirements: 1) transportation plans should provide a balanced transportation system providing transportation options; 2) transportation plans should reduce reliance upon the single occupant vehicle and increase the opportunity for modal choice; and 3) transportation plans should be coordinated with land use plans and address the environmental, social, economic, and energy consequences of proposed actions.

### Corridor Planning Process

The corridor planning process recognizes that different segments of the Hood River-Mt. Hood Corridor require differing levels of study to develop a corridor-wide long-range plan. Thus, corridor planning moves from the general to the specific in a three-phased process (illustrated below). It is important to note that this planning may not occur in a linear fashion, i.e., that activities described in Phase 1 may occur after some Phase 2 or Phase 3 planning activities. The Corridor Planning process consists of:

- Identification, in a Corridor Strategy, of significant corridor-wide issues and strategies to address those issues;
- Preparation of two types of Transportation System Plans--General Plans for counties and Systems Plans for cities; and
- Resolution of any outstanding environmental, land use or other issues through Refinement Plans.

**Figure 1. Corridor Planning Process**



This Corridor Plan has been developed with the active involvement of tribal and local governments in the corridor, service providers, interest groups, statewide agency and stakeholder committees, and the general public. Public comment received throughout the planning process through newsletter survey responses, open houses, letters and phone calls has been incorporated into development of the Corridor Plan. A Technical Advisory Committee (TAC) is the primary author of the Corridor Plan. The TAC will remain active for future revisions to the Corridor Plan as necessary.

Key steps in development of the Corridor Plan included:

- Identification of community and stakeholder issues, concerns and ideas about transportation modes in the Corridor. A survey of Corridor residents and other interested parties was conducted through a newsletter mailing and at the Hood River Harvest Festival in October, 1995 to identify issues and needs to be addressed in the corridor planning process.
- Research and analysis of existing conditions and future opportunities and constraints.
- Development of an Interim Corridor Strategy that established overall objectives for how all modes would be managed in the Corridor. A September, 1996 newsletter and questionnaire solicited public input on key objectives drafted by the TAC. Open houses were also held in September, 1996 to solicit public input on preliminary objectives, implementation actions and priorities to be addressed in the Interim Corridor Strategy and in the TSPs for Hood River County and the cities of Hood River and Cascade Locks.
- Analyses, or refinement studies, in a number of areas identified by TAC as needing further study before implementation strategies could be identified and prioritized. As a result, ODOT undertook analysis of the need for bicycle and pedestrian system improvements, passing and climbing lanes, and intersection safety and capacity improvements within the Corridor.
- Development by local governments of Transportation System Plans (TSPs). Hood River County and the cities of Hood River and Cascade Locks are currently finalizing these plans for the transportation systems within their jurisdictions.
- Identification of specific strategies and improvement projects to implement the Interim Corridor Strategy objectives and prioritization of improvement projects based upon scenarios of anticipated available funding.
- Newsletters distributed regionwide in June, 1998 to over 2,000 individuals, agencies and organizations summarizing key management strategies, and in September, 1998 announcing September and October open houses conducted in conjunction with the draft Oregon Highway Plan.
- Incorporation of these pieces into a draft Corridor Plan.
- Following public and agency review, endorsement of the Corridor Plan by local governments and other TAC members and adoption by the OTC.
- As needed, refinement planning to address special issues. These refinement plans will then be folded into the Corridor Plan. An example of a refinement plan would be a study of the westside access issues in the City of Hood River.

### **Applicability Of This Plan**

The objectives embodied in this Corridor Plan direct the manner that the Oregon Department of Transportation plans, manages, and improves the Hood River-Mt. Hood (OR 35) Corridor. The Hood River-Mt. Hood (OR 35) Corridor Plan was adopted prior to January 1, 2000. This Corridor Plan is consistent with the policies and standards of the 1991 Oregon Highway Plan. The 1991 Highway Plan policies, except for the Operating Level of Service Standards (Appendix A-3) shall remain effective for purposes of the Transportation Planning Rule (OAR 660-12-015) consistency requirements.

The exception, Policy 1F, Highway Mobility Standards of the 1999 Oregon Highway Plan, will be effective immediately.

The standards provided in 1F shall identify the state highway mobility performance expectations to be used in the development of transportation system plans and highway corridor plans that are adopted after March 18, 1999. Alternative performance standards that need or exceed these highway mobility performance standards may be substituted.

The standards provided in Policy 1F shall guide state highway operation decisions initiated after March 18, 1999.

Application for amendments to functional plans, acknowledged comprehensive plans and land use regulations subject to the Transportation Planning Rule (OAR 660-12-060), initiated after March 18, 1999 shall be consistent with the standards in Policy 1F.

The Hood River-Mt. Hood (OR 35) Corridor Plan shall be amended to be consistent with the 1999 Oregon Highway Plan at its next update.

### **Revision and Amendment Process**

Implementation of the Hood River-Mt. Hood (OR 35) Corridor Plan will occur over many years. During that time, it will be necessary to update and revise the Plan to reflect changing conditions and policy direction or to better achieve Plan objectives. Corridor Plan Objectives call for maintaining a corridor-wide advisory group to assist ODOT in periodically prioritizing management solutions, reviewing local government transportation system plans for conformance with the Corridor Plan, and assisting in updating the Corridor Plan as needed. Refinement planning will also occur to address outstanding environmental, land use or other issues. Agency and public input will be solicited during refinement planning and Corridor Plan updates.

## **C. CORRIDOR OVERVIEW**

The Hood River-Mt. Hood (OR 35) Corridor (Figure 2) consists of two interconnected portions of the statewide highway system:

- US 30 from its intersection with I-84 (East Hood River Interchange) to its intersection with the Historic Columbia River Highway (HCRH)/State Street (commonly referred to as Button Junction); and
- OR 35 from Button Junction to its intersection with US 26 near the Mt. Hood Summit.

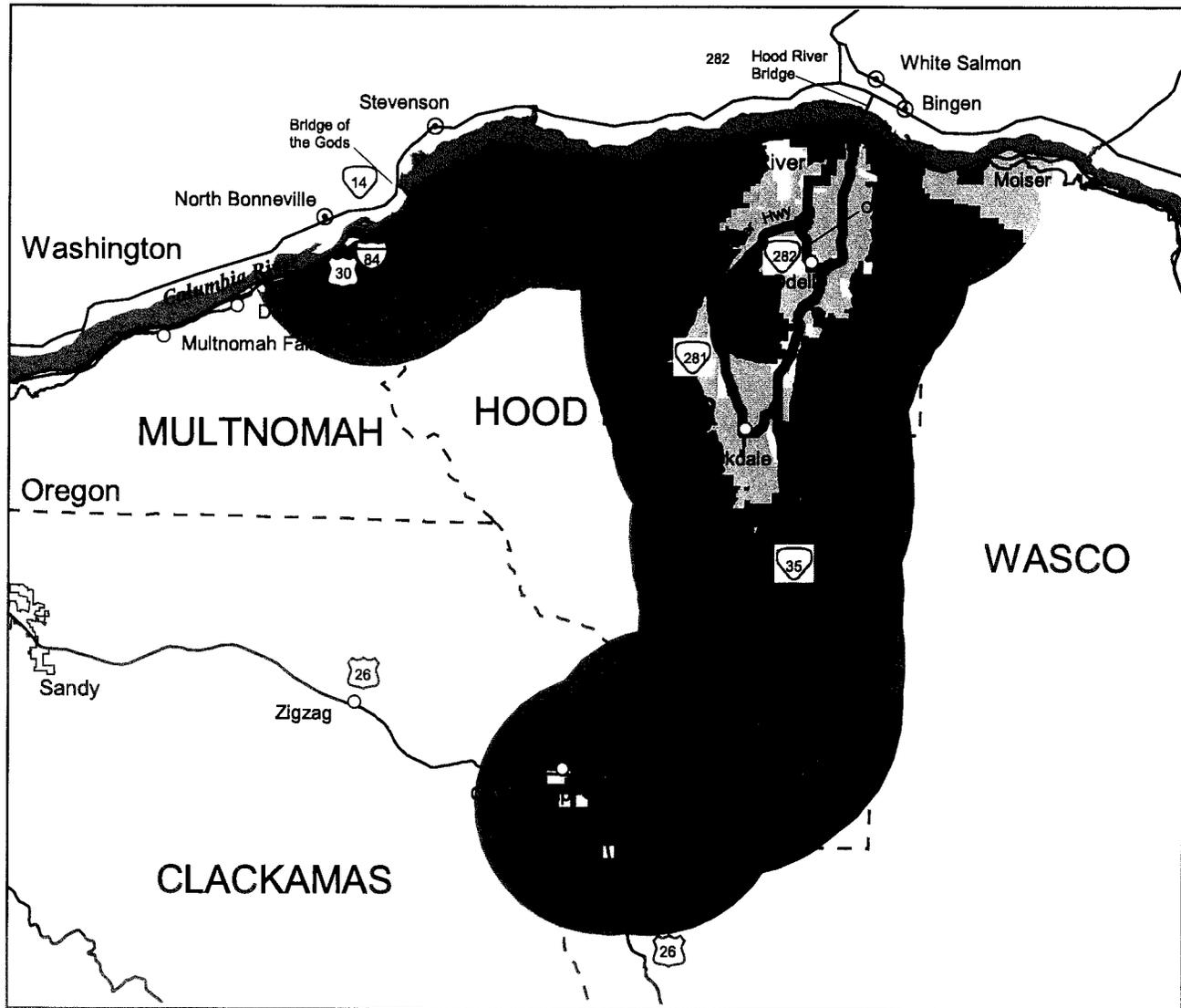
In order to define the long-term management direction for the entire countywide transportation system, the Corridor Plan addresses:

- The Hood River-Mt. Hood (OR 35) Corridor as defined above;
- District Highways 281 and 282;
- Historic Columbia River Highway (HCRH)/US 30 through Hood River and Cascade Locks; and
- I-84 through Hood River County.

A separate ODOT planning process is underway to develop detailed management direction for the HCRH. Long-term management direction for I-84 will be defined as part of a future planning effort for the length of this interstate highway through Oregon. Consequently, while recognizing them as part of the countywide transportation system, this Corridor Plan defers detailed planning of these facilities to their separate processes.

The Corridor includes the urban areas of Hood River and Cascade Locks (Figure 3), as well as the rural community centers of Odell and Parkdale. In 1998, Hood River's population was 5,130 and Cascade Locks' population was 1,095. Each community brings a varying mix of transportation needs, community development patterns, and activity levels.

**Figure 2: General Corridor Area Existing Conditions**

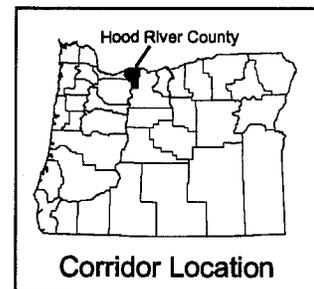
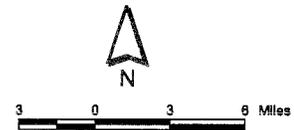


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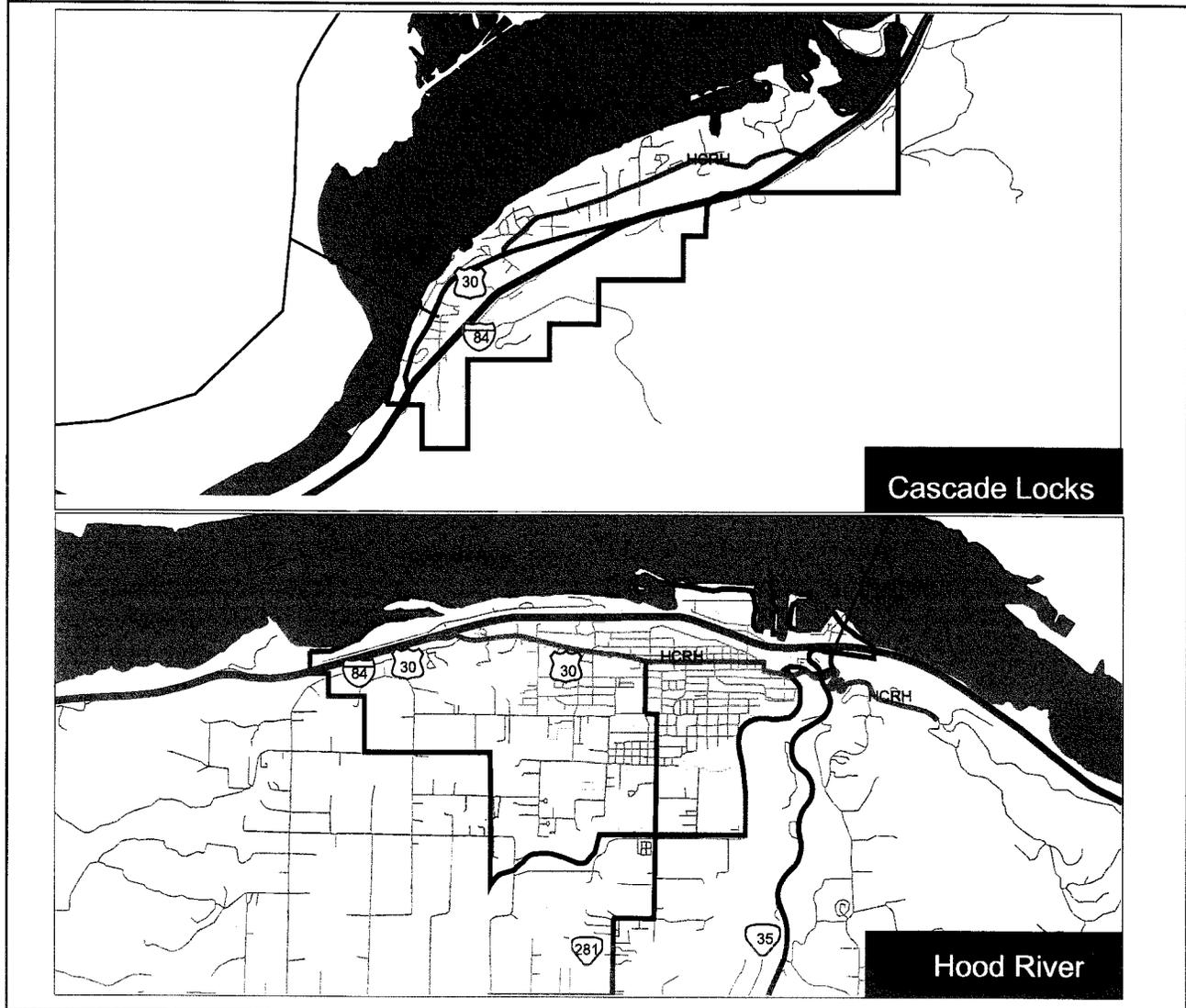
- Interstate Highway
- US Highway
- State Highway
- Hood River - Mt. Hood (OR 35) Corridor
- County Boundaries
- Urban Growth Boundaries

**Zoning and Land Use**

- Agriculture
- Forestry
- Park and Recreation
- Rural Service Center
- Urban

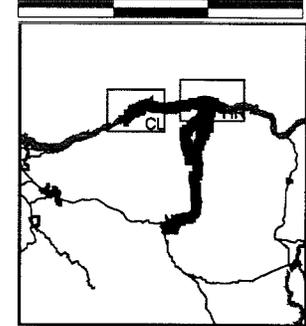
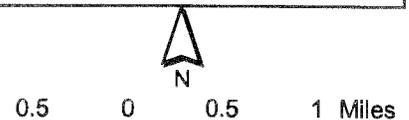


**Figure 3: Cascade Locks and Hood River Urban Growth Areas Existing Conditions**



**Legend:**

- Urban Growth Boundaries
- City Boundaries
- Roads
- Interstate and Highways**
- Interstate
- Statewide Highway
- District Highway
- Historic Highway



**UGB Locations**

## Role/Functions

The Hood River-Mt. Hood Corridor serves both urban and rural transportation needs. The Corridor serves a variety of activities critical to the state. It links the farm and forest activities of the Hood River Valley to processing and distribution facilities in the City of Hood River, and by connecting to I-84, links Hood River County to other destinations throughout the country. With occasional weather closures of I-84 through the Columbia River Gorge, OR 35 (Mt. Hood Highway) provides an important alternative for moving people and goods between the Willamette Valley and eastern Oregon. It is also a major summer and winter recreation route for activities in the Mt. Hood National Forest and the Columbia River Gorge. The Corridor passes through difficult terrain and environmentally sensitive areas, the needs of which must be balanced with the need to maintain access. As part of the Mt. Hood Loop, OR 35 connects US 26 and I-84, as well as SR 14 (via the Hood River bridge), to I-84 and the local street systems.

Among the Corridor's functions are:

- Eastside (Mt. Hood Loop) entrance into the Columbia River Gorge National Scenic Area;
- Primary access to Cooper Spur Ski Area and other eastside (of Mt. Hood) recreation facilities;
- Alternative route (to US 26) from the Portland area to Mt. Hood Meadows Ski Area and other winter and summer recreation facilities;
- Truck route, serving lumber mills, orchards and fruit shippers;
- Access to the rural community centers of Odell, Parkdale and Mt. Hood;
- Access to scenic vistas;
- Scenic Byway for that portion within the Mt. Hood National Forest; and
- Access from I-84 to the east end of Hood River.

The Hood River Highway (281) and the Odell Highway (282) are ODOT district highways, whose primary function is to serve local traffic and provide access to adjacent properties. They link the communities in the mid- and upper Hood River Valley to the major east-west and north-south transportation corridors (I-84 and OR 35). Both highways provide a truck route serving lumber mills and orchards and both are county bike routes (shared roadways).

The Hood River Highway (Highway 281) is the major parallel route to OR 35. It begins in downtown Hood River at Oak Street (HCRH) and follows the Hood River to the rural center of Parkdale, where it intersects OR 35. Among the highway's functions are:

- Westside alternate route into the city of Hood River;
- Secondary access to Cooper Spur Ski Area;
- Access to the rural communities of Dee and Parkdale;
- Detour route for incidents along OR 35;
- Access to orchards, fruit shipping operations and residential areas in the Hood River Valley;
- Access to the eastside of the Mt. Hood National Forest and associated recreational facilities.

The Odell Highway (Highway 282) connects the Hood River Highway (Highway 281) and OR 35, serving the rural community of Odell. Among the highway's functions are:

- Access to the rural community of Odell;
- Detour route for incidents along OR 35; and

- Access to orchards, fruit shippers and residential areas in the Lower Hood River Valley.

The Historic Columbia River Highway (HCRH) in Hood River and Cascade Locks is on the National Register of Historic Places. The Oregon Legislature has declared that it is the state policy to preserve and restore the continuity and historic integrity of the remaining segments of the HCRH for public use and enjoyment.

I-84 is a four-lane controlled access freeway running east/west through Hood River County along the Columbia River. It is part of the federal interstate system that connects the east coast to the west coast.

### **Transportation Facilities and Services**

Key transportation facilities and services in the Corridor include:

#### *Highways*

This Corridor includes the route of OR 35 from its junction with US 26 on Mt. Hood to the junction of US 30 with I-84 in Hood River. It also includes the highway connections in the cities of Hood River and Cascade Locks. OR 35 is the primary north-south route through Hood River County. It is part of the National Highway System (NHS), and is identified in the 1999 Oregon Highway Plan as a Statewide Highway, meaning that it provides connections to larger urban areas, ports and major recreation areas not served by interstate highways. Interstate 84 is the primary east-west route through the northern portion of the state.

Two district highways, the Hood River Highway (281) and Odell Highway (282) provide links from the mid- and upper Hood River Valley to the major east-west and north-south transportation corridors.

#### *Air Service*

There are four airports in the county--Cascade Locks State Airport, Hood River Airport, Hanel Airport, and Green Acres Airpark. Cascade Locks State Airport is located within the city limits and is administered by the ODOT Aeronautics Division. It plays a supportive role to the state transportation system in terms of agricultural, recreational, and emergency uses. Hood River Airport is a general aviation airport located south of Hood River adjacent to Highway 281. It is owned and operated by the Port of Hood River and provides no regularly scheduled air service, being used primarily by small planes for agricultural, business, and personal uses. Other airports include two small private airports located south of Hood River. In addition, the US Coast Guard has four seaplanes which operate out of the Port of Hood River boat basin on the Columbia River.

Major commercial air service is available approximately 40 miles west of Cascade Locks at the Portland International Airport in Portland. The accessibility of Portland Airport and the wide range of services it offers limit the likelihood of significant expansions of the airports in Hood River County.

#### *Bicycle System*

I-84, OR 35, Highways 281 and 282, and HCRH (US 30) are all state highway bicycle facilities and are intended to provide for general bicycling needs. Both commuting and recreational bicycle use occurs in the Corridor. Bicyclists commonly use local streets within the urban areas. Along OR 35, bicycling facilities consist of shared roadways and shoulders. An inventory of shoulder widths shows that, in general, the southern ten miles of OR 35 are in good shape exceeding four feet in width, the middle 18 miles are in poor shape with many deficient areas, and the northern ten miles have fairly wide shoulders with few deficiencies. The parallel district highways, 281

and 282, have deficient shoulders for bicycle use. Seventy-nine (79) percent of the shoulder miles on Highway 281 and 69 percent of the shoulder miles on Highway 282 are less than four feet in width.

### *Pedestrian System*

Other than shoulders, pedestrian facilities are not provided along OR 35. Most of the local pedestrian activity in the Corridor occurs in cities or rural centers where sidewalks, pedestrian crosswalks, and other facilities are present. Within Hood River and Cascade Locks, sidewalks are lacking in some areas and pedestrians must frequently share roads with cars. Downtown Hood River has a pedestrian-friendly environment with sidewalks and short blocks. However, many of the sidewalks lack curb cuts for wheelchair access. A pedestrian pathway is provided along the Columbia River near Port of Hood River properties, but is difficult to access without using a car.

Cascade Locks, in its Design Theme for a Downtown Street Plan, has identified the need to establish a more pedestrian-friendly environment through its downtown on Wa Na Pa Street (US 30). Increasing sidewalk widths to 12 feet, adding areas for street trees and benches, narrowing pedestrian crossings, and developing numerous walking loops within the downtown and the locks are proposed. An obstacle to creating a better pedestrian environment is the large number of dead end streets.

Recreational walking trails are present throughout the county, particularly in the Mount Hood National Forest, and include the Pacific Crest Trail which can be accessed from Cascade Locks. A few trails can be accessed directly from OR 35.

### *Transit Services*

Public transit service within Hood River County is coordinated by Columbia Area Transit District (CAT). The District provides demand-responsive (dial-a-ride) service countywide. CAT's demand-responsive, door-to-door service operates daily within Hood River and Odell, and once a week within Parkdale and Cascade Locks. Also, "as needed" trips to the Portland area are made for people needing access to medical attention. The CAT bus also has a stop close to the Greyhound Bus Lines depot in downtown Hood River.

During the summer, CAT also offers a city-only fixed-route service. In the summer of 1997, CAT had six different routes providing coverage throughout the City of Hood River. One of these routes connected to OR 35. However, due to budget constraints, service may be reduced. This route may or may not traverse OR 35; however, the dial-a-ride service can connect with OR 35 on an on-call basis.

The District also operates a shuttle along OR 35 traveling from Hood River to the Mount Hood ski areas. It operates this shuttle during the ski season (usually November through March) on weekends and holidays. This shuttle service is intended to help relieve congestion on OR 35 and US 26 during the winter months. The ski shuttle can help encourage traffic from the Portland area to access Mount Hood from Hood River and OR 35, rather than from US 26.

Intercity bus service is provided by Greyhound Bus Lines at Port offices in downtown Hood River. The buses stop in Hood River en route to Portland on westbound I-84, and to The Dalles and Boise, Idaho, on eastbound I-84. This service operates three times per day. Greyhound also runs a bus once per day from Hood River to Umatilla, Oregon and then north to Spokane, Washington.

### *Rail Service*

Rail service is provided on the Union Pacific main line, which runs roughly parallel to I-84 and the Columbia River through the Columbia River Gorge, with stops in Hood River and Cascade Locks. Eastbound, it links with lines serving the Rocky Mountain states, midwest, and eastern portions of the country. Union Pacific hauls primarily wood products from Hood River and Cascade Locks.

The Mt. Hood Railroad branch line runs south from the City of Hood River to the upper Hood River Valley. The majority of revenues for the railroad come from providing tourist excursions to Parkdale, with the balance derived from hauling freight (primarily wood products). The Mt. Hood Railroad moves approximately 15,000 tons of freight per year consisting almost exclusively of lumber.

Passenger rail service (excluding tourist excursions) is not provided in Hood River County. However, infrastructure remains if the former passenger rail service provided by Amtrak on the UPRR were reinstated.

### *Truck Freight*

Truck freight is carried on the major highways through the Corridor -- I-84, OR 35 and Highways 281 and 282. I-84 through the Corridor is designated as a freight route in the 1999 OHP. As a primary east-west corridor through the state, I-84 carries high volumes of truck freight. The other highways in the Corridor are not part of the State Highway Freight System.

Conversely, truck and freight volumes on OR 35 and District Highways 281 and 282 are relatively low. In 1998, approximately 11 percent (129 trucks) of the ADT on OR 35 consisted of trucks. During that same year, roughly 572,000 net tons of freight was transported along this highway. This freight consisted primarily of fresh fruit (pears, apples, cherries and peaches) and wood products.

### *Water Transport/Ports*

There are two ports in Hood River County--the Port of Hood River and the Port of Cascade Locks. The Port of Hood River has extensive property holdings along the waterfront in downtown Hood River and west of Odell. The waterfront property consists of 75 acres along the Columbia River in the northeastern portion of the City of Hood River with shallow docks (18 feet deep). The properties are bisected by the Hood River and used as a marine park on the east side of Hood River and as an industrial park on the west side. The marine park includes 140 boat slips and an area for boathouses and seaplanes. The park is the center for boating, swimming and sailboarding. The waterfront property west of the Hood River includes a basin that can accommodate barges and large commercial vessels. Port facilities in this area are not used for cargo handling, rather, they are used primarily for barge repair and small cruise ship docking. Cruise ship activity has expanded rapidly in recent years and is now a major activity in the area. The Port also owns and operates the Hood River/White Salmon Bridge (toll bridge) and the Hood River Airport.

The Port of Cascade Locks owns a marine facility, two passenger carrying sternwheeler boats, the Bridge of the Gods, a campground and visitor center, and roughly 150 acres of industrial lands. The marine facility is in the western portion of the city adjacent to the Union Pacific mainline near US 30 and I-84. The shallow draft port is used for recreational trips by the sternwheeler boat, which makes up the majority of river traffic. At this time, no commercial shipping or freight movement occurs at the port. The Bridge of the Gods toll bridge is operated by the Port and connects the city to Skamania County, Washington. Except for some forest products business, the Port's industrial lands are largely undeveloped.

### *Pipelines*

A Northwest Pipeline Corporation natural gas transmission pipeline runs east-west on the Washington side of the Columbia River. This line crosses the river near the Hood River Interstate Bridge. The City of Hood River and the northern portion of the county near that city are provided with natural gas service, while the Cascade Locks and the southern portion of the county are not served. No oil or natural gas transmission lines cross or traverse OR 35.

### *Telecommunications*

The existing telecommunications system in the Corridor is primarily composed of the conventional local and long distance telephone system. Increased telecommuting could lead to an increase in the corridor's population as Hood River County is viewed as a desirable place to live with a limited employment base.

### **Key Opportunities**

Although dominated by automobile travel, the Hood River-Mt. Hood Corridor, as a rural corridor, has a relatively well-balanced transportation network. It could become a more balanced transportation network with better utilization of existing rail and telecommunications infrastructure. Additionally, transit service could be improved to provide more travel options. Other opportunities to develop a balance of modes in the Corridor include:

- As congestion increases on US 26, the Hood River-Mt. Hood Corridor could become a more attractive route for Portland area residents to access recreational opportunities on Mt. Hood. The OR 35 Highway has adequate capacity to handle more trips and could act as a reliever for US 26 traffic.
- Existing transit service to Mt. Hood Meadows could be increased on OR 35 to reduce congestion on US 26.
- As the telecommunications infrastructure is expanded throughout the Corridor, the potential exists for an increasing number of work trips to be avoided through telecommuting.
- Both of the corridor's existing rail lines, the Union Pacific main line and the Mt. Hood Railroad, have the potential to increase freight-hauling operations and reduce truck traffic on OR 35 and I-84. The UPRR line, which connects to major destinations within and beyond the state boundaries, has depots in Hood River and Cascade Locks. The Mt. Hood Railroad runs from Hood River (where it connects to the UPRR) up the mountain to Parkdale.
- Passenger rail service could be reinstated along the Union Pacific Railroad. The Amtrak Pioneer line used to carry passengers through the county to major destinations such as Portland to the west and Chicago to the east. Amtrak service was provided until 1997, when federal funding was discontinued. Infrastructure to support passenger rail, including a depot in Hood River, is still in place.

### **Assumptions**

A number of assumptions are made related to other planning efforts, use of the transportation system, and other factors. These assumptions, which are not repeated as issues or objectives, include:

- Standard levels of roadway maintenance and repair.
- The majority of growth occurring within the Hood River and Cascade Locks UGBs, with some additional growth in Odell and exception areas.
- Increasing recreational use of the transportation system.

- Environmental constraints to highway improvements.
- Regulation of design and development within portions of the County by the Columbia River Gorge National Scenic Area Management Plan.
- With the reduction of National Forest timber receipts, an increased need for new funding sources to maintain the existing County road system.
- Increasing bicycle and pedestrian traffic within urbanized areas and along OR 35.
- Limitation on new road construction to “local” roads.
- Continued operation of the Hood River Highway (281) and Odell Highway (282) as district level facilities.
- No I-84 capacity improvements except for interchange improvements where warranted, e.g., East Hood River interchange.
- Increased use of the highway system for freight, particularly fruit shipping.

Current funding constraints are not assumed. The purpose of the Corridor Plan is to establish objectives and priorities for the long-term management of and improvements to transportation facilities within the Corridor, irrespective of current funding limitations. The plan’s objectives and priorities are balanced with a reasonable possibility of funding from a variety of sources over the 20-year planning period. The ability to implement these objectives and priorities will, of course, be dependent upon future available funding.

#### **D. KEY MANAGEMENT THEMES**

A wide variety of objectives have been developed to address various aspects of the corridor’s transportation system. A primary goal of this multi-modal Corridor Plan is to manage growth in travel in the Corridor, while making wise use of scarce resources to fund needed improvements. The Plan emphasizes managing the highway facilities that currently exist without substantial increases in capacity or construction of new facilities. This is achieved by strengthening the role of alternative modes of transportation, improving facility operations, and managing demand through appropriate land uses.

Other key themes reflected in the Corridor Plan include:

##### *All State Facilities*

- Maintain existing facilities to ensure that they remain safe and functional as the highest priority for the allocation of state and federal resources.
- Improve overall corridor safety through a combination of increased enforcement, access management, and targeted highway improvements.
- Apply the most restrictive access management standards (regulating the number, spacing, type, opportunities for left turns and location of driveways, intersections and traffic signals) when consistent with existing or planned adjacent land uses.
- Factor environmental and energy conservation considerations into both maintenance practices and improvement projects, with an immediate focus on enhancing salmon and steelhead habitat through upgrading culverts.
- Promote transportation-efficient land use patterns that reduce vehicle miles traveled and provide a live/work balance.

*OR 35*

- Provide no additional expansion in highway capacity, except for intersection improvements or truck chain-up areas.
- Promote OR 35 as an alternative to Highway 26 for access to Mt. Hood ski areas and other winter and summer recreational activities.
- Promote the corridor's tourism/recreation role, including its role as part of the Mt. Hood Loop.
- Protect the corridor's scenic values.
- Resolve congestion and safety problems in the urban segment, e.g., I-84 interchange and HCRH (US 30) intersection.
- Address safety problems at intersections, e.g., Highway 282 (Odell) and Ehrck Hill Road.
- Promote continued use of the Mt. Hood Railroad for freight movement and recreation.
- Promote the use of Highway 35 as a bicycle route.

*District Highways*

- Maintain and preserve the roadways for continued use as primary routes for local travel.
- Provide no additional expansion in highway capacity, except for turning lanes if needed.
- Promote Highway 281 as a scenic drive route.
- Promotion of Highway 281 as an alternative north-south bike route.
- Address safety problems at intersections, e.g., OR 35 and Highway 282 (Odell), and at railroad crossings.

The Historic Columbia River Highway and I-84 are also important highways in the county highway network. Separate planning efforts to deal with these highways are currently underway.

## **E. DECISIONS AND SOLUTIONS**

### **Key Management Direction**

The Corridor Plan includes a series of objectives, strategies and projects to enhance the Corridor's ability to serve commuter, recreational, freight and other business travel in Hood River County. Consistent with OTP objectives to promote a balanced multi-modal transportation system, the Corridor Plan promotes transportation demand management (TDM) and system management (TSM) strategies as the first course in addressing future needs, especially within the cities of Hood River and Cascade Locks. These TDM and TSM strategies include the development of support facilities for transit and other non-motorized modes, as well as retaining railroad and air services.

Another overall theme is cost-efficiency. With limited capital improvement and maintenance dollars available, ODOT must stretch its revenues as far as possible. This is accomplished in the Corridor by combining projects for a single mode into multi-modal projects where possible. For example, combining bicycle shoulder improvement projects with highway widening and passing lane projects benefits bicycles, pedestrians, and the movement of truck freight, as well as autos. This allows the implementation of bicycle projects that would not be cost-effective as stand-alone projects. To the greatest extent possible, projects identified that improve

transportation balance in the Corridor are pursued through maintenance, operations, management, and service projects that minimize capital expense.

Other key management direction includes:

- **Relieve congestion.** This is addressed by capacity expansion in the urban areas pursuant to the Hood River and Cascade Locks TSPs, and by construction of limited improvements, e.g. turning lanes and truck chain-up areas, in the rural areas. These limited improvements are appropriate given existing and proposed traffic volumes and environmental sensitivity.
- **Support use of alternative modes of transportation.** Transit, bicycle and pedestrian modes play a significant role in the urban areas, while in the rural areas these modes have a minor role. Given the distances and limited number of community centers in the rural portions of the Corridor, transit's role is limited.
- **Access management.** Managing the locations of driveways and distance between intersecting streets is the key to preserving the capacity of the statewide highways and local arterials. In the urban areas, access management can provide for opportunities to enter, exit, or cross the highways for vehicles, pedestrians, and bicycles, consistent with local comprehensive plans. In rural areas, access management consists of managing at-grade intersections with the state highways. Access management can preserve the rural residential character of community centers by providing a safer pedestrian and bicycling environment, as well as managing the flow of auto traffic through the area.
- **Economic development.** A principal objective of the Corridor Plan is to ensure the efficient shipment of locally produced fruit and wood products to processing centers within and outside the region. This is accomplished by maintaining capacity on the highway system and managing demand. In addition, the highway provides access to recreational and tourist destinations that fuel the local economy. In the rural areas, access management maintains travel times to assure that connections between Mt. Hood, upper and lower Hood River Valley, and the Columbia River Gorge are preserved.
- **Develop transportation facilities appropriate to the surrounding environment.** Modernization and capacity-related improvements in the urban areas can be acceptable when they support the character of the area and address local and regional travel needs. Modernization of the rural portions of the corridor may also be appropriate, but the high costs and potentially major environmental impacts of highway improvements should be carefully weighed against potential benefits to motorists. Some of the projects considered were generated by ODOT needs analyses that brought all substandard portions of OR 35 up to standard. This does not take into account the presence of natural and cultural resources nor land ownerships, e.g., U.S. Forest Service. Many of these projects were either eliminated or scaled back in recognition of their enormous expense and environmental impacts.
- **Land use coordination.** In all areas of the Corridor, the Plan supports and strengthens the connection between land use and transportation facilities and programs. In the urban area, the TSPs propose interconnected street systems and transportation services in balance with current land uses and anticipated growth. Throughout the Corridor, city and county comprehensive plans are the guiding land use documents. The Corridor Plan is careful in all instances to support applicable land use laws and policy.

## Management Direction by Corridor Segment

Given the broad range of topics covered by the Corridor Plan and the variation in needs among the various transportation modes, there are no “one size fits all” solutions to transportation needs in the Corridor. Consequently, the discussion of overall management direction is broken into three sections that define the character of the Corridor: Urban Areas, Rural Areas and Rural Community Centers.

### *Urban Areas*

The urban areas of the Corridor are defined as the areas within the City of Hood River and City of Cascade Locks Urban Growth Boundaries (UGBs). Land uses within the two UGB’s are planned and regulated by the cities, while transportation facilities and services are provided by the cities, Hood River County, ODOT, Columbia Area Transit District (CAT), and private service providers. In general, the city Transportation System Plans (currently in draft form) and the transportation elements of their Comprehensive Plans form the basis for management direction of the transportation system in the urban areas.

The approach to management of the urban portions of the corridor is summarized as follows:

- **Transportation modal balance is maintained and improved.** With inter- and intra-city bus service, bicycle and pedestrian facilities, and rail-to-rail and truck/rail transfer facilities, the Hood River urban area offers modal choices for passenger and freight movements. The Cascade Locks urban area also provides for pedestrian and bicycle travel, with limited transit service and freight options. Corridor Plan objectives seek to strengthen the role of transit, pedestrian and bicycle modes, as well as to improve truck and rail freight service.
- **An interconnected grid of local streets is planned to ensure direct, convenient circulation within the urban area, to minimize out of direction travel, and to provide alternatives to the state highway system for local travel.** The existing grid systems within the urban areas will be enhanced over time to improve local circulation and access, and to provide alternatives to using I-5, OR 35 and US 30 for local trips.
- **Transportation infrastructure supports land use plans in the urban areas.** The function and design of planned facilities support and are compatible with existing and planned land uses.
- **Transportation investments support efficient rail and truck freight movements.** Planned facility improvements and services support growth and economic development in the urban areas. High priority is given to projects that promote efficient freight access to industrial and commercial sites.

### *Rural Areas*

The rural areas of the Corridor are defined as those areas outside of UGBs and established rural community centers. The Corridor Plan’s approach to management of transportation for rural areas includes:

- **Congestion relief is achieved through small-scale capital improvements, such as intersection improvements.** No major areas of congestion are anticipated within the planning period. Localized congestion will be addressed by small-scale capital improvements such as turning lane and intersection improvements. In many cases, projects to bring the highway “up to standard” would be very costly, achieve little to no operational benefits, and have significant environmental impacts. This approach of eliminating “choke points” makes the best use of scarce resources and minimizes environmental impacts.

- **Access management plays an important role in the rural areas.** With multiple at-grade intersections along OR 35 and Highways 281 and 282, the opportunity exists for potential conflicts between highway users and cross-traffic and turning traffic. Access management consolidates access points to the highways and provides safer, more predictable points of interaction between motorized vehicles, bicyclists, and pedestrians.
- **Transportation improvements must minimize impact on significant environmental and cultural resources.** The potential to impact streams, wetlands, plants, wildlife habitat and archaeological sites is greatest in the rural parts of the Corridor. For this reason, the Plan emphasizes small-scale, strategic safety and congestion-relief improvements.

### *Rural Community Centers*

Odell and Parkdale are rural community centers in the Corridor. They include relatively small-scale commercial, industrial, and residential developments. These centers provide economic opportunity for rural residents and are dependent upon OR 35 and Highways 281 and 282 for access and to bring recreational and truck freight traffic to their businesses. Located on district highways with convenient access to OR 35, Odell and Parkdale can access higher speed travel on Highway 35 while restricting travel speeds on the district highways. The slower-moving vehicles mix with pedestrians and bicyclists, with all modes having opportunities to access businesses and residences safely. Balancing community needs and the transportation function of the highways is a key theme in these areas. Other elements of management direction in these rural community centers include:

- **Needs for efficient and safe through movements are balanced with local access and circulation needs.** As district highways, the primary function of Highways 281 and 282 is to serve local traffic and to provide access to adjacent properties. Within the rural centers of Odell and Parkdale, through movements are secondary to local access and circulation for pedestrians, bicyclists, and motorists.
- **Access management is critical to maintain safety and rural community ambiance.** In order to preserve the unique character of the rural communities, pedestrians and bicyclists must be able to move about safely, and transportation improvements cannot overwhelm the surrounding land uses. Access management consolidates access points to the highway and provides safer, more predictable points of interaction among cars, pedestrians and bicyclists.

### **Approach to Key Issues**

#### *Capacity Issues*

Except for a few intersections, congestion is not currently a problem in the Corridor, nor is it anticipated to become one over the next twenty years. Throughout the Corridor, facility management techniques such as encouraging the use of alternative transportation modes, consolidation of access points along arterials and collectors, and the use of motorist information systems can be used to minimize congestion. Consequently, no expansion in highway capacity, except for turning lanes and intersection improvements, is proposed. Other congestion management strategies are summarized below.

Within the urban areas, congestion tends to be a peak-hour problem at several key intersections that can be addressed, in part, through TDM and TSM strategies. In particular, the Corridor Plan calls for:

- Support for TSM and TDM measures, improvements to pedestrian facilities, and increased reliance on transit.

- Improvements to problematic intersections such as the I-84/US 30 (East Hood River) interchange and the HCRH/US 30 (Button Junction) intersection.
- Development of local access management and circulation plans to relieve localized congestion problems and to meet local transportation system needs.

In the rural areas of the Corridor, congestion should be controlled primarily through land use controls and access management. In addition, the continued provision and possible expansion of shuttle service to winter recreation areas can reduce congestion during peak winter traffic periods.

### *Alternative Modes*

#### Air Service

PDX is expected to continue to be the primary airport used by residents, and no significant increase in service within Hood River County is expected. Continued provision of service, protecting access, and protecting facilities from encroaching land uses form the primary management approach to air service facilities within the Corridor.

#### Bicycle System

Three overall themes are applicable to bicycle improvements in the Corridor:

- Maintenance and cleaning of highway shoulders to improve conditions for cyclists.
- Inclusion of bicycle improvement projects as part of routine pavement overlays. In many cases, an extra foot of shoulder width is easy to provide at minimal cost during an asphalt overlay.
- Stand-alone bicycle projects are not generally recommended, unless they can be combined with other highway projects to share costs.

#### Pedestrian System

The focus for pedestrian improvements is similar to bicycle themes for the rural sections. Within the urban areas, improvements to pedestrian facilities should focus on creating a linked pedestrian network and on enhancing existing facilities to meet ADA standards. In the rural community centers, proposed solutions include shoulder improvements and consolidation of access points, which will improve safety and convenience. In the rural areas, when other roadway improvements are made, safe crossings and adequate shoulders should be provided.

#### Transit Services

Outside of the urban areas, the primary objective is to continue to provide dial-a-ride service and shuttles to Mt. Hood winter recreation areas. Within the City of Hood River, continuation of the fixed-route, bus system is the primary strategy. Also, new transit facilities (Park and Ride and Park and Pool lots, bus shelters, and possibly a multimodal transportation center) are seen as important for enhancing the transit system and improving intermodal connections. In Cascade Locks, the current dial-a-ride service should be continued. Intercity bus service between Hood River, Cascade Locks, and Portland should be continued.

#### Rail Service

The focus is on protecting and enhancing the existing service within the corridor, promoting the restoration of Amtrak passenger service, and protecting and improving rail infrastructure throughout the county.

### Truck Freight

Truck freight will increase or decrease based on market demand. Within the urban areas, access for trucks will be improved at key intersections and at accesses to commercial and industrial sites. In the rural areas, truck safety and travel times will be improved through the provision of chainup areas, improvements to problem intersections, and reducing conflicts between farm vehicle traffic and truck traffic.

### *Roadway Conditions and Safety*

Problems of deficient geometry and poor pavement conditions can affect the safety of motor vehicle drivers, cyclists, and pedestrians. Maintenance of existing facilities to ensure that they remain safe and functional is established as the highest priority in allocating state resources. Improvements to surface conditions and to high accident locations are also priorities. Solutions include intersection safety improvements, shoulder widenings and pavement overlays.

The Corridor Plan addresses safety in the Corridor through a combination of facility management and improvements at potentially unsafe locations. Objectives identify a wide variety of facility management techniques including intersection improvements, improved lighting and delineation, additional signage, and provision of truck chainup areas.

The Confederated Tribes of Warm Springs have requested that ODOT consider moving OR 35 out of Polallie Canyon due to environmental concerns and roadway maintenance and preservation problems. While this section of OR 35 regularly experiences problems with rockfall and undercutting by the East Fork of Hood River, the Plan recommends that management and maintenance efforts be directed towards preservation of the existing alignment given the cost and environmental impacts associated with relocation. Consequently, management and maintenance projects focus on short-term solutions.

### *Maintenance*

As a first priority, ODOT will focus its resources on the maintenance of existing facilities in order to minimize long-term costs. Maintenance, operations, and management actions comprise the vast majority of implementation actions for improvements to roadway safety and conditions in the Corridor. Improving public safety is a key criterion for the evaluation of maintenance projects. Specific solutions include:

- Increase the “Targeted Opportunity Funds” account to allow ODOT to respond to localized minor needs on the highway system.
- Increase the maintenance limitation budget to allow Districts to conduct minor repairs. Many repairs have been backlogged because of limited maintenance budgets.

### *Bridges*

The ODOT Bridge Engineering Section has evaluated the bridge structures in the state and determined those that need a seismic retrofit. A Phase 1 upgrade involves connecting bridge superstructure elements such as beams and decks to their supporting members. Phase 2 retrofitting includes strengthening bridge members such as columns. To prioritize seismic retrofitting projects, ODOT classified roadways according to whether they are Priority 1 or 2 lifeline routes.

OR 35 is not a Priority 1 Lifeline Route. Only one bridge was recommended for Phase I retrofit, the West Hood River Interchange bridge (#09017, MP 104.61). Two other bridges, the East Fork Hood River Bridge (bridge #01939, a MP 12.90) and Hood River (Tucker Bridge) (#01600, MP 4.95), need seismic retrofit, but are not recommended for retrofitting at this time because they are not on a designated lifeline route.

### *Environmental Impacts*

All projects undertaken in the implementation of this Plan must consider impacts to wetlands, other water bodies, farmlands, forestlands, threatened or endangered species and other protected resources, including scenic, cultural and archaeological resources. The Oregon Plan (Oregon Coastal Salmon Restoration Initiative Conservation Plan) provides the primary means of addressing impacted anadromous fish runs in the rivers and streams in the corridor. Numerous culvert repairs are proposed. Other solutions include:

- ODOT, where feasible and appropriate, will work with local governments to integrate mitigation efforts in transportation improvement projects and to avoid or minimize impact on sensitive natural areas when constructing improvements.
- ODOT will take care to manage vegetation along the highway to meet the scenic requirements of *State Highway 35 Viewshed Management Guide* (USFS, 1991). Specific actions relating to management of the transportation corridor include minimizing impacts of ditch cleaning, selective thinning of brush to maintain safe sight distances and to provide viewing opportunities, minimizing shoulder and safety zone mowing, providing additional clearly delineated turn out areas where viewing opportunities exist, and minimizing unwanted vehicle tracks in other areas.
- All new transportation projects will include appropriate measures to protect water quality.

### *Access Management*

In the urban areas, access control is generally limited to the I-84 interchanges and local streets. In the rural areas, state highways are not access controlled as the rural areas are sparsely settled with small farms or large acreage homesites and much of the land is designated for forest uses. About one-half of OR 35 is located within the Mt. Hood National Forest where access is limited per Forest Service policy.

New access management policies are currently being developed as part of the 1999 OHP implementation. In the interim, the access management categories established in the 1991 OHP are applied as follows:

- US 30--access management Category 4 from I-84 (East Hood River) interchange south to the State Street/HCRH (US 30) intersection.
- OR 35--access management Category 3 from Button Junction, south to US 26.
- Highway 281 and Highway 282--access management Category 5.
- HCRH (US 30)--access management Category 5 through Cascade Locks and Hood River.
- I-84--access management Category 1.

The Corridor Plan recommends an aggressive program of access management in the rural area to reduce the number of conflicts between through traffic and local traffic entering the highway. In some areas, access management may include eliminating existing access points through the creation of new shared access points for more than one land use.

### *Land Uses*

Management of and improvements to the transportation system are fully integrated with local government land use planning, resulting in transportation efficient land use patterns that reduce vehicle trips and miles traveled and promote a live-work balance, particularly within the Corridor's urban portion. Within the rural portion, additional commercial and residential development is concentrated in designated rural community centers.

In a general sense, the future of land uses in the Corridor will be very similar to conditions today. The Corridor will continue to have moderate population centers located at the north and west ends and a substantial amount of recreational opportunities at the southern and northern ends. Based upon a Potential Development Impact Area (PDIA) analysis conducted for the Corridor Plan, there will be very little in the way of new land development in Hood River County outside of UGBs.

No Special Transportation Areas (STAs) have been designated through the Corridor Plan or draft TSPs and there is no appropriate location for an STA on OR 35. OR 35 has no downtown or main street characteristics. STA characteristics are more common in those portions of Hood River and Cascade Locks located on the HCRH. The appropriateness of designating portions of the Hood River and Cascade Locks downtown areas as STAs pursuant to 1999 OHP standards will be assessed as part of the OHP implementation work plan and coordinated with the cities' TSPs.

### *Economic Impacts*

OR 35 is a prime route for access to the principle industries in the County, which include agriculture, lumber and wood products, retail trade, and recreation/tourism. Important agricultural resources are located in the mid and lower portions (up to 2,700 feet) of the Corridor, particularly pear, apple, and cherry orchards. Recreation and tourism destinations are located throughout the Corridor. Mt. Hood Meadows Ski Area, Cooper Spur Ski Area, the Mt. Hood National Forest, several campgrounds, trails and snowparks are located in the southern portion of the Corridor. These and various other recreation sites provide opportunities for snow recreation, camping, and hiking. The Columbia River, the Columbia River Gorge, numerous creeks, and the City of Hood River are located in the northern portion of the Corridor, providing opportunities for hiking, shopping, sailboarding, and numerous other water-related and outdoor activities. A well-functioning transportation system is essential for ensuring the viability of these industries.

Current economic development efforts include plans by the Port of Hood River to redevelop the waterfront in Hood River for a variety of commercial uses, and activities by the Mt. Hood Economic Alliance (as part of the Regional Strategies program) to encourage development of the agricultural, software, hi tech, and tourism industries in Hood River County, using state lottery funds and other sources of revenue as available to provide the public infrastructure needed for business start-ups. Through their Rural Investment Fund, the Alliance will support economic growth in the rural portions of the corridor by supporting local public health, public safety, education, and economic well-being projects, as well as community planning and project development technical assistance.

The Confederated Tribes of the Warm Springs are currently investigating development of a gaming casino within Hood River or Cascade Locks or at a rural location in the County strategically located to I-84 traffic. This potential development surfaced after completion of most aspects of the corridor planning process and has not been addressed in the Corridor Plan. Should a specific site be identified for casino development, refinement planning will be undertaken and, if necessary, Corridor Plan management direction reviewed and revised.

## F. PROJECT PRIORITIES AND FUNDING

A key step in development of the Corridor Plan was prioritizing improvement projects and ensuring that the highest priority projects fit within reasonable funding forecasts. Corridor Plans do not need to pass the rigorous criteria required for the Metropolitan Planning Organizations (such as Metro). Rather, several ranges of funding forecasts, based on different assumptions, have been developed.

Not only are funding forecasts uncertain statewide, the relative amounts to be allocated for different types of projects will vary over 20 years. The TAC focused primarily on modernization (new construction), safety, and operational (TSM and TDM) improvements.

### New Construction Funding Estimate

The TAC developed a general methodology for determining the target funding levels for new construction (modernization), based upon a "snap-shot picture" approach with a base year of 1997 and including state revenue and federal highway funds for new construction. Assumptions for projected funding allocation included:

- 20-year projection of funding allocation for new construction projects.
- No changes in state or federal funding levels from the 1997 level.
- No inflation adjustment on project costs.

An important part of this funding estimate was the understanding of potential allocation of state and federal funding. Briefly, ODOT receives new construction funding from state gas tax and federal funds. Region 1 receives approximately 34% of the statewide construction allocation. Within Region 1, the disbursement of construction funds is 80% for MPO (metropolitan planning organization) areas and 20% to the rural or non-MPO areas. There are five counties in Region 1 and non-MPO funds are divided among the rural portion, each would receive an equal allocation. While allocated based on need, Hood River County could expect to receive up to 1/5 of the Region's rural allocation (much of this money might be allocated to I-84).

**Table 1: New Construction Funding Allocation (1997 base year)**

Source	Region 1					Hood River County
	Statewide (million)	Region Share %	Funding Allocation (million)	Metro Allocation (80%)	Non MPO Allocation (20%)	Even Distribution <sup>(1)</sup>
State Gas Tax (approx. per year)	\$56.80	34.2	\$19.42	\$15.54	\$3.88	\$0.78
Federal Funds	\$99.00	34.2	\$33.86	\$27.09	\$6.77	\$1.35
Total	\$155.80		\$53.28	\$42.62	\$10.66	\$2.13

<sup>(1)</sup>Based upon an even distribution among the five Region 1 Non-MPO counties.

Table 1 indicates that Hood River County could potentially receive approximately \$2.13 million of new construction funds under this funding scenario of the Region's \$53.3 million. This represents about 4 percent of the Region's allocation. If this estimate were simply projected 20 years it could exceed \$40.6 million. Keeping in mind that much of this funding would be needed for I-84, it was important that the TAC begin prioritizing projects for funding, because the TAC had identified more needs than available funds.

## Corridor Funding Forecasts

The funding forecasts were developed for the planning horizon and represented 20-year totals. An attempt was made to include other categories such as safety, maintenance, etc. This was difficult, because the description of these categories, as well as funding forecasts, changed over time. The projected funding forecasts were developed to provide the TAC with a range of funding scenarios to focus on prioritizing needs with an awareness of funding shortfalls. During the solution process the TAC acknowledged far more solution needs than revenues.

Each forecast is based on different assumptions that will produce different levels of funding for improvements. It is important to understand that no one funding forecast is correct, but rather they serve as a range of funding levels to reinforce the existing fact that revenues are inadequate and the TAC must work to develop new sources of revenue.

The first forecast uses a historical distribution of money to the Region and funding in the OR 35, Hwy 281 and 282 Highways over the past 20 years and applies it to the forecast revenues over the next 20 years. It is possibly a good estimate of the minimum funding to be available without increased revenues at the state or federal level. Inflation and deferred maintenance and preservation needs will consume an increasing proportion of available revenue.

The second forecast uses the 1998 Draft OHP (September 1998) needs and revenue forecasts and assumes an even split of available funds to address all needs. The OHP projects 62.5% of the needed revenue will be available over 20 years. An even split would allocate 62.5% of needed funds to each program area. This may represent more funds than can reasonably be expected for modernization over the next 20 years, given policies to maintain and preserve existing facilities.

Finally, a third forecast prioritizes programs other than modernization, funding only 20% of those needs, while meeting a greater level of need for maintenance, preservation, safety, etc. This assumption addresses several policy objectives, including the emphasis on preserving and managing the existing system. It also reflects current statutes requiring ODOT to spend about \$54 million per year statewide on modernization. This should represent a reasonable amount available over the 20-year planning horizon, though much of these funds might be allocated to I-84.

Table 2 summarizes the range of the three forecasts.

**Table 2. Projected Modernization Funding Forecast  
20-year Planning Horizon**

Historical STIP Programming (\$ million)	Even Distribution of Projected Revenue (\$ million)	Low Mod-High Maintenance & Preservation (\$ million)	
\$1.9			<i>OR 35</i>
\$0.2			<i>OR 281/282</i>
	\$22.0	\$14.0	<i>Hood River County</i>
\$2.1	\$22	\$14	<i>Total</i>

## Project Funding Priorities

As noted earlier, limited revenues necessitate managing and improving the existing transportation services and facilities within the Corridor to accommodate the anticipated growth in travel. Accordingly, the Corridor Plan allocates state resources to highway projects according to the following priorities:

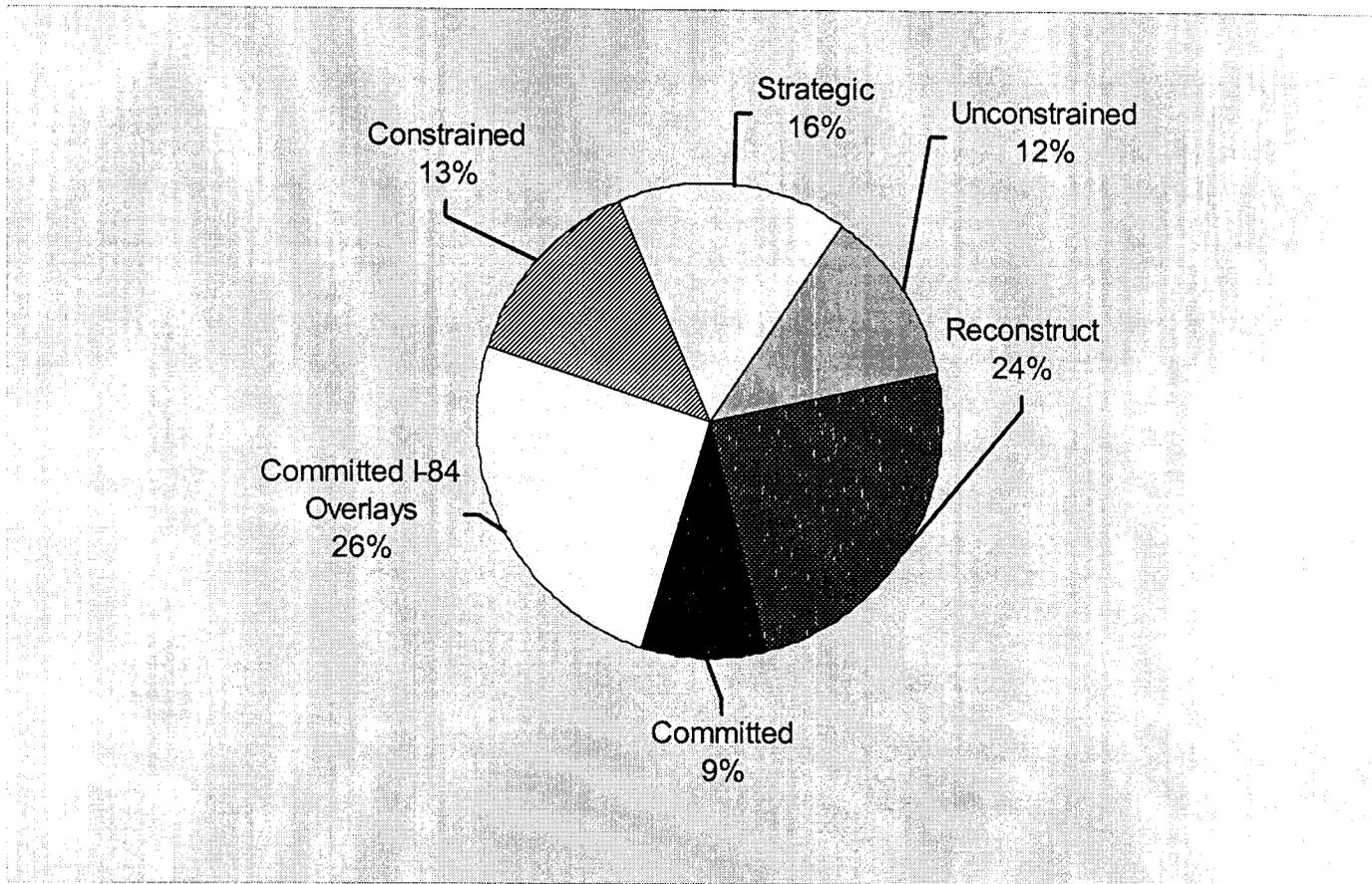
- (1) Maintenance of the existing facilities to ensure that they remain safe and functional, e.g. fixing potholes.
- (2) Preservation of the roadway by investing in roadbed and pavement reconstruction as needed to minimize maintenance costs;
- (3) Transportation system management to optimize existing highway capacity;
- (4) Safety and capacity improvements; and
- (5) Projects that support economic development, particularly recreation and tourism.

Implementation projects have been prioritized in the Corridor Plan based upon projected available funding over the planning horizon. Funding forecasts are based upon traditional funding distributions among ODOT Regions, within each Region, between urban/rural and among rural counties, and finally to various facilities.

The highest priority projects are placed in the *Committed* and *Constrained* funding category, meaning they would all be expected to be implemented over the 20-year planning period. Committed projects, which are already funded in the current STIP, and total \$30.2 million. \$22.4 of the committed solutions are projects on I-84. Constrained projects, totaling \$11.9 million, would be implemented in later years of the current STIP and are still subject to funding authorization. Next in priority are *Strategic* funding projects which will require new sources of funding in order to be implemented in the intermediate-to-long-term. Strategic funding projects total \$14.3 million in costs. All remaining projects are considered *Unconstrained* or *Reconstruct to Standard*. Based upon current revenue forecasts (including all reasonable additional sources of revenue), these projects are *not* likely to be funded within the 20-year planning horizon. The term "Unconstrained" means that if ODOT had all the funding to meet all Corridor needs, then all projects could be funded. However, Unconstrained projects could be funded by alternative funding sources, such as development exactions, local improvement districts, urban renewal districts, etc. Unconstrained projects total \$10.6 million. "Reconstruct to Standard" projects, totaling \$21.7 million, were generated through ODOT's HPMS system which identifies projects to bring substandard segments of highway up to highway standards. These projects may not be practical given that attaining maximum grade or curvature standards could require extraordinarily expensive and impractical solutions for a highway like OR 35 which crosses a mountain range and operates in a highly constrained environment. Consequently, these Reconstruct to Standard projects are *not* recommended for implementation as part of the Corridor Plan.

The projected total cost for implementation projects included in the Corridor Plan is over \$67 million. If Reconstruct to Standard projects are added, the total increases to \$88.7 million. Costs are preliminary estimates based upon information provided by local governments or developed by ODOT. Local contributions to project costs could result in adjustments to the prioritization of projects. That is, given ODOT's limited resources, the greater the "local match," the higher the likelihood of implementing the project. Figure 4 illustrates the relative amounts of funding categories to projected available revenues.

Figure 4. Relationship of Funding Categories



## I. INTRODUCTION

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## A. PURPOSE AND SCOPE

The Hood River-Mt. Hood (OR 35) Corridor Plan is the product of a cooperative effort between the Oregon Department of Transportation (ODOT) Hood River County, the cities of Hood River and Cascade Locks, ports of Hood River and Cascade Locks, Confederated Tribes of the Warm Springs, transportation service providers, other interest groups, and the general public to develop a long-term program for management of and improvements to the Hood River-Mt. Hood Corridor. This Corridor Plan is one of over 30 similar plans being prepared by ODOT statewide for key transportation corridors identified in the Oregon Transportation Plan (OTP) and for urban area arterials and interchange areas where development pressures have threatened operation. In ODOT Region 1, there are five priority corridors, including the Hood River-Mt. Hood (OR 35) Corridor. Corridor planning is a new approach to transportation planning in which ODOT and the communities bordering major transportation corridors work together to create plans for managing and improving transportation modes along entire corridors.

*The purpose of the Corridor Plan is to establish both short and long-term management direction for all modes of transportation in the Corridor and to make major transportation tradeoff decisions. Management objectives address the Corridor as a whole, as well as specific sites and transportation improvements. The Corridor Plan also identifies priorities and timing for the various actions and responsible public agencies and other service providers.*

A primary goal of this multi-modal Corridor Plan is to manage growth in travel in the Corridor, while making wise use of scarce resources to fund needed improvements. The Plan emphasizes managing the highway facilities that currently exist without substantial increases in capacity or construction of new facilities. This is achieved by strengthening the role of alternative modes of transportation, improving facility operations, and managing demand through appropriate land use.

Prioritized improvements to corridor facilities, systems and management identified in the Corridor Plan provide the basis for updating the Statewide Transportation Improvement Program (STIP), which, in turn, is the basis for distributing the State's limited transportation resources. Corridor planning helps ODOT, with the cooperation of local governments and input from the citizens of Oregon, make difficult funding decisions necessary to build and maintain a statewide transportation system that meets the growing demand for transportation for the next 20 years. Inclusion of any improvements in the Corridor Plan does not represent a funding commitment by ODOT or any local government, however, until programmed in the STIP and/or a local capital improvement program CIP.

Key elements of the Corridor Plan include:

- Description of existing and future conditions for all modes in the Corridor;
- Forecasts of future available funding for transportation projects in the Corridor;
- Summary of existing state, regional and local policy direction and analysis of its compliance or consistency with the Corridor Plan;
- Future vision for management of each element of the Corridor's transportation system;
- Corridor Plan Objectives that define the policy direction for all modes in the Corridor, as well as for several functional issues such as connectivity, congestion and environmental and energy impacts;
- Solutions or implementation programs comprised of proposed projects, strategies and other actions to be taken to implement the Corridor Plan Objectives;
- Prioritization of improvement projects based upon scenarios of anticipated available funding; and
- Detailed information and mapping for all projects.

Unique to this Corridor Plan process has been the simultaneous development of Transportation System Plans (TSPs) for the cities of Hood River and Cascade Locks. ODOT funding and staffing has been provided to ensure that the TSPs are coordinated with and build upon the Corridor Plan and vice-versa. Although exempt from Transportation Planning Rule Requirements for a TSP, Hood River County has fully participated in this comprehensive planning process to ensure that all of the countywide transportation system is addressed. A Technical Advisory Committee (TAC) developed common goals and objectives for the Corridor Plan and TSPs and identified implementation specific to each document. Separate long-term planning effects are underway for I-84 and the Historic Columbia River Highway. The intent is to ultimately combine these products into a countywide transportation plan which defines the long-term management direction for all elements of the countywide transportation system.

The Hood River-Mt. Hood Corridor Plan builds on the strategies and policies found in the Oregon Transportation Plan (OTP), the Oregon Highway Plan (OHP) and other modal plans. As noted above, it has also been closely coordinated with the development of transportation system plans (TSPs) for Hood River County and the cities of Hood River and Cascade Locks. Through this local and regional transportation system planning and refinement planning for the Corridor Plan, periodic review, and local plan amendments, ODOT and the local governments in the Corridor are cooperatively working together to ensure that city and county comprehensive plans and zoning ordinances achieve Corridor Plan management objectives. The Oregon Transportation Commission (OTC) will adopt the final Corridor Plan as an element of the OTP.

## B. CORRIDOR PLANNING CONCEPT

A corridor plan is a long-range (20-year) program for managing transportation systems that move people, goods and services within a specific transportation corridor. Transportation *corridors* are defined as broad geographic areas served by various transportation systems that provide important connections between regions of the state for passengers, goods, and services. Transportation *facilities* are defined as individual modal or multimodal conveyances and terminals; within a corridor, facilities may be of local, regional, or statewide importance. Examples of facilities are highways, rail transit lines, transit stations, and bicycle paths. Transportation *systems* are defined as networks of transportation links, services, and facilities that collectively are of statewide importance even though the individual components in the system may be of only local or regional significance. Examples include highway, rail, public transportation, and bicycle systems.

With the adoption of the 1992 Oregon Transportation Plan (OTP), the OTC defined policies and broad improvement strategies for the statewide transportation network. The OTP is not intended to identify specific actions that should be taken on any particular transportation corridor. Rather, implementation and refinement of the OTP are to occur through the development of Modal and Corridor Plans. Modal Plans such as the Oregon Highway Plan (OHP) and other plans relating to bicycles, pedestrians and rail look at statewide needs and policies for all of the different transportation modes. Corridor Plans provide a framework for long-term planning and development of all modes within specific transportation corridors.

The benefits of corridor planning for the Hood River-Mt. Hood Corridor include:

- **Resolution of Major Planning Issues Prior to the Initiation of Project Development**

Consensus among local and state governments regarding project purpose and needs is essential to successful project development. Corridor planning provides a framework within which individual projects located in corridor communities can be reviewed and prioritized.

- **Protection of Transportation Investments**

To prevent premature obsolescence of highways and other facilities, corridor planning examines alternate means to accommodate transportation needs with and without capital-intensive improvements. Alternatives such as access management, utilization of parallel local streets, reconfigured land use patterns and demand management programs

(i.e., rideshare, public transportation, flex-time, etc.) are considered in lieu of or in addition to major capital improvements.

▪ **Partnerships With Diverse Public and Private Agencies and Organizations**

Corridor planning provides a forum for resolution of policy issues and negotiation of strategic partnerships between organizations striving to fulfill complementary missions with limited resources. Examples include local, state and federal agencies, Native American tribes, and transportation associations.

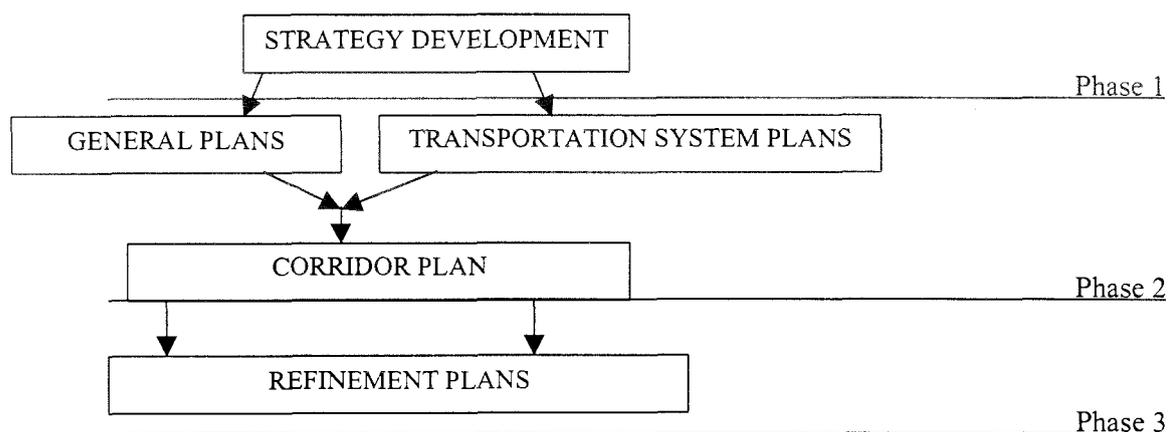
There are several federal and state mandates impacting how corridor planning is to be undertaken. The three most important of these are: the Transportation Efficiency Act of the 21<sup>st</sup> Century (TEA-21); the Oregon Transportation Plan (OTP); and the Oregon Transportation Planning Rule (TPR). While very different policy initiatives, all three share several common requirements: 1) transportation plans should provide a balanced transportation system providing transportation options; 2) transportation plans should reduce reliance upon the single occupant vehicle and increase the opportunity for modal choice; and 3) transportation plans should be coordinated with land use plans and address the environmental, social, economic, and energy consequences of proposed actions.

### C. OVERVIEW OF CORRIDOR PLANNING PROCESS

The corridor planning process recognizes that different segments of the Hood River-Mt. Hood (OR 35) Corridor require differing levels of study to develop a corridor-wide long-range plan. Thus, corridor planning moves from the general to the specific in a three-phased process (illustrated below). It is important to note that this planning may not occur in a linear fashion, i.e., that activities described in Phase 1 may occur after some Phase 2 or Phase 3 planning activities.

- Identification, in a Corridor Strategy, of significant corridor-wide issues and strategies to address those issues;
- Preparation of two types of Transportation System Plans—General Plans for counties and Systems Plans for cities; and
- Resolution of any outstanding environmental, land use or other issues through Refinement Plans.
- Full consideration of potential environmental impacts are beyond the scope of the Corridor Plan.

**Figure 1. Corridor Planning Process**



This Corridor Plan has been developed with the active involvement of tribal and local governments in the Corridor, service providers, interest groups, statewide agency and stakeholder committees, and the general public. Public comment received throughout the planning process through newsletter survey responses, open houses, letters and phone calls and has been incorporated into issues and objectives. A Technical Advisory Committee

(TAC) is the primary author of the Corridor Plan. The TAC will remain active for future revisions to the Corridor Plan as necessary.

Key steps in development of the Corridor Plan included:

- Identification of community and stakeholder issues, concerns and ideas about transportation modes in the Corridor. A survey of Corridor residents and other interested parties was conducted through a newsletter mailing and at the Hood River Harvest Festival in October, 1995 to identify issues and needs to be addressed in the corridor planning process.
- Research and analysis of existing conditions and future opportunities and constraints.
- Development of an Interim Corridor Strategy that established overall objectives for how all modes would be managed in the corridor. A September, 1996 newsletter and questionnaire solicited public input on key objectives drafted by the TAC. Open houses were also held in September, 1996 to solicit public input on preliminary objectives, implementation actions and priorities to be addressed in the Interim Corridor Strategy and in the TSPs for Hood River County and the cities of Hood River and Cascade Locks.
- Analyses, or refinement studies, in a number of areas identified by TAC as needing further study before implementation strategies could be identified and prioritized. As a result, ODOT undertook analysis of the need for bicycle and pedestrian system improvements, passing and climbing lanes, and intersection safety and capacity improvements within the corridor.
- Development by local governments of Transportation System Plans (TSPs). Hood River County and the cities of Hood River and Cascade Locks are currently finalizing these plans for the transportation systems within their jurisdictions.
- Identification of specific strategies and improvement projects to implement the Interim Corridor Strategy objectives and prioritization of improvement projects based upon scenarios of anticipated available funding.
- Newsletters distributed regionwide in June, 1998 to over 2,000 individuals, agencies and organizations summarizing key management strategies, and in September, 1998 announcing September and October open houses conducted in conjunction with the draft Oregon Highway Plan.
- Incorporation of these pieces into a draft Corridor Plan.
- Following public and agency review, endorsement of the Corridor Plan by local governments and other TAC members and adoption by the OTC.
- As needed, refinement planning to address special issues. These refinement plans will then be folded into the Corridor Plan. An example of a refinement plan would be a study of the westside access issues in the City of Hood River.

#### **D. APPLICABILITY OF THIS PLAN**

The objectives embodied in this Corridor Plan direct the manner that the Oregon Department of Transportation plans, manages, and improves the Hood River-Mt. Hood (OR 35) Corridor. The Hood River-Mt. Hood (OR 35) Corridor Plan was adopted prior to January 1, 2000. This Corridor Plan is consistent with the policies and standards of the 1991 Oregon Highway Plan. The 1991 Highway Plan policies, except for the Operating Level of Service Standards (Appendix A-3) shall remain effective for purposes of the Transportation Planning Rule (OAR 660-12-015) consistency requirements.

The exception, Policy 1F, Highway Mobility Standards of the 1999 Oregon Highway Plan, will be effective immediately.

The standards provided in 1F shall identify the state highway mobility performance expectations to be used in the development of transportation system plans and highway corridor plans that are adopted after March 18, 1999. Alternative performance standards that need or exceed these highway mobility performance standards may be substituted.

The standards provided in Policy 1F shall guide state highway operation decisions initiated after March 18, 1999.

Application for amendments to functional plans, acknowledged comprehensive plans and land use regulations subject to the Transportation Planning Rule (OAR 660-12-060), initiated after March 18, 1999 shall be consistent with the standards in Policy 1F.

The Hood River-Mt. Hood (OR 35) Corridor Plan shall be amended to be consistent with the 1999 Oregon Highway Plan at its next update.

## **E. REVISION AND AMENDMENT PROCESS**

Implementation of the Hood River-Mt. Hood (OR 35) Corridor Plan will occur over many years. During that time, it will be necessary to update and revise the Plan to reflect changing conditions and policy direction or to better achieve Plan objectives. Corridor Plan Objectives call for maintaining a Corridor-wide advisory group to assist ODOT in periodically prioritizing management solutions, reviewing local government transportation system plans for conformance with the Corridor Plan, and assisting in updating the Corridor Plan as needed. Refinement planning will also occur to address outstanding environmental land use or other issues. Agency and public input will be solicited during refinement planning and Corridor Plan updates.

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## A. CORRIDOR DESCRIPTION

The Hood River-Mt. Hood Corridor, also known as the OR 35 (Mt. Hood Highway) Corridor, consists of two interconnected portions of the statewide highway system:

- US 30 from its intersection with I-84 at the East Hood River Interchange to its intersection with the Historic Columbia River Highway (HCRH)/State Street (commonly referred to as Button Junction); and
- OR 35 from Button Junction to its intersection with US 26 near the Mt. Hood Summit.

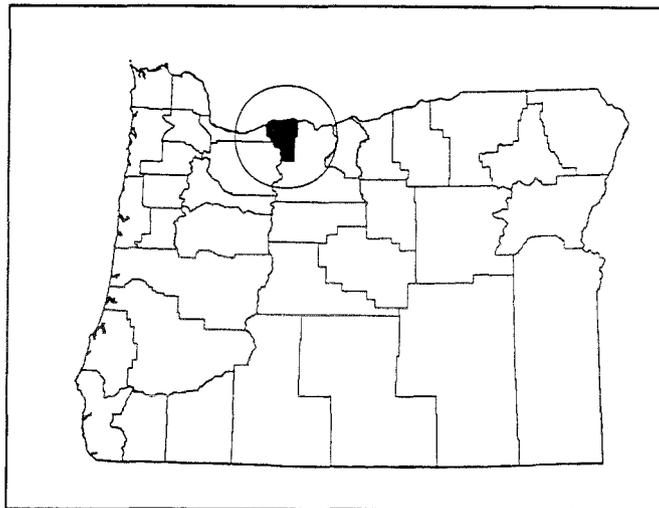
In order to define the long-term management direction for the entire countywide transportation system, the Corridor Plan addresses:

- The Hood River-Mt. Hood (OR 35) Corridor as defined above;
- District Highways 281 and 282;
- HCRC/US 30 through Hood River and Cascade Locks; and
- I-84 through Hood River County.

A separate ODOT planning process is underway to develop detailed management direction for the HCRH. Long-term management direction for I-84 will be defined as part of a future planning effort for the length of this interstate highway through Oregon. Consequently, while recognizing them as part of the countywide transportation system, this Corridor Plan defers detailed planning of these facilities to their separate processes.

The Corridor includes the urban areas of Hood River and Cascade Locks, as well as the rural community centers of Odell and Parkdale. Each community brings a varying mix of transportation needs, community development patterns, and activity levels.

**Figure 2: Location of Hood River - Mt. Hood (OR 35) in Oregon**



The Hood River-Mt. Hood Corridor is a multimodal transportation system traversing both urban and rural areas. It follows OR 35 for 38.46 miles from the intersection with US 26 on Mt. Hood to the intersection with I-84 in the City of Hood River. In order to consider the interconnected nature of the transportation systems within Hood River County, the Corridor boundaries also include the highway connections of I-84 and US 30 to the cities of Hood River and Cascade Locks and these cities' other transportation facilities. The transportation facilities and

systems of the cities are addressed as they relate to regional connectivity in the Corridor, and the Corridor Plan is not meant to supplant the more in depth analyses conducted in the cities' Transportation System Plans.

Each community along the Corridor is unique, with issues and concerns that reflect the needs of local citizens and businesses. OR 35 acts as a common lifeline from Mt. Hood to the Columbia River Gorge while the other highways connect Cascade Locks and Hood River to each other and to OR 35. Actions taken by one community may affect others. In addition, decisions made about the future role of OR 35 may affect other transportation facilities.

The focus of the Hood River-Mt. Hood Corridor is OR 35 (Figure 3). The OR 35 portion of the Corridor Plan is divided into two segments with similar characteristics for analysis in this plan. Segment 1 runs from the intersection with US 26 and ends at the intersection with Base Line Road east of Parkdale. This segment begins high in the mountain near winter recreation areas, and travels north down the mountain through forestland, campgrounds, trails, lakes and streams. It is sparsely populated, containing the small community of Parkdale and pockets of rural residential development. The segment contains important forestland, recreational sites, and some farming. Much of Segment 1 passes through Mt. Hood National Forest, where it is managed to maintain scenic vistas from OR 35.

Segment 2 continues north as the route descends the mountain. It runs from the intersection with Base Line Road to the junction with I-84 within the City of Hood River. The land uses change from primarily forest to cropland, to rural residential, and finally to urban development within the City of Hood River. Segment 2 contains the community of Odell and the City of Hood River.

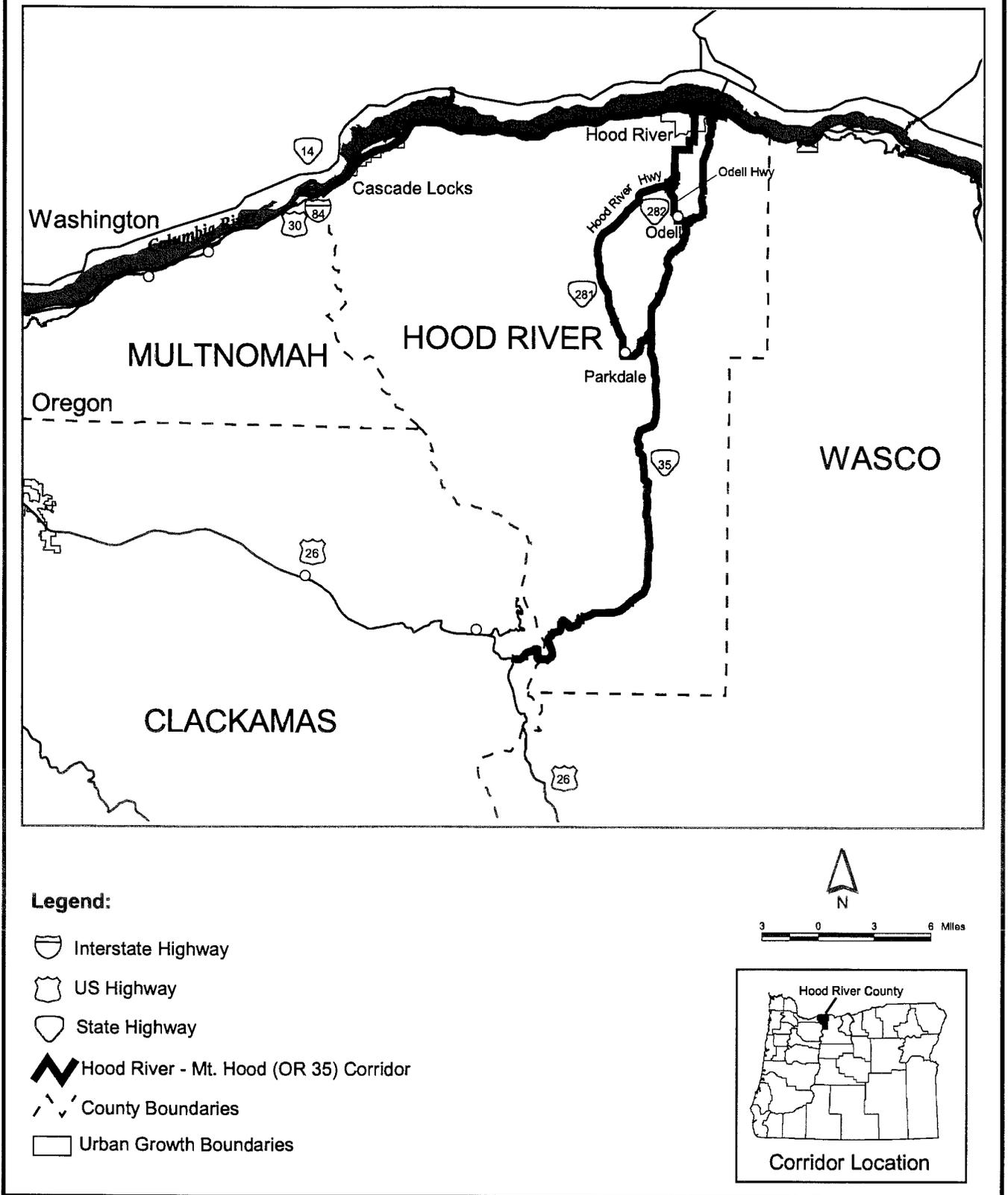
Hood River and Cascade Locks are the only incorporated cities in Hood River County and provide urban amenities for the entire Corridor (Figure 4). Hood River is the largest city in the Corridor. In 1998, Hood River's population was 5,130 and Cascade Locks' population was 1,095. As the county seat, Hood River provides governmental services, as well as the bulk of the employment for the area. The Corridor's alternative transportation facilities are concentrated within these two cities.

The Hood River-Mt. Hood Corridor has scenic attributes of national, state, and local significance. The Corridor is part of the "Mount Hood Loop" road system, which also includes I-84 and US 26. This "Loop" is considered to be one of the most important recreational drives in Oregon. Lands within the Mt. Hood National Forest are designated as a critical viewshed, and those visible from OR 35 are managed to maintain scenic vistas. OR 35 is also a major accessway to the Columbia River Gorge which has been recognized nationally for its scenic attributes. In addition, it is a primary route to major recreational designations on Mt. Hood and within the Columbia River Gorge.

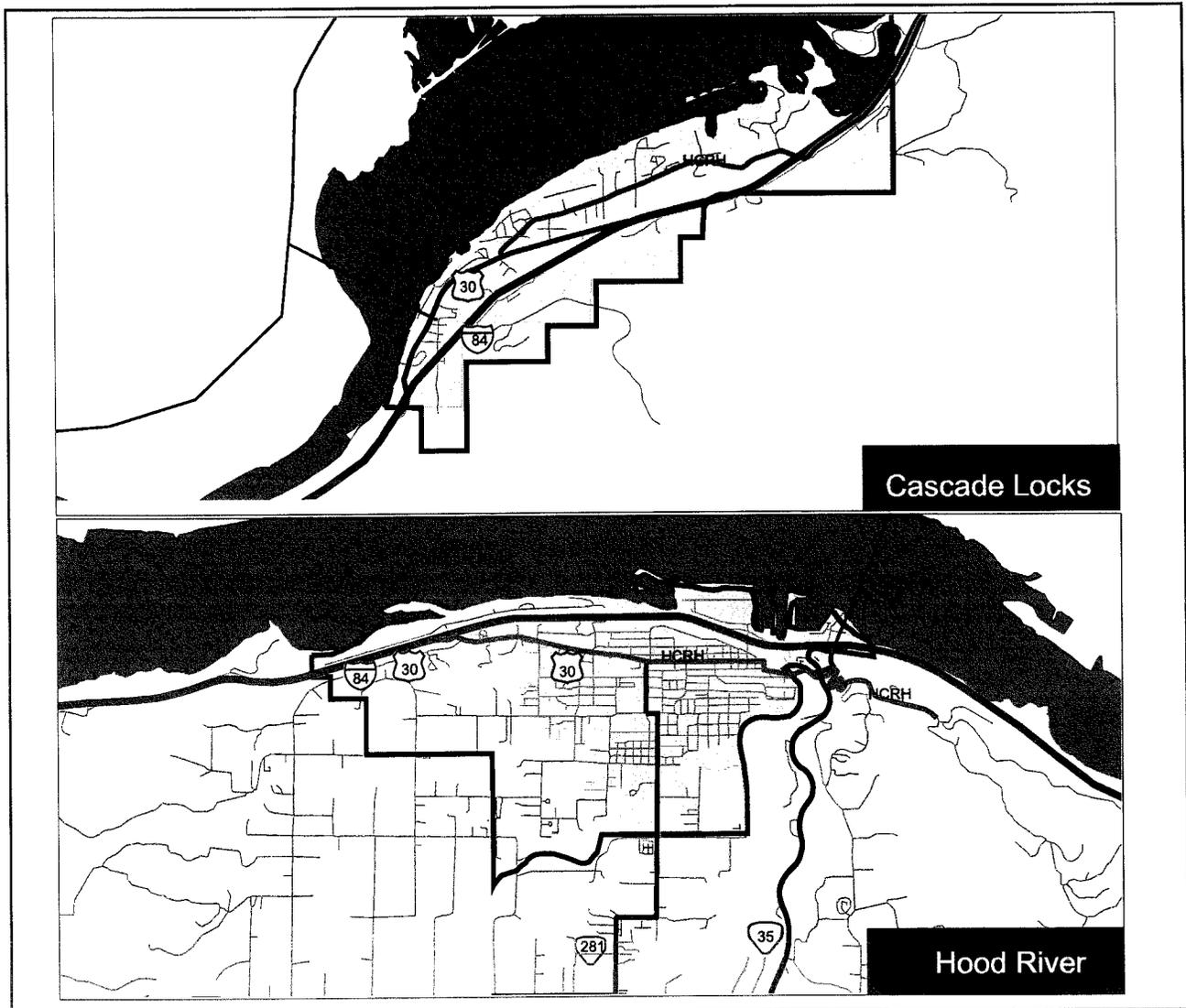
## **B. CORRIDOR ROLE**

The Hood River-Mt. Hood Corridor serves both urban and rural transportation needs. Though multi-modal, the Corridor is dominated by auto use on OR 35, which is part of the State Highway System. The Corridor serves a variety of activities critical to the state. It links the farm and forest activities of the Hood River Valley to processing and distribution facilities in the City of Hood River, and by connecting to I-84 links Hood River County to other destinations throughout the country. With occasional weather closures of I-84, through the Columbia River Gorge, OR 35 provides an important alternative for moving people and goods between the Willamette Valley and eastern Oregon. It is also a major summer and winter recreation route for activities in the Mt. Hood National

**Figure 3: General Corridor Area  
Existing Conditions**

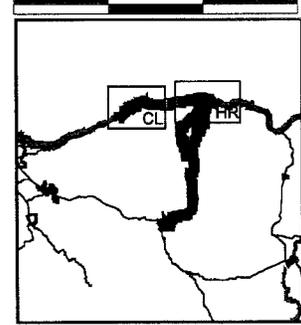
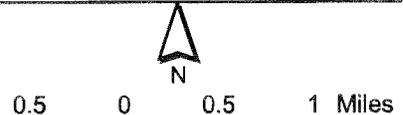


**Figure 4: Cascade Locks and Hood River Urban Growth Areas Existing Conditions**



**Legend:**

-  Urban Growth Boundaries
-  City Boundaries
-  Roads
- Interstate and Highways**
-  Interstate
-  Statewide Highway
-  District Highway
-  Historic Highway



**UGB Locations**

Forest and the Columbia River Gorge. The Corridor also passes through difficult terrain and environmentally sensitive areas, the needs of which must be balanced with the need to maintain access. As part of the Mt. Hood Loop, OR 35 (Mt. Hood Highway) connects US 26 and I-84, as well as SR 14 (via the Hood River bridge) to I-84 and the local street systems.

Among the Corridor's functions are:

- Eastside (Mt. Hood Loop) entrance into the Columbia River Gorge National Scenic Area;
- Primary access to Cooper Spur Ski Area and other eastside (of Mt. Hood) recreation facilities;
- Alternative route (to US 26) from the Portland area to Mt. Hood Meadows Ski Area and other winter and summer recreation facilities;
- Truck route, serving lumber mills, orchards and fruit shippers;
- Access to the rural community centers of Odell, Parkdale and Mt. Hood;
- Access to scenic vistas;
- Scenic Byway for that portion within the Mt. Hood National Forest; and
- Access from I-84 to the east end of Hood River.

The Hood River Highway (281) and the Odell Highway (282) are ODOT district highways, whose primary function is to serve local traffic and provide access to adjacent properties. They link the communities in the mid- and upper Hood River Valley to the major east-west and north-south transportation corridors (I-84 and OR 35). Both highways provide a truck route serving lumber mills and orchards and both are county bike routes (shared roadways).

The Hood River Highway (Highway 281) is the major parallel route to OR 35. It begins in downtown Hood River at Oak Street (HCRH) and follows the Hood River to the rural center of Parkdale, where it intersects OR 35. Among the highway's functions are:

- Westside alternate route into the city of Hood River;
- Secondary access to Cooper Spur Ski Area;
- Access to the rural communities of Dee and Parkdale;
- Detour route for incidents along OR 35;
- Access to orchards, fruit shipping operations and residential areas in the Hood River Valley;
- Access to the eastside of the Mt. Hood National Forest and associated recreational facilities.

The Odell Highway (Highway 282) connects the Hood River Highway (Highway 281) and OR 35, serving the rural community of Odell. Among the highway's functions are:

- Access to the rural community of Odell;
- Detour route for incidents along OR 35; and
- Access to orchards, fruit shippers and residential areas in the Lower Hood River Valley.

The Historic Columbia River Highway (HCRH) in Hood River and Cascade Locks is on the National Register of Historic Places. The Oregon Legislature has declared that it is the state policy to preserve and restore the continuity and historic integrity of the remaining segments of the HCRH for public use and enjoyment.

I-84 is a four-lane controlled access freeway running east/west through Hood River County along the Columbia River. It is part of the federal interstate system that connects the east coast to the west coast.

## C. EXISTING CONDITIONS

### 1.0 Introduction

This section describes the existing conditions in the Corridor, beginning with a brief review of Corridor demographics and economy. Then the major subject areas of the Corridor Plan are summarized. For a detailed discussion of these existing conditions, future conditions, and development of solutions, refer to Volume 2, Chapter I of this Corridor Plan.

### 2.0 Economy and Demographics

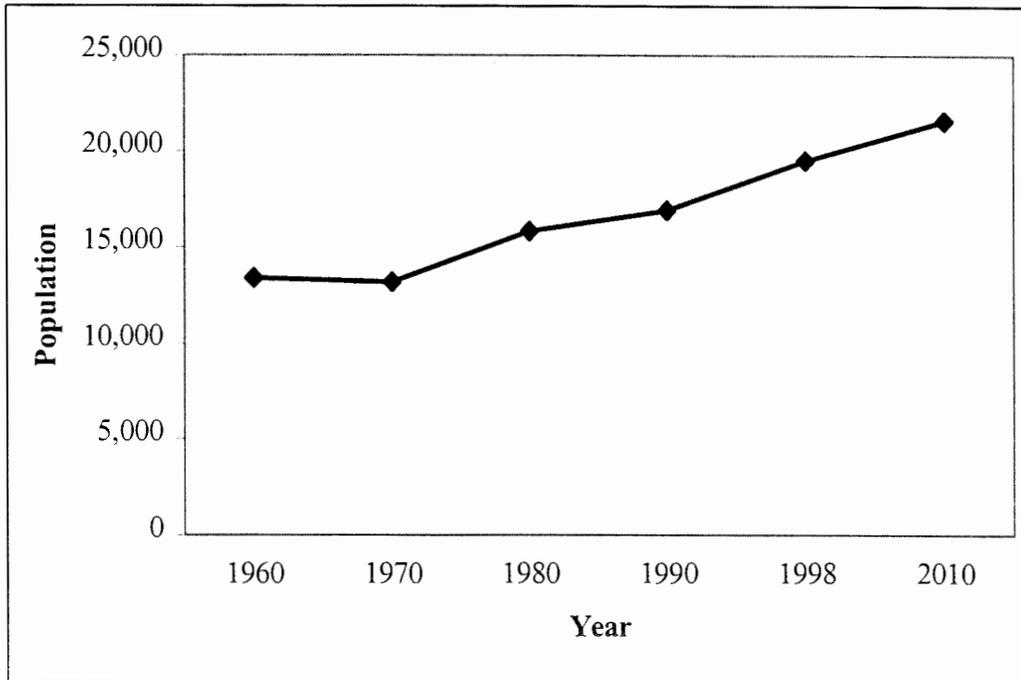
Transportation systems can have a significant economic impact on their surroundings. New transportation services and system improvements can act as a catalyst for new businesses, job creation, and the promotion of tourism. Hood River County's principal industries are agriculture, lumber and wood products, retail trade, and recreation/tourism. Important agricultural resources are located in the mid and lower portions (up to 2,700 feet) of the Corridor, particularly pear, apple, and cherry orchards. Recreation and tourism destinations are located throughout the Corridor. Mt. Hood Meadows Ski Area, Cooper Spur Ski Area, the Mount Hood National Forest, several campgrounds, trails and snowparks are located in the southern portion of the Corridor. These and various other recreation sites provide opportunities for snow recreation, camping, and hiking. The Columbia River Gorge, numerous creeks, the Columbia River, and the City of Hood River are located in the northern portion of the Corridor providing opportunities for hiking, shopping, world-class windsurfing, and numerous other water-related and outdoor activities. A well-functioning transportation system is essential for ensuring the viability of these industries.

Current economic development efforts include plans by the Port of Hood River to redevelop the waterfront in Hood River for a variety of commercial uses and activities by the Mt. Hood Economic Alliance (as part of the Regional Strategies program) to encourage development of the agricultural, software, hi tech, and tourism industries in Hood River County, using state lottery funds and other sources of revenue as available to provide the public infrastructure needed for business start-ups. Through their Rural Investment Fund, the Alliance will support economic growth in the rural portions of the Corridor by supporting local public health, public safety, education, and economic well-being projects, as well as community planning and project development technical assistance.

Hood River County is expected to grow at a moderate rate with the majority of the growth concentrated within the urban areas (Cascade Locks and Hood River). Outside of the county's urban areas and rural community centers, minimal growth is expected. High growth in population projected for the Portland metropolitan area will likely increase the traffic in the Corridor. The Corridor is one of Oregon's primary routes to Columbia River Gorge and Mt. Hood recreation/tourism destinations. In addition, Hood River County is close enough to Portland employment centers for commuting to be attractive to some Corridor residents. Figures 5 and 6 show the historic and projected population and employment for Hood River County, respectively.

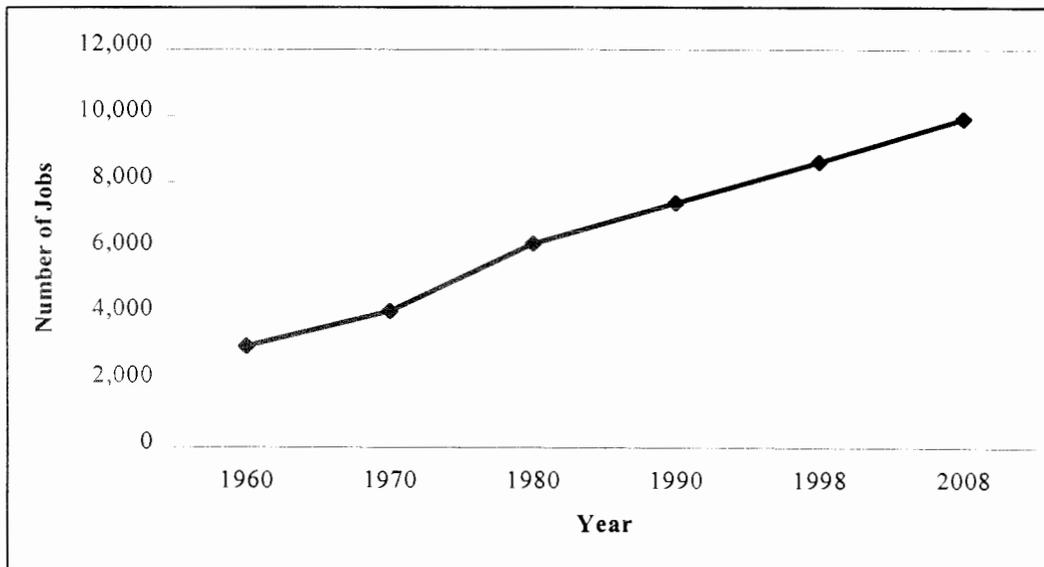
In the rural portions of the Corridor, ODOT forecasts potential residential and employment growth based on areas that could possibly be developed within the next 20 years (Figure 7). The intent of Potential Development Impact Analysis (PDIA) is to compare and contrast actual (current) residential densities and the potential residential densities within rural areas expected at maximum (full) build-out, as allowed in county comprehensive plans and zoning ordinances. This analysis indicates the amount of traffic that might be generated, assesses how that traffic would impact OR 35, and assist in making strategic decisions in response to that development (e.g. identify highway improvements, access management measures, etc.). The PDIA analysis likely overstates the amount of

**Figure 5: Historic and Projected Population  
Hood River County**



Source: Center for Population Research and Census, Portland State University

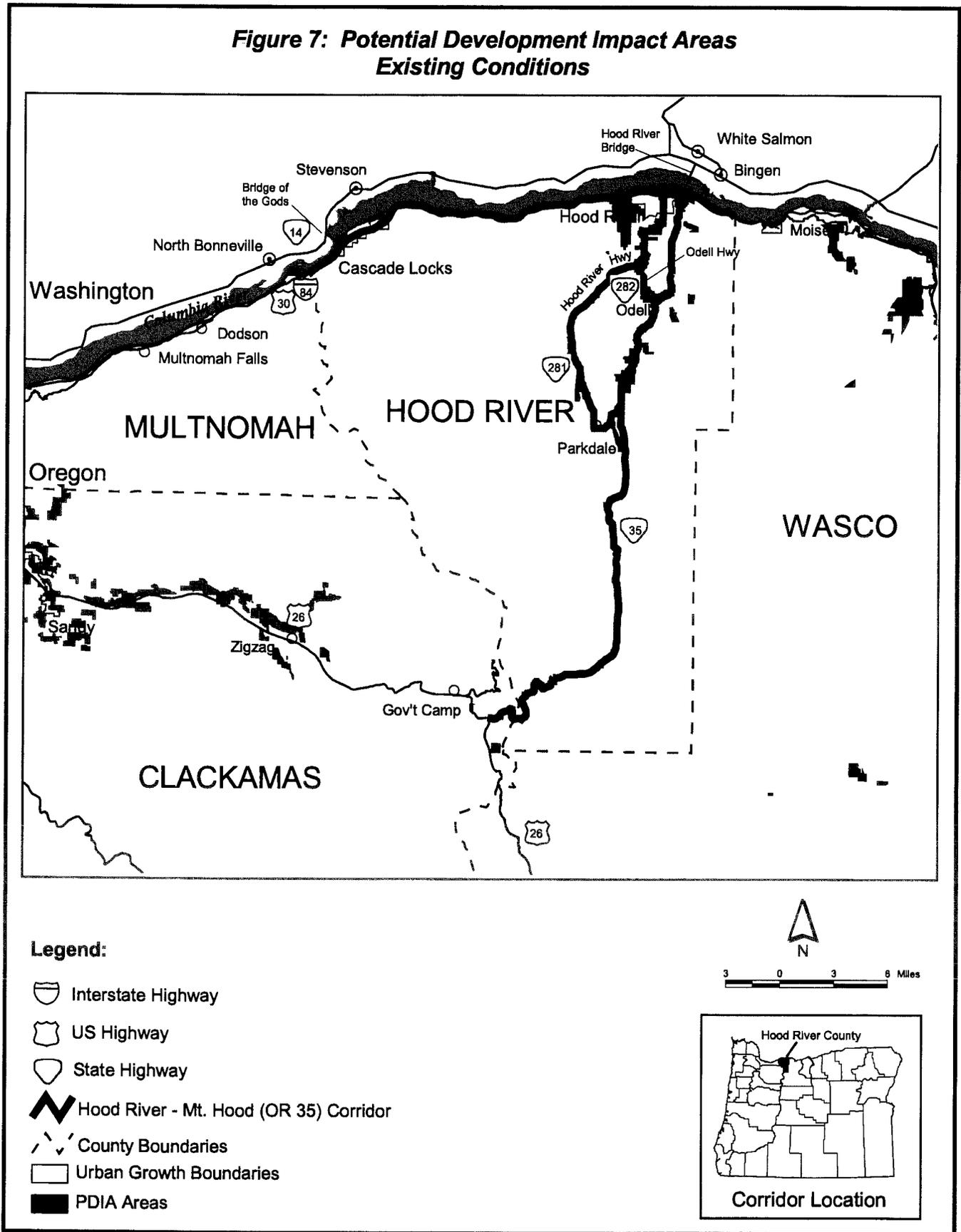
**Figure 6: Historic and Projected Employment<sup>(1)</sup>  
Hood River County**



Source: *Oregon Covered Employment and Payrolls*, Oregon Employment Department, 1998.

<sup>(1)</sup> Nonagricultural wage and salary employment. The data exclude the self-employed, volunteers, unpaid family workers, domestics, and persons involved in labor disputes.

**Figure 7: Potential Development Impact Areas  
Existing Conditions**



traffic that will be on the highways due to assumptions in the methodology (e.g., it does not take into account natural features that make "vacant" land unbuildable). However, it does provide a worst-case scenario for congestion in the Corridor.

### 3.0 Transportation Facilities and Services

#### 3.1 Highways

The highway system addressed in the Corridor Plan is displayed in Figure 8. The OR 35 (Mt. Hood Highway) portion of the Corridor, consists of two interconnected portions of the statewide highway system:

- US 30 from its intersection with I-84 at the East Hood River Interchange to its intersection with the Historic Columbia River Highway (HCRH)/State Street (commonly referred to as Button Junction); and
- OR 35 from Button Junction to its intersection with US 26 near the Mt. Hood Summit.

OR 35 is a primary north-south route to the Mt. Hood and the Columbia River Gorge, and provides access from rural communities, orchards, timber operations, and recreational areas to the urban areas in the north. It is a part of the National Highway System and a Statewide Highway in the OHP, meaning it provides connections to larger urban areas, ports, and major recreation areas not served by interstate highways. In addition to its connections to I-84 and US 26, OR 35 also connects Hood River County to Washington State via the interstate bridge.

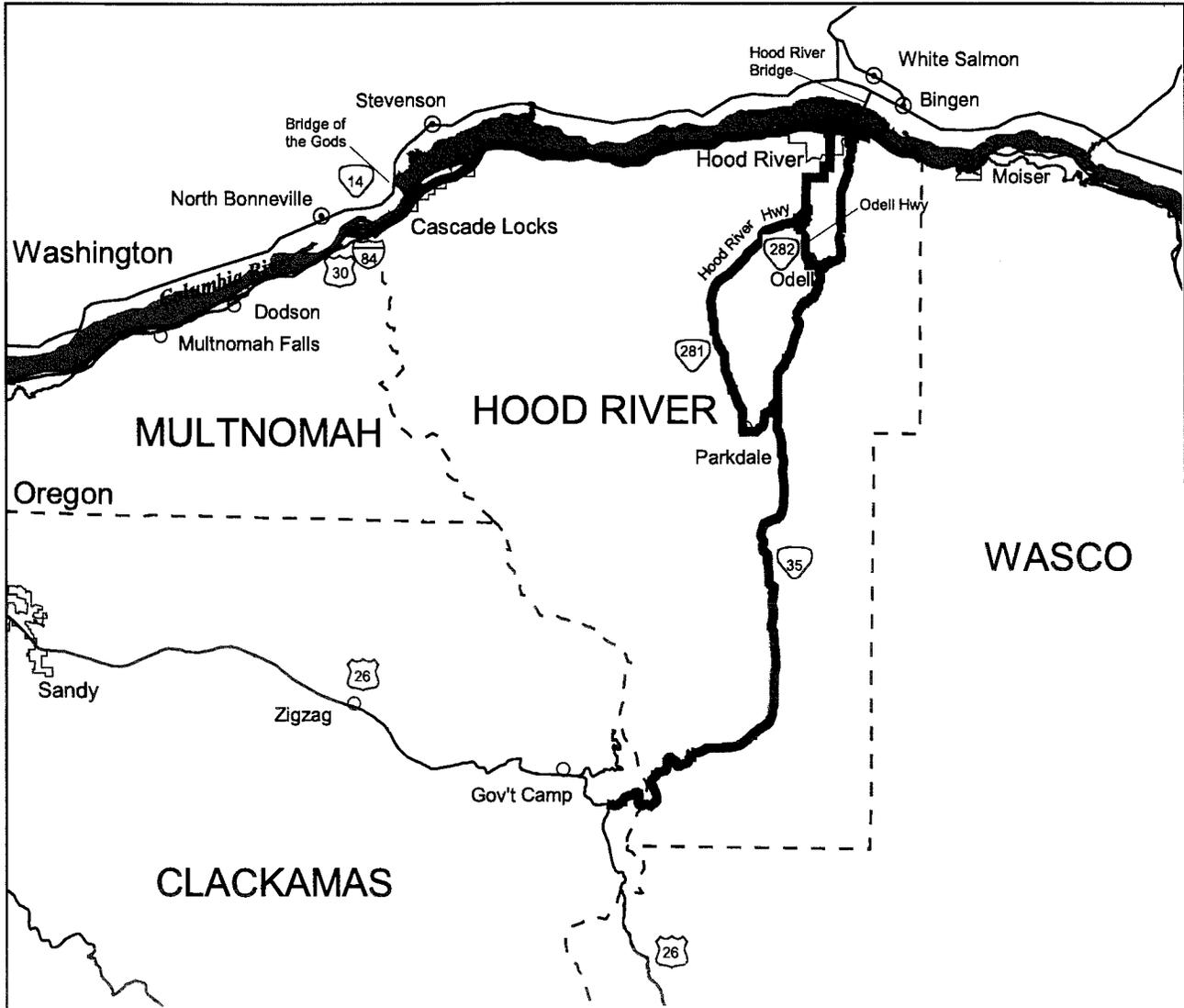
The Hood River Highway (281) and the Odell Highway (282) are ODOT district highways, whose primary function is to serve local traffic and provide access to adjacent properties. They link the communities in the mid- and upper Hood River Valley to the major east-west and north-south transportation corridors (I-84 and OR 35). Both highways provide a truck route serving lumber mills and orchards and both are county bike routes (shared roadways).

I-84 and HCRH are also important routes in the Corridor. I-84 is the major east-west connection through the state. Long-term management direction for I-84 will be defined as part of a future planning effort for the length of this interstate highway through Oregon. The HCRH, a statewide highway, periodically shares an alignment with I-84 and is located on city and county streets in the cities of Hood River and Cascade Locks. In addition, HCRH is listed on the National Register of Historic Places. A separate ODOT planning process is underway to develop detailed management direction for the HCRH and it is evaluated in the Transportation System Plans being developed by the cities of Hood River and Cascade Locks. Planning for the HCRH is tied to protecting its historic and cultural significance while accommodating the cities' transportation needs. The City of Hood River will be including the HCRH as a Goal 5 (historic) resource in its comprehensive plan. While these highways are not addressed in depth through this planning process and detailed planning of these facilities is deferred to their separate processes, connectivity to I-84 and HCRH is discussed.

#### 3.2 Air Services

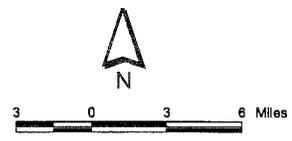
Although air travel within the Corridor is fairly limited, it provides an essential form of transportation supporting business, agriculture, emergency services, and personal travel. There are four airports in the county -- Cascade Locks State Airport, Hood River County Airport, Hanel Airport, and Green Acres Airpark. (See Figure 9).

**Figure 8: Highway Network Existing Conditions**

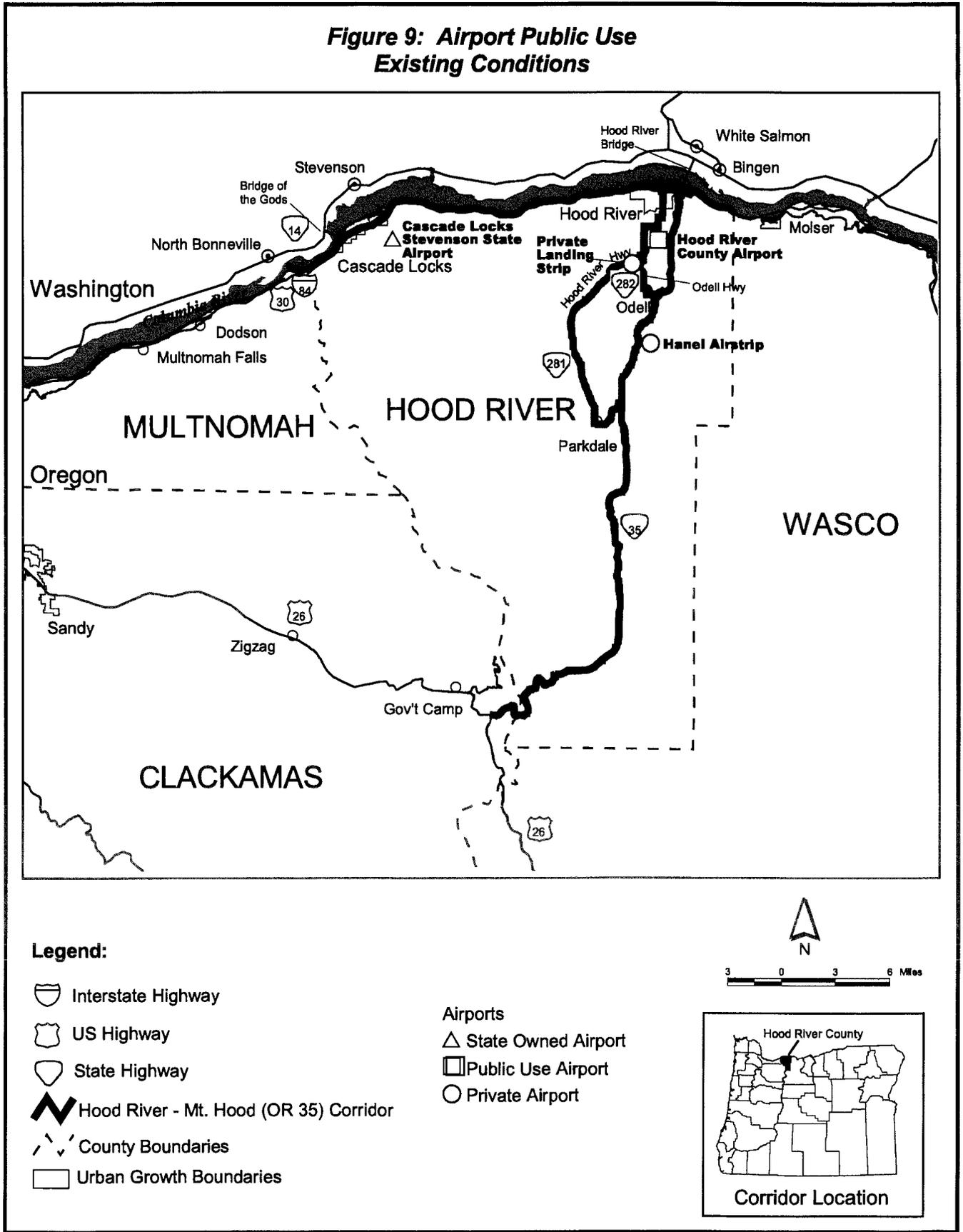


**Legend:**

-  Interstate Highway
-  US Highway
-  State Highway
-  Hood River - Mt. Hood (OR 35) Corridor
-  County Boundaries
-  Urban Growth Boundaries



**Figure 9: Airport Public Use Existing Conditions**



**Legend:**

- Interstate Highway
- US Highway
- State Highway
- Hood River - Mt. Hood (OR 35) Corridor
- County Boundaries
- Urban Growth Boundaries

- Airports**
- State Owned Airport
  - Public Use Airport
  - Private Airport



Cascade Locks State Airport is located within the city limits and is administered by the ODOT Aeronautics Division. It plays a supportive role to the state transportation system in terms of agricultural, recreational, and emergency uses. Hood River Airport is a general aviation airport located south of Hood River adjacent to Highway 281. It is owned and operated by the Port of Hood River and provides no regularly scheduled air service, being used primarily by small planes for agricultural, business, and personal uses. Hanel Airport and Green Acres Airpark are small private airports located south of Hood River. In addition, the US Coast Guard has four seaplanes which operate out of the Port of Hood River boat basin on the Columbia River.

Major, commercial air service is available approximately 40 miles west of Cascade Locks at the Portland International Airport in Portland. Portland International Airport is a full service airport, handling both passengers and cargo. The accessibility of Portland Airport and the wide range of services it offers limit the likelihood of significant expansions of the airports in Hood River County. There are also airports located in Troutdale and The Dalles, which could be used by Hood River County residents.

### 3.3 Bicycle System

I-84, OR 35, Highways 281 and 282, and HCRH (US 30) are all state highway bicycle facilities and are intended to provide for general bicycling needs. Both commuting and recreational bicycle use occurs in the Corridor. Bicyclists commonly use local streets within the urban areas.

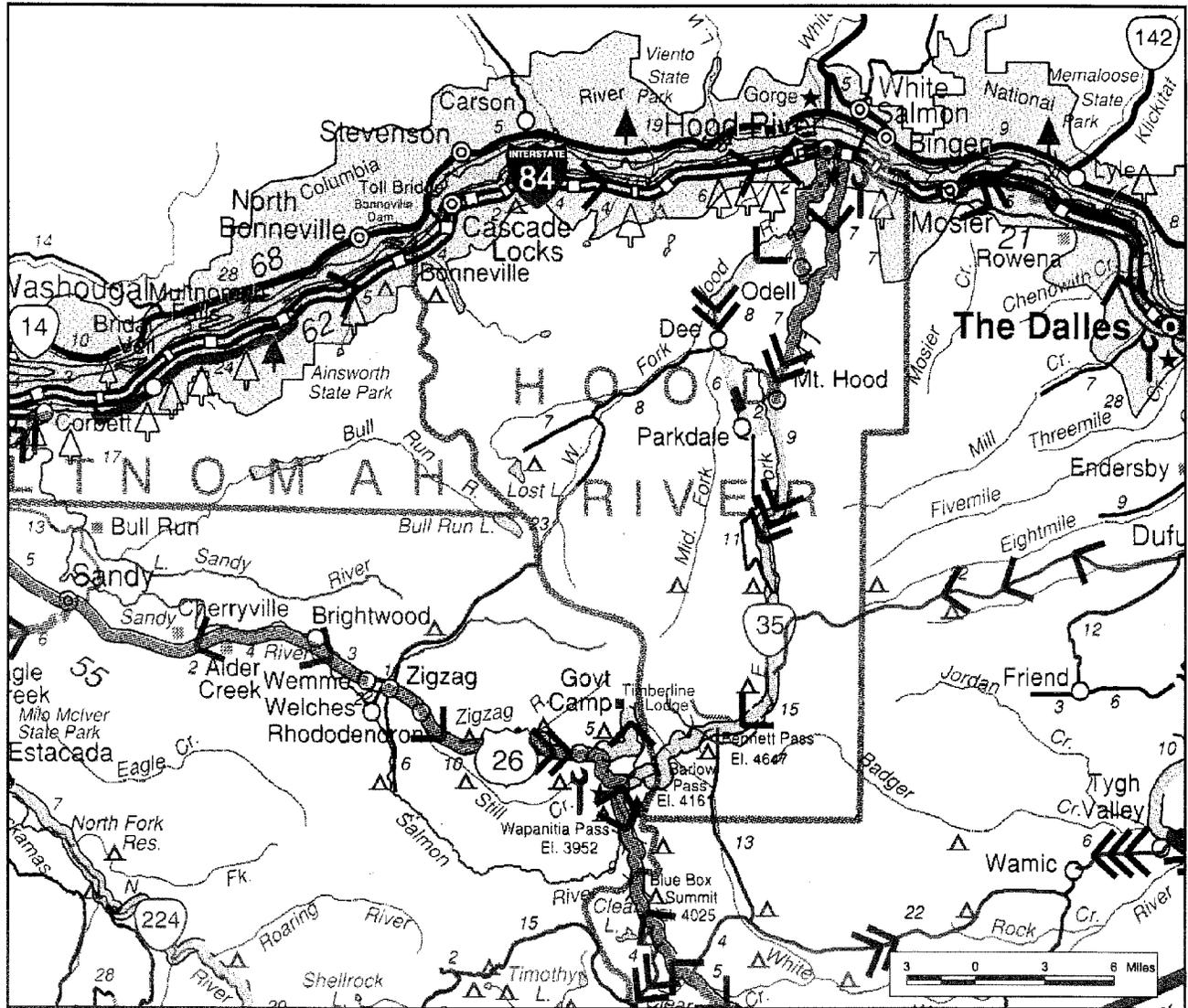
ODOT's 1995 Oregon Bicycle and Pedestrian Plan considers rural highways and county roads suitable for cycling if they have paved shoulders or relatively low traffic volumes. Roads with very low volumes are suitable for bicycling on shared roadways with motor vehicles. Minimal or substandard shoulders can carry rural bicycle traffic along roads with low to moderate volumes. As part of an analysis of bicycle facilities and shoulder adequacy within the Corridor (see *Volume 2, Roadway Conditions and Safety* section), the existing shoulders along OR 35 and Highways 281 and 282 were inventoried for shoulder width and condition. The inventory catalogued the improvements needed to bring the shoulder up to standard (Figure 10). The inventory revealed that in general, the southern ten miles of the highway is in good shape with the majority of the shoulders over four feet, the middle 18 miles is in the worst shape with many deficient areas, and the northern ten miles has the widest shoulders with only a few deficiencies. Some of the deficiencies could be corrected with additional pavement or additional pavement and fill. However, many of the deficiencies are due to steep drop-offs, embankments, and bridge widths. Widening shoulders in these locations would be unrealistic due to cost and environmental constraints.

The two district highways, Highways 281 and 282, were also found to have deficient shoulders for bicycle use. Seventy-nine (79) percent of the shoulder miles on Highway 281 are less than four feet in width, while 69 percent of the shoulders on Highway 282 are less than four feet in width. As is the case for OR 35, improvements to shoulders on these highways are only likely to occur in conjunction with future modernization projects.

### 3.4 Pedestrian System

Most of the pedestrian activity in the Corridor is in the cities of Hood River and Cascade Locks, as well as in some small communities along the highway, such as Parkdale and Odell. In the rural areas, there are few pedestrian trip generators or destinations due to rural development patterns. Walking distances between origin and destination tend to be great, making walking infeasible in most rural areas, and pedestrian facilities consist of shared roadways and shoulders. (Shoulder conditions are discussed above.) There are pedestrian facilities within the two cities along the urban sections of the highways. Within the City of Hood River, HCRH (US 30) has sidewalks along most segments through downtown. This part of HCRH (US 30) is a pedestrian-friendly environment with sidewalks and short blocks. However, many of the sidewalks lack curb

**Figure 10: Bicycle Existing Conditions**



- Interstate Freeway (Bicycles Allowed)
- Low Traffic Volume Paved Road
- Moderate Traffic Volume Paved Road
- High Traffic Volume Paved Road
- Caution required due to combinations of narrow width, poor sight distance, high truck traffic or very high traffic volumes.
- Paved Shoulder 4' or wider (black lines on each side)
- Information Not Available (usually low traffic county roads)
- Gravel Road
- Interstate Route Marker
- U.S. Route Marker
- State Route Marker
- Accumulated Mileage Between Stars
- Mileage Between Towns and Junctions

# OREGON BICYCLING GUIDE 1997

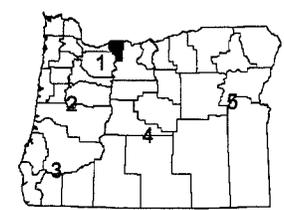
- Moderate Grade
- Steep Grade
- Very Steep Grade (Arrows point uphill)

- Separated Path, shared with pedestrians. Inquire locally for exact locations.
- Direction of Prevailing Summer Wind

- Point of Interest
- Commercial Airport
- Bicycle Repair Facility
- U.S. Forest Service Campground
- State Park or Wayside
- State Park with Overnight Facility
- State Park with Reserved Campsites
- Bureau of Land Mgt. Campground

- COMMUNITIES**
- State Capital
  - County Seat
  - Incorporated Place
  - Unincorporated Place
  - Locale or Site

Prepared by:  
Oregon Department of Transportation  
Bicycle and Pedestrian Planning  
and Inventory & Mapping



**Corridor Location**

cuts for wheelchair access. Along most of HCRH (US 30)/Wa-Na-Pa Street in the Cascade Locks, sidewalks are provided on both sides of the street from the foot of the Bridge of the Gods to Oneonta Street and on the north side of the roadway from Oneonta Street to Lakeside Drive. An obstacle to creating a better pedestrian environment is the large number of dead end streets in the city. Recreational walking trails are present throughout the County, particularly in the Mt. Hood National Forest. A few trails can be accessed directly from OR 35.

### 3.5 Transit Service

Public transit service within Hood River County is coordinated by Columbia Area Transit District (CAT). The district provides demand-responsive (dial-a-ride) service countywide. CAT's demand-responsive, door-to-door service operates daily within Hood River and Odell, and once a week within Parkdale and Cascade Locks. Also, "as needed" trips to the Portland area are made for people needing access to medical attention. The CAT bus also has a stop close to the Greyhound Bus Lines depot areas from Port offices in downtown Hood River.

During the summer, CAT also offers a city-only fixed-route service. In the summer of 1997, CAT had six different routes providing coverage throughout the City of Hood River. One of these routes connected to OR 35. However, due to budget constraints, service may be reduced. This route may or may not traverse OR 35; however, the dial-a-ride service can connect with OR 35 on an on-call basis.

The District also operates a shuttle along OR 35 traveling from Hood River to the Mount Hood ski areas. It operates this shuttle during the ski season (usually November through March) on weekends and holidays. This shuttle service is intended to help relieve congestion on US 26 during the winter months. The ski shuttle can help encourage traffic from the Portland area to access Mount Hood from Hood River and OR 35, rather than from US 26.

Intercity bus service is provided by Greyhound Bus Lines from a downtown Hood River depot (located at 1205 'B' Street). The buses stop in Hood River en route to Portland on westbound I-84, and to The Dalles and Boise, Idaho, on eastbound I-84. This service operates three times per day. Greyhound also runs a bus once per day from Hood River to Umatilla, Oregon and then north to Spokane, Washington. Existing intercity bus services are displayed in Figure 11.

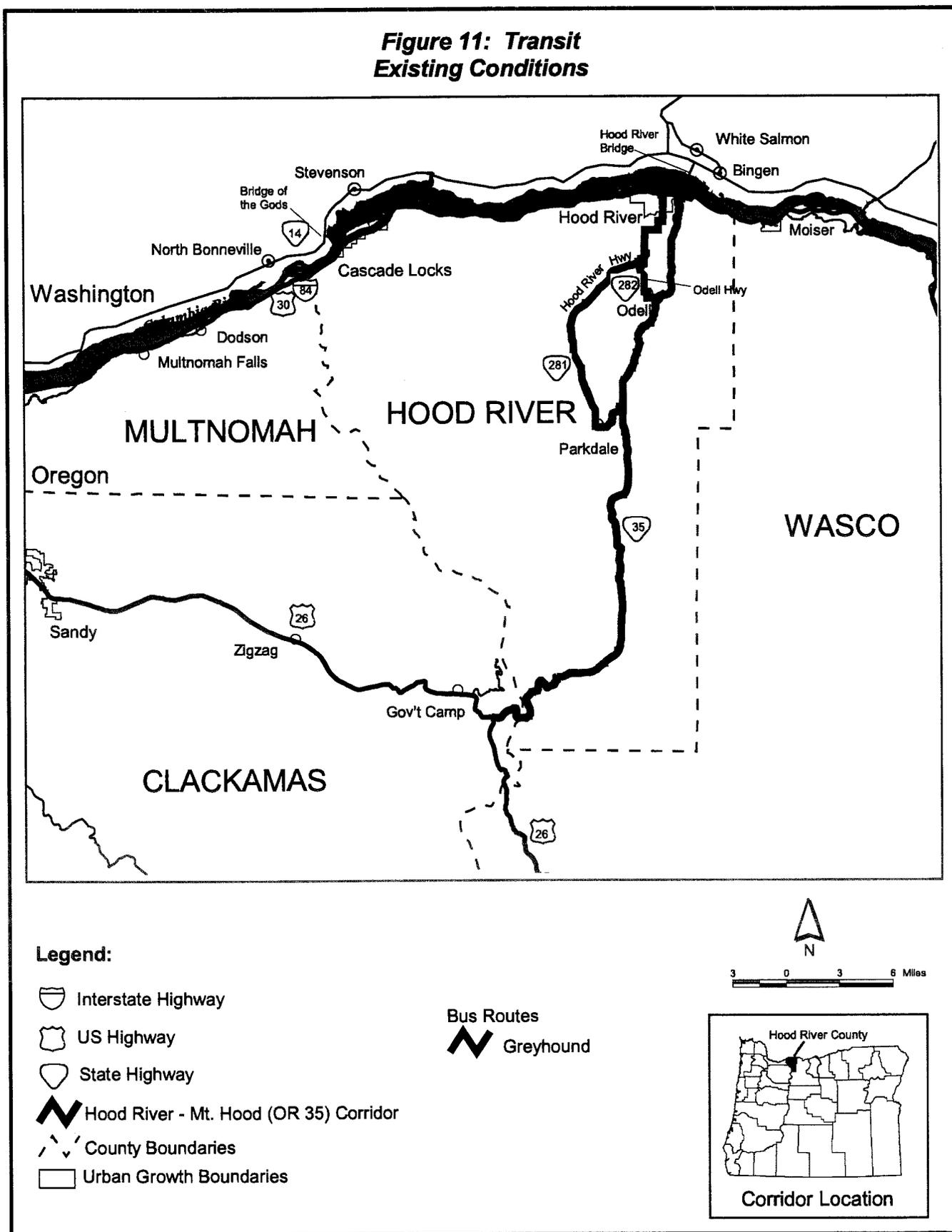
### 3.6 Rail Service

Rail service in the county is provided on the Union Pacific main line, which runs roughly parallel to I-84 and the Columbia River through the Columbia River Gorge; the Mt. Hood Railroad branch line, which runs from the City of Hood River to the upper Hood River valley; and spur lines in Hood River and Cascade Locks (Figure 12).

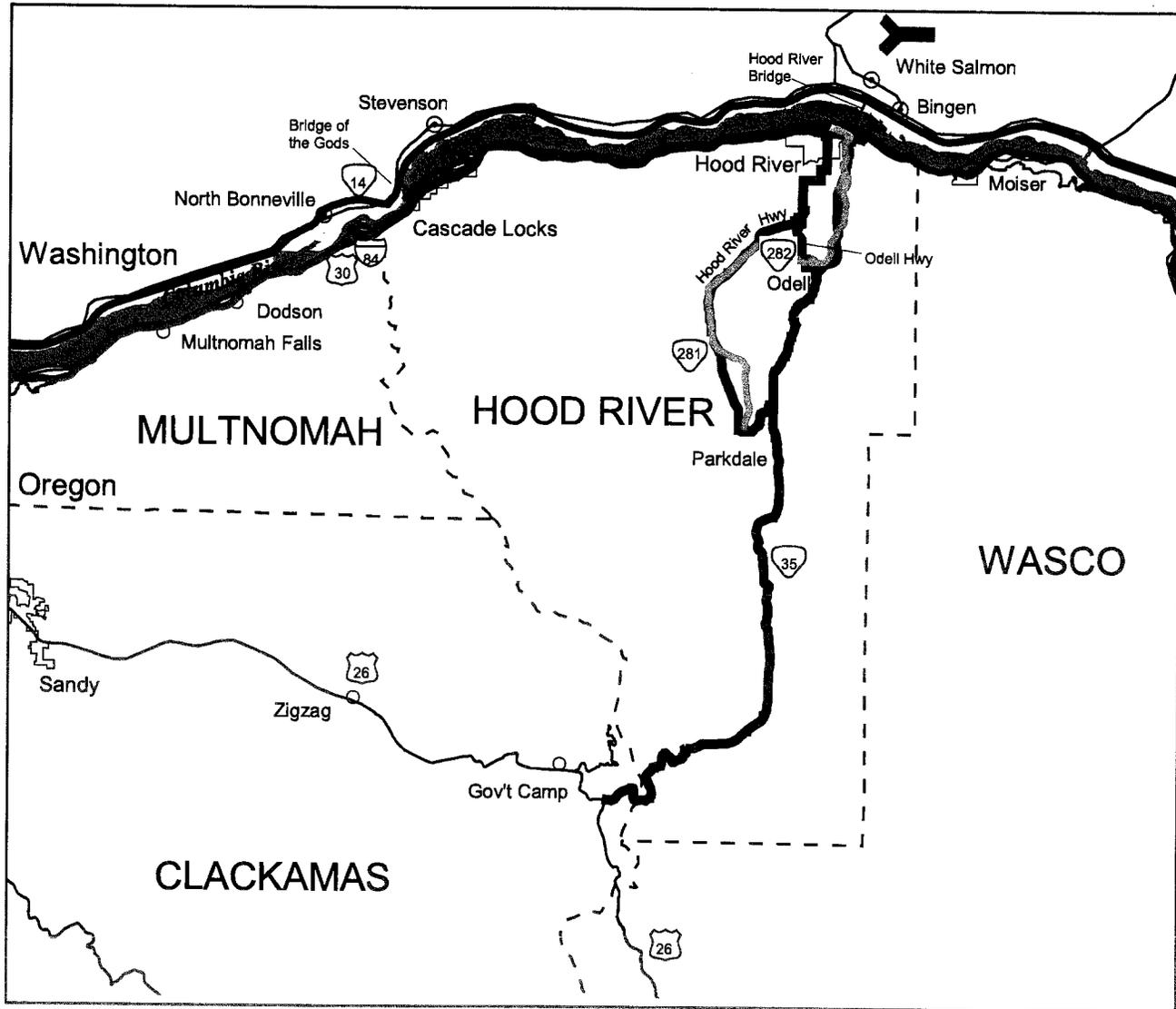
Passenger rail service (excluding tourist excursions) is not provided in Hood River County. Amtrak's passenger rail service (the Pioneer Route) previously traveled on the Union Pacific main line track with a stop in the City of Hood River, but was discontinued in 1997 due to a lack of federal funding. Tourist excursions are provided on the Mt. Hood Railroad. This light density rail line traverses the Corridor between Hood River and Parkdale, intersecting with OR 35 and other Corridor highways in several places south of Hood River. The line starts at a depot in Hood River and travels through Pine Grove, Odell, Dee, and Parkdale. The Mt. Hood Railroad moves approximately 15,000 tons of freight per year consisting almost exclusively of lumber.

The Union Pacific line is used to haul freight to Portland where it links with northbound and southbound lines. It also travels southeast to Colorado, then east to Chicago. From its interchange in Hood River, the Union Pacific receives mostly fresh fruit cargo and some wood products. (In 1996, it hauled between 50 and 60 cars of fresh fruit from the area during the peak season.) From its Cascade Locks depot, the line primarily

**Figure 11: Transit Existing Conditions**



**Figure 12: Rail Existing Conditions**



**Legend:**

Interstate Highway

US Highway

State Highway

Hood River - Mt. Hood (OR 35) Corridor

County Boundaries

Urban Growth Boundaries

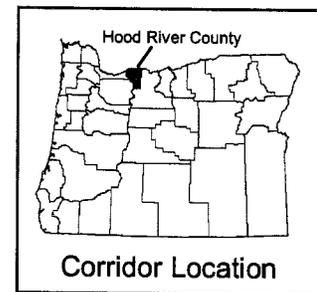
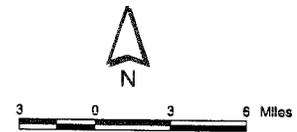
Amtrak

Amtrak Terminals

**Railroads**

Union Pacific

Mount Hood Railroad



hauls wood products. In addition, a limited amount of local freight is hauled on the Mt. Hood Railroad with passengers.

The Union Pacific line is used to haul freight to Portland where it links with northbound and southbound lines. It also travels southeast to Colorado, then east to Chicago. From its interchange in Hood River, the Union Pacific receives mostly fresh fruit cargo and some wood products. (In 1996, it hauled between 50 and 60 cars of fresh fruit from the area during the peak season.) From its Cascade Locks depot, the line primarily hauls wood products. In addition, a limited amount of local freight is hauled on the Mt. Hood Railroad with passengers.

### 3.7 Truck Freight

The ground freight transportation system in Hood River County has not changed significantly over the past 20 years despite major changes in the region's economy during the same period. The most important economic changes are related to the decline in the forest products industry, which has historically been among the region's primary users of the freight transportation system, along with the agricultural/produce industry. Increasing diversification of the regional economy (i.e., increased retail trade, tourism) has resulted in different challenges and opportunities facing freight movers in the region.

As a primary east-west Corridor through the state, I-84 carries high volumes of truck freight. I-84 is part of the State Highway Freight System as identified in the 1999 OHP. ODOT estimated annual freight volumes through Hood River County on I-84 to be between 23 and 32 million tons in 1992.

Conversely, truck and freight volumes on OR 35 and District Highways 281 and 282 are relatively low. They are not part of the State Highway Freight System. In 1998, approximately 11 percent (129 trucks) of the ADT on OR 35 consisted of trucks. During that same year, roughly 572,000 net tons of freight was transported along this highway. This freight consisted primarily of fresh fruit (pears, apples, cherries and peaches) and wood products.

### 3.8 Other Modes

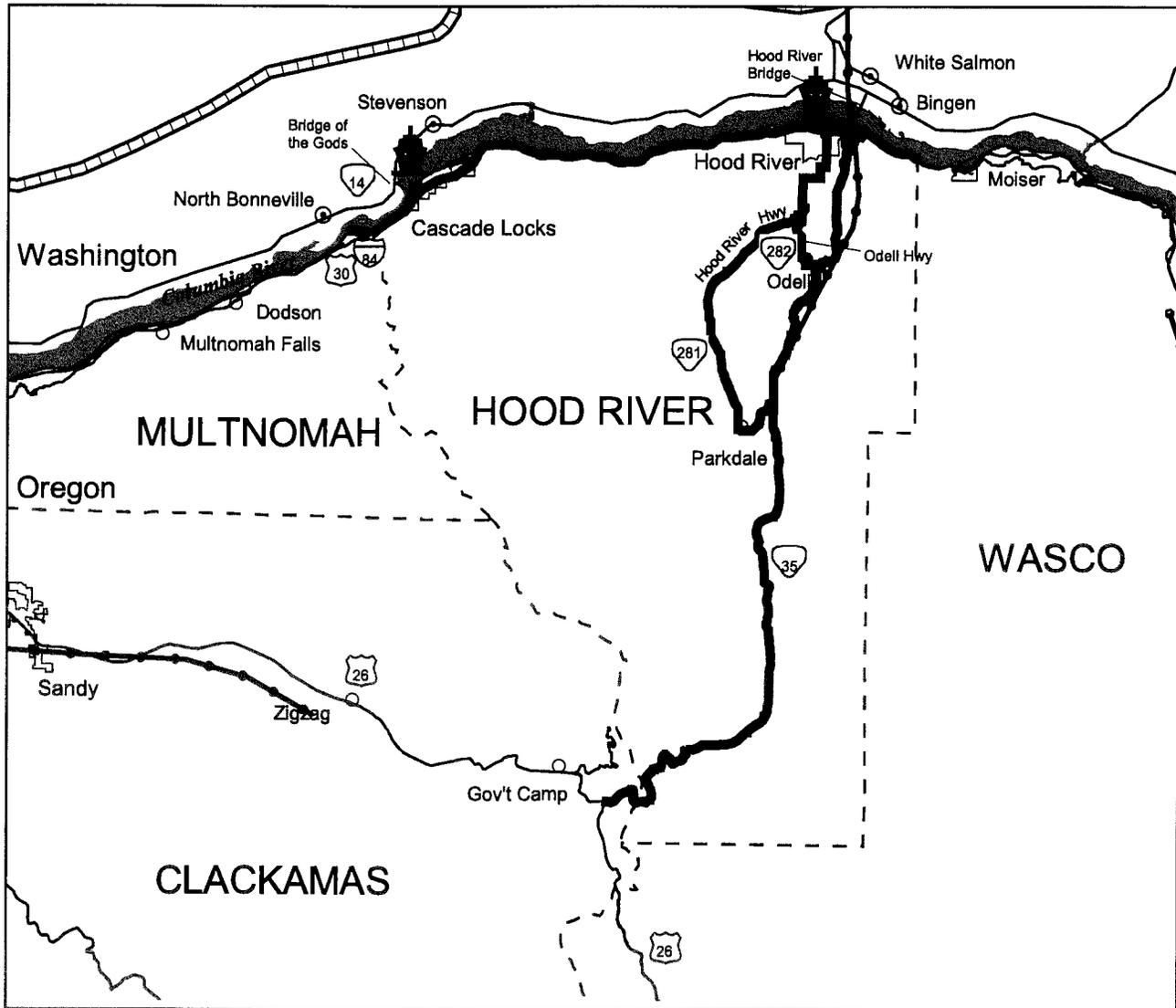
"Other" transportation modes consist of water, pipelines, and telecommunications. Figure 13 shows locations of these facilities.

#### *Water Transport*

There are two ports in Hood River County--the Port of Hood River and the Port of Cascade Locks. The Port of Hood River has extensive property holdings along the waterfront in downtown Hood River and west of Odell. The waterfront property consists of 75 acres along the Columbia River in the northeastern portion of the City of Hood River with shallow docks (18 feet deep). The properties are bisected by the Hood River and used as a marine park on the east side of Hood River and as an industrial park on the west side. The marine park includes 140 boat slips and an area for boathouses and seaplanes. The park is the center for boating, swimming and sailboarding. The waterfront property west of the Hood River includes a basin than can accommodate barges and large commercial vessels. Port facilities in this area are not used for cargo handling, rather, they are used primarily for barge repair and small cruise ship docking. Cruise ship activity has expanded rapidly in recent years and is now a major activity in the area. The Port also owns and operates the Hood River/White Salmon Bridge and the Hood River Airport.

The Port of Cascade Locks owns a marine facility, two passenger carrying sternwheeler boats, the Bridge of the Gods, a campground and visitor center, and roughly 150 acres of industrial lands. The marine facility is in the western portion of the city adjacent to the Union Pacific mainline near US 30 and I-84. The shallow draft port is

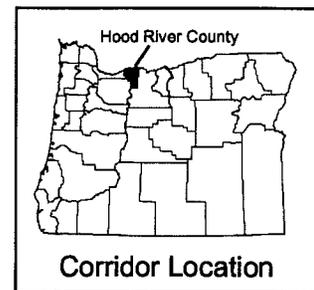
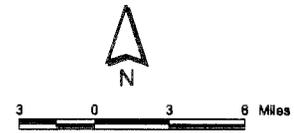
**Figure 13: Pipeline & Water Transportation Existing Conditions**



**Legend:**

-  Interstate Highway
-  US Highway
-  State Highway
-  Hood River - Mt. Hood (OR 35) Corridor
-  County Boundaries
-  Urban Growth Boundaries

- Pipelines**
-  Natural Gas
-  Gas Distribution
-  Shallow Water Port



for recreational trips by the sternwheeler boat, which makes up the majority of river traffic. At this time, no commercial shipping or freight movement occurs at the port. The Bridge of the Gods toll bridge is operated by the Port and connects the city to Skamania County, Washington. Except for some forest products business, the Port's industrial lands are largely undeveloped.

### *Pipelines*

The Northwest Pipeline Corporation natural gas transmission pipeline runs east-west on the Washington side of the Columbia River. This line crosses the river near the Hood River Interstate Bridge. The City of Hood River and the northern portion of the county near that city are provided with natural gas service, while the Cascade Locks and the southern portion of the county are not served. No oil or natural gas transmission lines cross or traverse OR 35. Pipelines and ports are shown in Figure 13.

### *Telecommunications*

The existing telecommunications system in the Corridor is primarily composed of the conventional local and long distance telephone system. Telecommunications is seen as an effective method of reducing traffic demand. Increased telecommuting could lead to an increase in the Corridor's population as Hood River County is viewed as a desirable place to live with a limited employment base.

## **4.0 Regional Connectivity**

Many of the major transportation facilities in the county are clustered, making intermodal connections possible. In Cascade Locks, the airport is located adjacent to the Union Pacific Railroad and very near US 30, I-84, and the Port of Cascade Locks. In Hood River, the port, I-84 and the rail lines (both Union Pacific Railroad and Mt. Hood Railroad) are also very close to each other. Until 1996, the Amtrak Pioneer Line stopped in Hood River connecting the city of Hood River to major destinations east and west. Although the line was discontinued, passenger train facilities are still in place and could be functional if funding is restored. The airport and the inter-city bus depot are the only major modes that are not centrally located in the city. (The airport is roughly two miles south of the city, and Greyhound stops in uptown Hood River.) However, CAT provides bus service through fixed-route and dial-a-ride service to these locations. (See the Transit Section.) Pedestrian and bicycle access to these transportation hubs is currently inadequate. However, both cities are examining ways to enhance their pedestrian/bicycle environments.

The Corridor has good regional connectivity with major highway routes (OR 35 and I-84), two interstate bridges connecting the region with Washington, the Union Pacific main line connecting with rail lines throughout the nation, and Greyhound bus lines leading to major destinations. Also, the Mt. Hood Railroad and CAT provide connections between the city of Hood River and the upper valley and Mt. Hood ski areas, via train and ski bus, respectively. A major port-of-entry for interstate truck freight is located in Cascade Locks. OR 35 supplies an alternative route to the Mt. Hood ski areas for the Portland metropolitan area. It also connects to US 26 which travels west to Portland and east to central and eastern Oregon.

OR 35 intersects with I-84 in the City of Hood River. I-84 is a primary east-west route through the state providing connections to major destinations running through the Columbia Gorge west to Portland and east to Idaho. The cities of Hood River and Cascade Locks each have three interchanges with I-84.

Two smaller state highways provide alternative routes north-south along portions of or 35. The Hood River Highway (281) runs south from the City of Hood River to Baseline Road before curving northeast to intersect with or 35 near milepoint 85. The Odell Highway (282) runs from the Hood River Highway just south of Oak Grove through Odell to intersect with or 35 at milepoint 95. These highways are designated district highways connecting the rural communities of the upper valley with Hood River. According to the Oregon Highway Plan,

district highways are intended to provide for moderate to high-speed continuous-flow operation in rural areas, and moderate to low-speed operation in urban and urbanizing areas with moderate to high level of interruptions to traffic flow.

Two interstate connections are provided to the Corridor. The Hood River Bridge in the City of Hood River provides access to White Salmon, Washington, and the Bridge of the Gods in Cascade Locks provides access to Stevenson, Washington.

Parallel roads to OR 35, which are not part of the state system, include East Side Road, Thomsen Road, Neal Creek Road, Booth Hill Road, and Pine Mt. Drive to the west; and Cooper Spur Road to the east. These roads provide alternative routes to OR 35 and intersect it in five places.

Internal connectivity within the cities is more constrained. Steep topography and the Hood River reduce street connections within the City of Hood River, while topography and the location of I-84 limit street connections in Cascade Locks.

## 5.0 Congestion

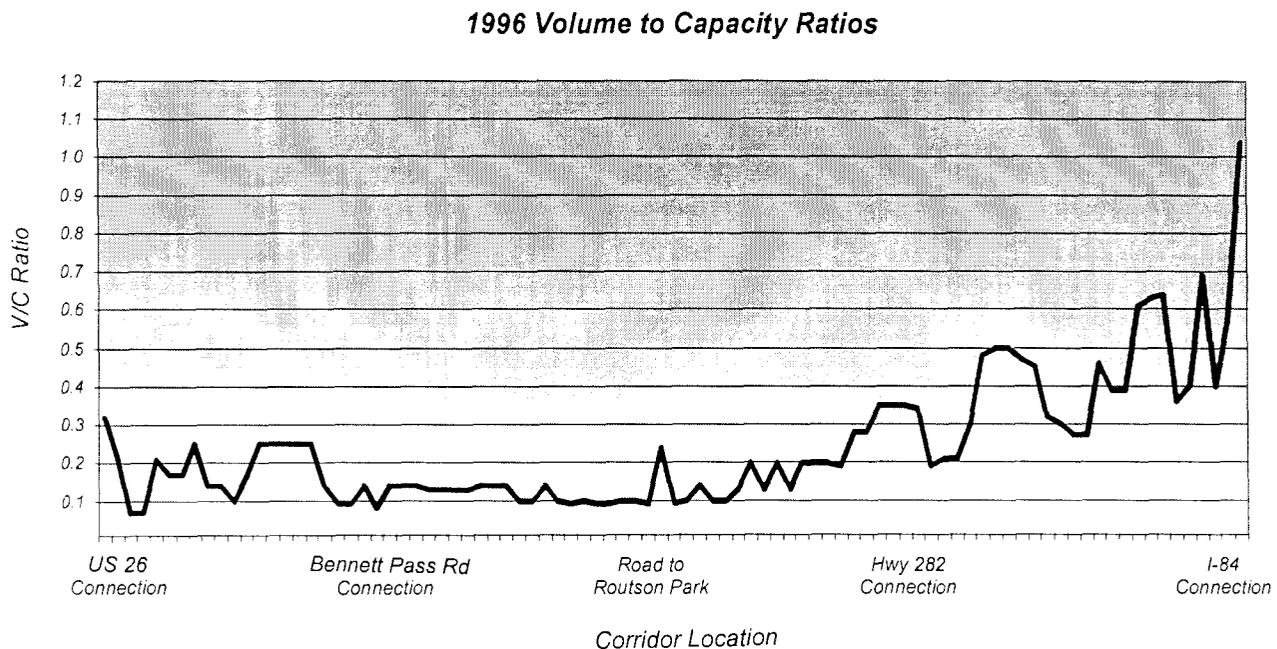
According to ODOT's *Overview of Corridor Planning* (1996) and the HPMSAP, less than one percent of the Corridor regularly experiences congestion (meaning it is operating at a level of service (LOS) of E). Nearly the entire Corridor experiences low or no congestion, which means that it is operating at a level of service of C or better. Congestion problems on OR 35 are limited to urban intersections. The rural portions of the Corridor do not experience any problems with congestion, although the vertical geometry of the road slows truck traffic and recreational vehicle traffic (Figure 14).

Within the urban area of the City of Hood River, congestion tends to be a peak-hour problem at several key intersections. The two intersections at the I-84 and OR 35 interchanges were identified as having major congestion and capacity deficiencies. Both intersections are unsignalized and STOP-controlled on the off-ramp approaches of I-84. Currently, the left-turn movement on the eastbound off-ramp operates at a LOS E, approaching unstable conditions with a long period of delay (37 seconds), while the westbound off/on-ramp operates at a LOS of E with a moderate delay (31 seconds).

The intersection of HCRH/State Street and OR 35 (Button Junction) and the two main north-south routes through town -- 9th/Eugene/12th Streets and 12th/13th Streets -- have also been identified as areas of concern. In Cascade Locks, an analysis of the roadways based on 1994 traffic volumes found that the city's major roadways (I-84 and HCRH) have no problems with congestion.

Efforts to limit congestion in the Hood River-Mt. Hood Corridor consist primarily of access management and improvements to problem intersections. Local jurisdictions and ODOT apply access standards to new development within the Corridor to ensure efficient movement of traffic on the roadways. This is especially important in the urban areas where there is more pressure to provide frequent access to roadways than in the rural portion of the Corridor. Much of the southern portion of the highway is located within the Mt. Hood National Forest where there is limited need and demand for access points. In addition to access management, intersection improvements proposed in the northern portion of the highway and in the urban areas of the county are intended to facilitate the efficient flow of traffic and reduce congestion.

**Figure 14: Corridor Congestion, 1996 Volume to Capacity Ratios (Annual Average Daily Traffic)**



Source: ODOT HPMS Data, 1996

### 6.0 Roadway Conditions and Safety

The Oregon Highway Plan (OHP) identifies minimum tolerable conditions (MTCs) for lane width and shoulder width for statewide highways such as OR 35. According to the OHP, the minimum lane width should be 11 feet in urban sections and 12 feet in rural sections with a minimum of 6-foot shoulders.

According to ODOT’s Pavement Management Section, a significant portion of OR 35 does not meet current design standards for horizontal alignment, grades, or roadway width. About 60 percent of the roadway includes horizontal curves with design speeds less than the posted speed, or where warning signs recommend reduced speeds due to the design speed of curves. Similarly, about 46 percent of the roadway include grades that significantly affect truck speed. Key problem areas include the Clark Creek section of OR 35 and the steep downhill into Hood River. Nearly one half (49 percent) of the highway has shoulder widths that are less than current minimum standards of six feet.

In Cascade Locks, the HCRH (US 30)/Frontage Road intersection has been identified as a problem area. Trucks leaving the Port of Entry on Frontage Road have difficulty making the turn onto HCRH because of the sharp curve immediately south of the on-ramp. Also, substandard site distances makes turning left difficult for eastbound traffic at the East Hood River Interchange in Hood River.

The OHP requires improving and maintaining pavement to fair or better conditions. The five state highways in Hood River County were rated by the Pavement Management Section of ODOT in 1995. Figure 15 shows the 1996 pavement conditions for the highways in the Corridor. This figure illustrates a snapshot in time and does not show the exact conditions today. This is because roadway conditions are in a continual state of fluctuation, with ODOT performing maintenance and the pavement deteriorating over time. For example, the current STIP includes a pavement overlay project for I-84, Cascade Locks-Mitchell Point-Hood River.

**Figure 15: Pavement Condition (1996)  
Existing Conditions**

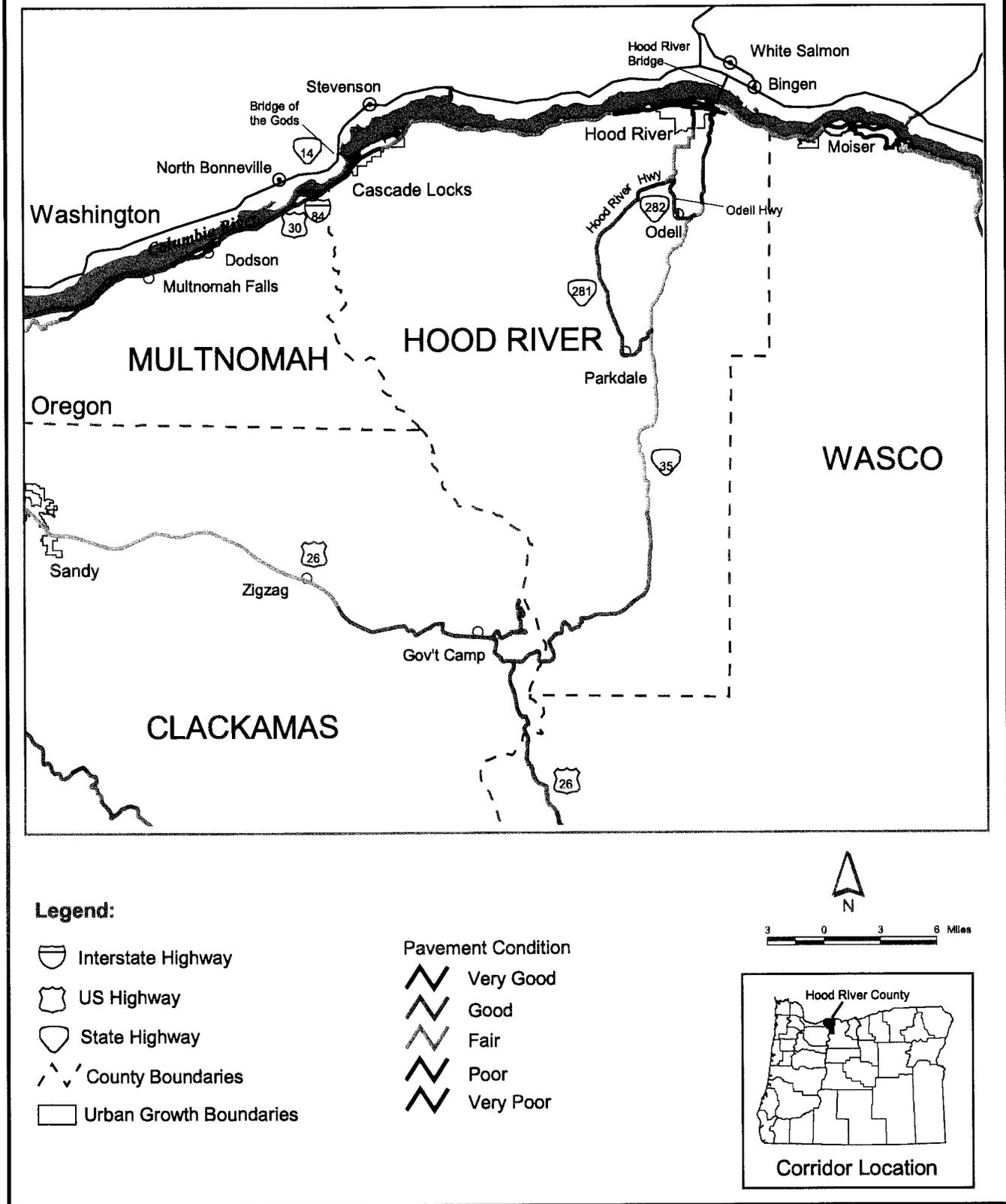


Table 1 summarizes existing conditions on OR 35 with respect to roadway conditions and safety.

**Table 1: General Roadway Conditions And Safety**

Segment Number and Location	Roadway Condition (% of Segment)	Accident Rate per MVMT <sup>(1)</sup>	Number of Lanes (% of Segment)
1 - From US 26 intersection to near Parkdale	Good - 74.3 Fair - 25.7	1.80	1 - 2 % 2 - 88 % 3 - 9 % 4 - 1 %
2 - From near Parkdale to I-84 interchange	Good - 22.5 Fair - 74.3 Poor - 3.2	0.57	2 - 51 % 3 - 49 %

<sup>(1)</sup>Based on reported accidents per million vehicle miles traveled from 1991-1993. (Statewide average is 0.87.)

This table is based on HPMSAP data with data approximated by milepoints. Percentages refer to the percentage of the lane miles within the segment.

Figures 16 and 17 display shoulder conditions for OR 35; Highways 281 and 282 based on a 1998 survey. These figures provide a graphic depiction of areas which would be easier or more difficult to bring up to standard.

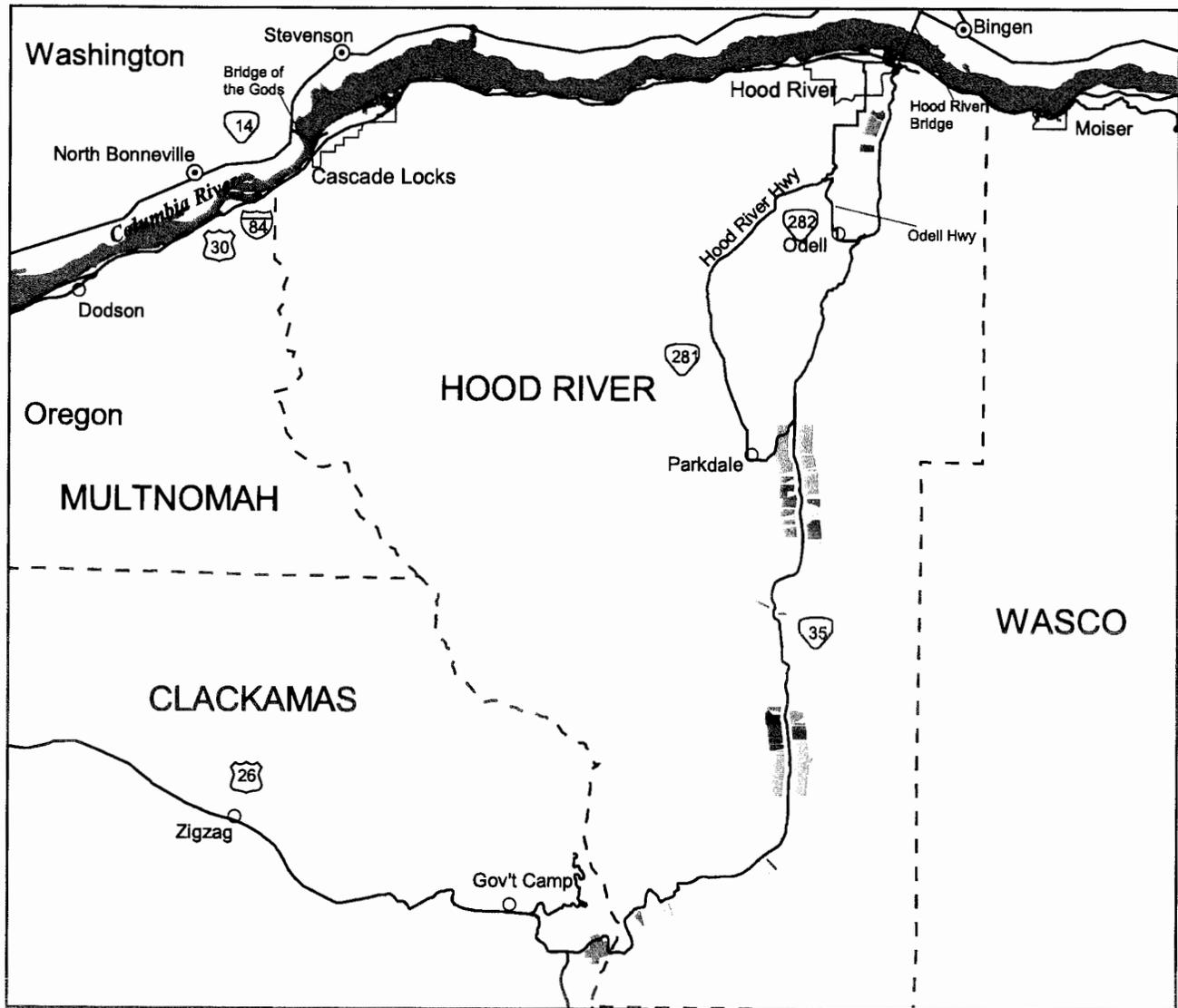
Another concern in the Corridor is seismic retrofitting of bridges. The ODOT Bridge Engineering Section has evaluated the structures in the Corridor and determined that three structures are in need of a Phase 1 seismic retrofit -- the West Hood River Interchange Bridge on OR 35, and the East Fork Hood River and Tucker bridges on Highway 281.

Safety has a high priority in the Oregon Transportation Plan (OTP). The OTP requires the development of a Transportation Safety Action Plan, and a safety education and awareness program for all system users. Assessing the relative safety of a roadway includes keeping track of the number, severity and location of accidents, and comparing accident records for specific roads with the statewide average.

According to data collected by ODOT's Traffic Management Section, OR 35 accident rates varied by segment. Segment 1 has a high accident rate and Segment 2 has low accident rate compared to other similar state highways. Although the accident data is a few years old, the conditions on the highway have not changed significantly and ODOT believes these data are adequate for determining safety needs in the Corridor. From 1991 to 1993, Segment 1 had an accident rate of 1.8 accidents per million vehicle miles traveled (MVMT), while Segment 2 had a rate of 0.57 accidents per MVMT. The rate for Segment 1 was nearly double the state average (0.87) for primary system, rural non-freeways. The high rate in Segment 1 is primarily due to hazardous driving conditions during inclement weather and sharp horizontal curves, particularly between the US 26/OR 35 intersection and Mt. Hood Meadows' access road. (Improvements to the Mt. Hood Meadows intersection will address some of these problems.) Several intersections on OR 35, e.g. at the Odell Highway, also experience safety problems due to lack of visibility, steep grades, or other factors. There was a double fatality at the Odell junction in 1998.

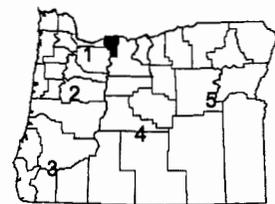
Accident rates for the other highways in the Corridor vary. I-84, with a 1994 accident rate of 0.27 accidents per million vehicle miles, is close to the statewide average for rural primary freeways. The urban portion of US 30 from the east Hood River city limits to the Hood River Highway (Highway 281) experiences higher than average accident rates. Also, Highways 281 and 282 have accident rates higher than the state average for similar highways.

**Figure 16: Shoulder Quality (OR 35)  
Existing Conditions**



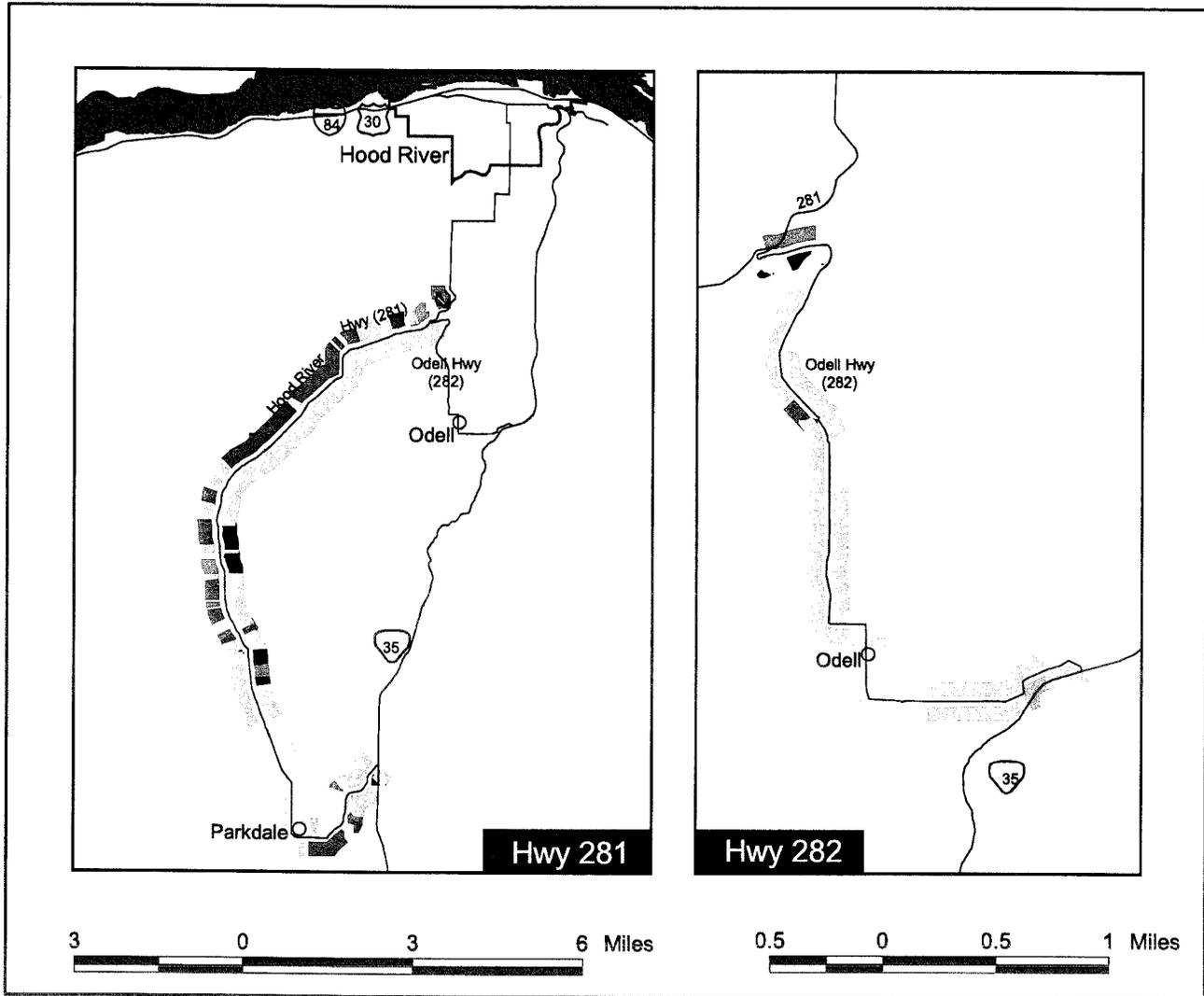
**Shoulder Improvement Categories**

-  Only cleaning of the pavement is required (remove gravel, debris).
-  Some additional pavement required.
-  Some fill and pavement required.
-  Substantial fill and/or retaining wall required to widen shoulder to 5 ft.
-  Substantial fill and/or retaining wall and additional pavement and roadside drainage work required.
-  The shoulder is up against a cliff that would require excavation of the cliff and a retaining wall.
-  The shoulder is up against a guardrail and a steep drop-off requiring an enormous amount of fill and/or a retaining wall and moving the guardrail.
-  The location is on a bridge or in a tunnel with narrow sidewalks. Mitigation is unrealistic.



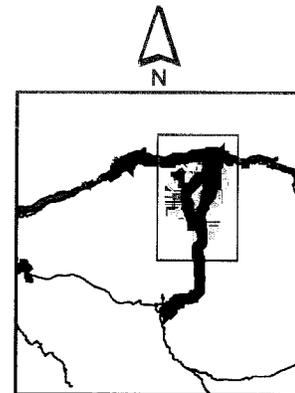
**Corridor Location**

**Figure 17: Shoulder Quality (Hwy 281 & Hwy 282)  
Existing Conditions**



**Shoulder Improvement Categories**

-  Only cleaning of the pavement is required (remove gravel, debris).
-  Some additional pavement required.
-  Some fill and pavement required.
-  Substantial fill and/or retaining wall required to widen shoulder to 5 ft.
-  Substantial fill and/or retaining wall and additional pavement and roadside drainage work required.
-  The shoulder is up against a cliff that would require excavation of the cliff and a retaining wall.
-  The shoulder is up against a guardrail and a steep drop-off requiring an enormous amount of fill and/or a retaining wall and moving the guardrail.
-  The location is on a bridge or in a tunnel with narrow sidewalks. Mitigation is unrealistic.



**Hwy 281 & Hwy 282  
Location**

The section of Highway 281 within Hood River has an accident rate of 3.61 per million vehicle miles, 30 percent higher than the state average. Highway 282 had accident rates ranging from 1.22 to 1.67 accidents per million vehicle miles between 1990 and 1994. The state average is 1.1 per million vehicle miles for secondary, rural non-freeway highways.

The ODOT Traffic Management Section collects and analyzes accident data through its Safety Priority Index System (SPIS). The SPIS system makes it possible to compare accident sites statewide to accident rates and levels of severity. For purposes of the SPIS system, intersections or sections of roadway which have a SPIS which falls within the top 10 percent are identified as problem locations which warrant further study to look for ways to reduce the number or severity of accidents. Figure 18 shows SPIS sites in the top 15 percent for accidents and the number of crashes experienced during a three-year period for segments of the Corridor's highways.

## 7.0 Environmental and Energy Impacts

Corridor Plan policy direction and implementation solutions must take into consideration potential impacts on the environment and energy. Full consideration of potential environmental impacts are beyond the scope of long-range planning efforts. As a result, environmental issues could significantly change a project.

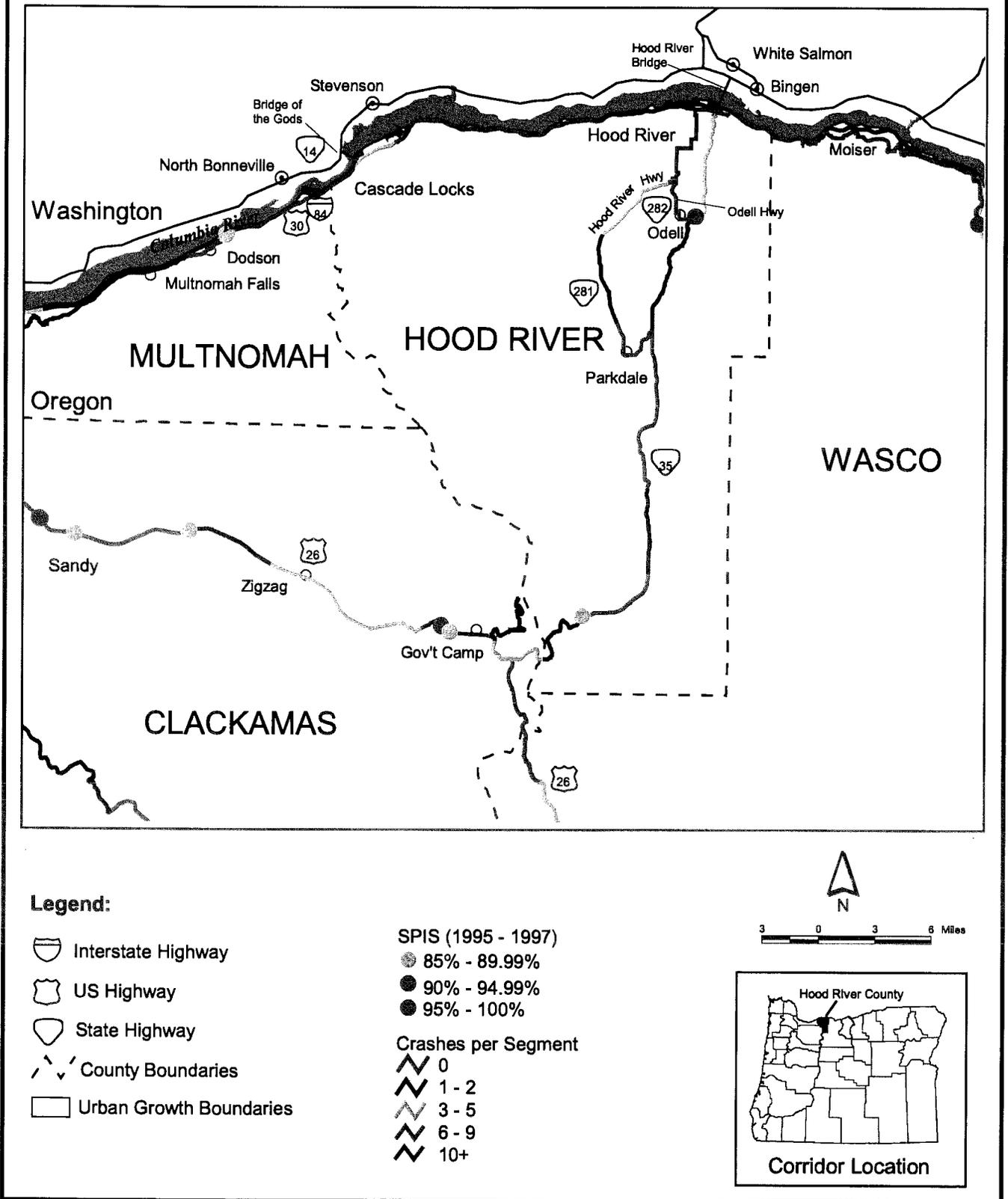
The rural portion of the Corridor is mostly undeveloped and environmental issues are most closely linked to land management practices, e.g., farm and forest operations. In the urban area, environmental issues are associated with urban development and transportation.

The Corridor contains scenic areas of local, regional, and national significance with OR 35 passing through the Mt. Hood National Forest and the Columbia River Gorge National Scenic Area. The 1991 *State Highway 35 Viewshed Management Guide*, prepared by the Mt. Hood National Forest, contains a Scenic Resource objective to improve the scenic quality of the views from OR 35. The Guide indicates that road management and maintenance activities can contribute to improved scenic quality along OR 35. Recommendations for management to meet Scenic Viewshed objectives include minimizing impacts to roadside vegetation, scaling down the size of ditches and culverts wherever possible, and rehabilitating cutbanks.

Natural resource areas and wildlife habitat areas exist throughout the Corridor. Wetlands and wildlife habitat are associated with forest land and several creeks along the Corridor. The highway traverses numerous creeks and rivers, including: the East Fork Hood River, Salmon River, White River, Clark Creek, North and South Forks of Iron Creek, Mitchell Creek, Meadow Creeks, Newton Creek, Engineers Creek, Hellroaring Creek, Culvert Creek, Tumble Creek, and Robinhood Creek in Segment 1, and Yellow Jacket Creek, Rimrock Creek, Cat Creek, South Fork Baldwin Creek, Rhoades Creek, Whiskey Creek, and the eastside Irrigation Ditch in Segment 2. The Salmon River and the White River are designated as wild and scenic rivers. The southern portion of the Corridor is densely forested with Douglas fir from the US 26 interchange to near the Parkdale junction. The Corridor becomes more developed as it approaches the City of Hood River. The terrain flattens out as the route passes through forest, farmland, and the urban area of Hood River. The last 1.6 miles of the route is within the Columbia River Gorge National Scenic Area.

Although limited data is available, air quality in the Corridor is believed to be relatively high due to the topography, climate, and low density of development in the area (Mt. Hood Meadows Ski Area FEIS, 1990). The widely recognized Gorge winds, coupled with seasonal precipitation and temperature changes, result in few, if any, prolonged periods of stagnation.

**Figure 18: Safety Existing Conditions**



Transportation facilities affect water quality principally through the pollutant loading in surface runoff from paved surfaces. There is also the potential for contamination of ground water within the Corridor from accidental spills of motor vehicle fuels or hazardous or toxic cargoes. Water quality and quantity are key components of the proposed State salmon enhancement programs. As noted above, OR 35 crosses several rivers and streams. The *Natural Resource Environmental Assessment for Highway 35* (Oregon Department of Fish and Wildlife, 1996) notes that there are three streams with water quality issues. The White River and East Fork Hood River have severe to moderate water quality impacts. The White River impacts include turbidity and sedimentation related to highly erosive glacial/stream deposits and associated land uses. East Fork Hood River and Robinhood Creek impacts include turbidity, sedimentation, bank erosion, and temperature related to vegetation removal, road location, bank structures and alterations. The East Fork Hood River and Robinhood Creek are listed by the Oregon Department of Environmental Quality as water quality limited due to high summer temperatures.

The Corridor Plan assumes that wetland areas have been identified in local comprehensive plans or by the U.S. Forest Service through watershed analyses and that adequate measures are in place for protection for the resource values. In addition, many projects listed in the plan are intended to improve the quality of water resources in the Corridor.

It has been 25 years since there was a shortage in the supply of energy for transportation. During this time, two trends have affected the demand for transportation related energy. First, the average consumption of energy by vehicles has declined when viewed in terms of fuel economy. However, this trend has been offset by the increase in average annual vehicle miles traveled, and an increase in the total number of vehicles. In the rural portion of the Corridor, there are currently few alternative modes to the auto available. In the urban portion of the Corridor, some alternative modes are available for use, providing the opportunity for selecting an energy efficient mode of travel. Given trends, it is assumed that total transportation-related energy consumption in the Hood River-Mt. Hood Corridor is increasing.

## 8.0 Social and Land Use Impacts

For purposes of social and land use analysis, the Corridor is broken into two segments as discussed earlier. Segment 1 runs south to north from the OR 35 junction with US 26 to the intersection with Base Line Road. Segment 2 encompasses the northern portion of the OR 35 Corridor including the area from Base Line Road to the junction with I-84 in the city of Hood River.

Based on a recent ODOT archaeological assessment (1998), there are 16 recorded archaeological sites identified in Segment 1 and three recorded archaeological sites within Segment 2. The potential exists for these sites to be significant, therefore, a formal site evaluation will need to occur if these sites are to be impacted by ODOT construction projects.

In Segment 1, 15 of the 16 archaeological sites are historical in nature. Sites and features within Segment 1 include: the Barlow Road and its alternate routes, historic graves, the Skyline Trail (National Historic Trail), an old fort, a wagon road, historic dumps, a 1930's guard station complex with associated features, and a peeled cedar tree. Overall, 22 percent of Segment 1 has a high potential for yielding archaeological resources, 7 percent of the Corridor has medium potential for containing sites, and 71 percent has a low potential for containing sites.

In Segment 2, two of the three archaeological sites are prehistoric campsites and the third site contains the remains of an historic flume operation. There are several unrecorded prehistoric archaeological sites within the immediate vicinity of the city of Hood River. Approximately 43 percent of Segment 2 has a high potential for yielding archaeological resources, 26 percent has medium potential for containing sites, and 31 percent has received a low archaeological probability rating.

The land uses in the Corridor vary by segment. Segment 1 starts in the mountain, passing through forest land, including the Mt. Hood National Forest, with some small areas of farmland and rural residential areas in the north. Forestry, recreation, and some farming activity occur within Segment 1. As the route descends the mountain through Segment 2, land use changes from forest, to cropland, to rural residential, and finally to urban development within the City of Hood River.

## 9.0 Economic Impacts

The County's principal industries are agriculture, lumber and wood products, retail trade, and recreation/tourism. Important agricultural resources are located in the mid and lower portions (up to 2,700 feet) of the Corridor, particularly pear, apple, and cherry orchards. Recreation and tourism destinations are located throughout the Corridor (Figure 19). Mt. Hood Meadows Ski Area, Cooper Spur Ski Area, the Mt. Hood National Forest, several campgrounds, trails and snowparks are located in the southern portion of the Corridor. These and various other recreation sites provide opportunities for winter recreation, camping, and hiking. The Columbia River Gorge, numerous creeks, the Columbia River, and the cities of Hood River and Cascade Locks are located in the northern portion of the Corridor providing opportunities for hiking, shopping, windsurfing, and numerous other water-related and outdoor activities.

ODOT's *Economic Development Analysis of Highway Corridors* (1995) concluded that the Hood River-Mt. Hood Corridor has a relatively low economic development potential and that the Corridor's benefit-cost ratio for economic growth generated by highway investments is relatively low. This determination was primarily based on the facts that Hood River County has limited economic development resources to spur growth and a moderate projected level of economic growth. Despite the Corridor economy's high sensitivity to transportation and a high proportion of lodging employment (an indicator of the level of tourism), the lack of development resources reduces the potential for economic development resulting from improved transportation facilities.

## D. KEY MANAGEMENT ASSUMPTIONS AND THEMES

### 1.0 Introduction

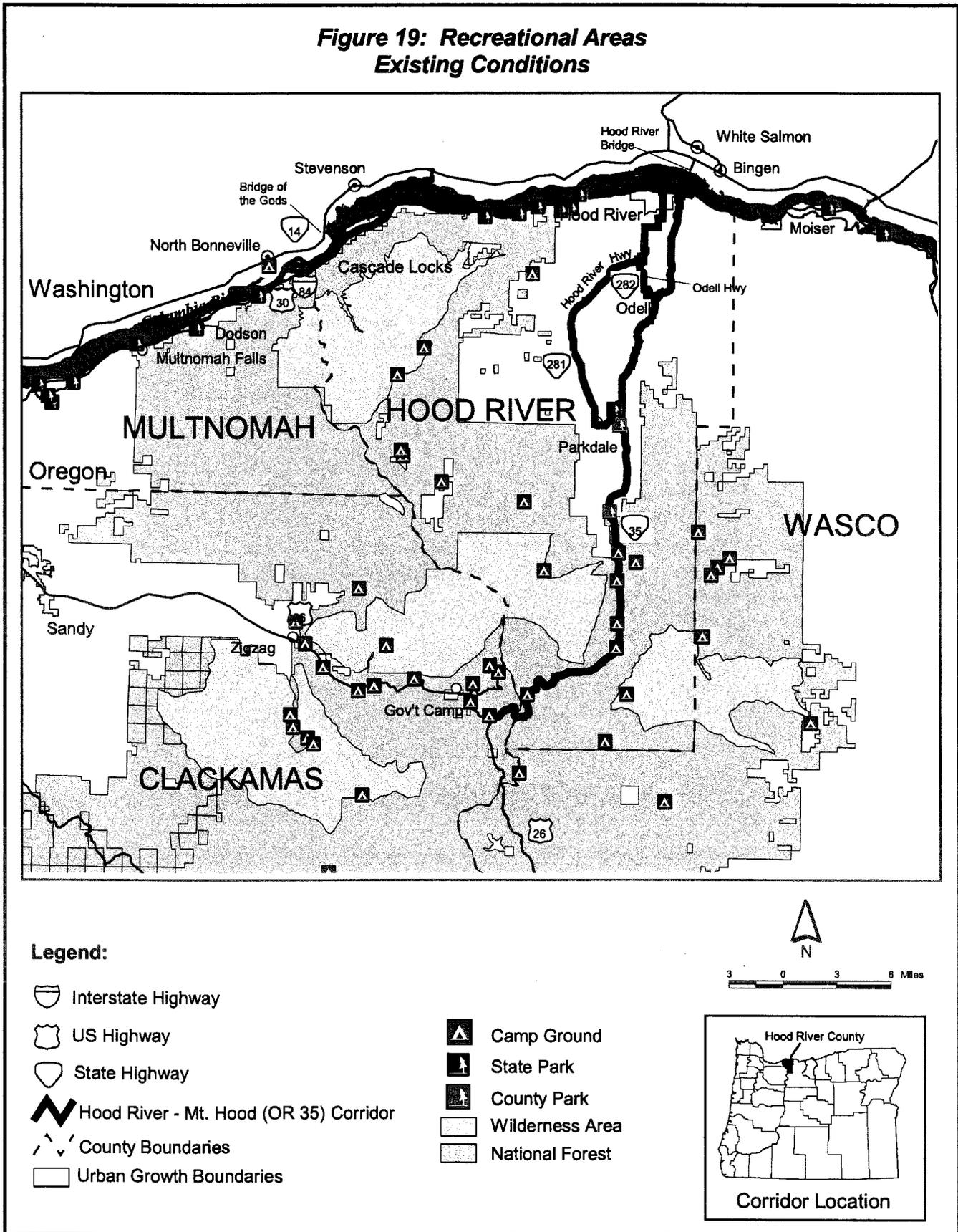
This section summarizes the underlying assumptions used in developing the Corridor Plan and key themes for management of the Corridor.

### 2.0 Assumptions

A number of assumptions are made related to other planning efforts, use of the transportation system, and other factors. These assumptions, which are not repeated as issues or objectives, include:

- Standard levels of roadway maintenance and repair.
- The majority of growth occurring within the Hood River and Cascade Locks UGBs, with some additional growth in Odell and exception areas.
- Increasing recreational use of the transportation system.
- Environmental constraints to highway improvements.
- Regulation of design and development within portions of the County by the Columbia River Gorge National Scenic Area Management Plan.
- With the reduction of National Forest timber receipts, an increased need for new funding sources to maintain the existing County road system.

**Figure 19: Recreational Areas Existing Conditions**



- Increasing bicycle and pedestrian traffic within urbanized areas and along OR 35.
- Limitation on new road construction to “local” roads.
- Continued operation of the Hood River Highway (281) and Odell Highway (282) as district level facilities.
- No I-84 capacity improvements except for interchange improvements where warranted, e.g., East Hood River interchange.
- Increased use of the highway system for freight, particularly fruit shipping.

Current funding constraints are not assumed. The purpose of the Corridor Plan is to establish objectives and priorities for the long-term management of and improvements to transportation facilities within the Corridor, regardless of current funding limitations. The Corridor objectives and priorities are balanced with a reasonable possibility of funding from a variety of sources over the 20-year planning period. The ability to implement these objectives and priorities will, of course, be dependent upon future available funding.

### 3.0 Key Management Themes

A wide variety of objectives have been developed to address the various elements of the Corridor’s transportation system. A primary goal of this multi-modal Corridor Plan is to manage growth in travel in the Corridor, while making wise use of scarce resources to fund needed improvements. The Plan emphasizes managing the highway facilities that currently exist without substantial increases in capacity or construction of new facilities. This is achieved by strengthening the role of alternative modes of transportation, improving facility operations, and managing demand through appropriate land use.

Other key themes reflected in the Corridor Plan include:

#### *All State Facilities*

- Maintain existing facilities to ensure that they remain safe and functional as the highest priority for the allocation of state and federal resources.
- Improve overall corridor safety through a combination of increased enforcement, access management, and targeted highway improvements.
- Apply the most restrictive access management standards (regulating the number, spacing, type, opportunities for left turns and location of driveways, intersections and traffic signals) when consistent with existing or planned adjacent land uses.
- Factor environmental and energy conservation considerations into both maintenance practices and improvement projects, with an immediate focus on enhancing salmon and steelhead habitat through upgrading culverts.
- Promote transportation-efficient land use patterns that reduce vehicle miles traveled and provide a live/work balance.

#### *OR 35*

- Provide no additional expansion in highway capacity, except for intersection improvements or truck chain-up areas.
- Promote OR 35 as an alternative to Highway 26 for access to Mt. Hood ski areas and other winter and summer recreational activities.
- Promote the corridor’s tourism/recreation role, including its role as part of the Mt. Hood Loop.
- Protect the corridor’s scenic values.

- Resolve congestion and safety problems in the urban segment, e.g., I-84 interchange and HCRH (US 30) intersection.
- Address safety problems at intersections, e.g., Highway 282 (Odell) and Ehrck Hill Road.
- Promote continued use of the Mt. Hood Railroad for freight movement and recreation.
- Promote the use of Highway 35 as a bicycle route.

#### *District Highways*

- Maintain and preserve the roadways for continued use as primary routes for local travel.
- Provide no additional expansion in highway capacity, except for turning lanes if needed.
- Promote Highway 281 as a scenic drive route.
- Promotion of Highway 281 as an alternative north-south bike route.
- Address safety problems at intersections, e.g., OR 35 and Highway 282 (Odell), and at railroad crossings.

The Historic Columbia River Highway and I-84 are also important highways in the county highway network. Separate planning efforts to deal with these highways are currently underway.

## **4.0 Approach to Key Issues**

#### *Capacity Issues*

Except for a few intersections, congestion is not currently a problem in the Corridor, nor is it anticipated to become one over the next twenty years. Throughout the Corridor, facility management techniques such as: encouraging the use of alternative transportation modes, consolidation of access points along arterials and collectors, and the use of motorist information systems (like variable message signs) can be used to minimize congestion. Congestion management strategies specific to urban and rural portions of the Corridor are summarized below.

#### Urban Areas

Within the urban areas, congestion tends to be a peak-hour problem at several key intersections that can be addressed in part, through TDM and TSM strategies. In particular, the Corridor Plan calls for:

- Support for TSM and TDM measures, improvements to pedestrian facilities, and reliance on transit.
- Improvements to problematic intersections such as the East Hood River interchange and the HCRH/OR 35 (Button Junction) intersection.
- Develop local access management and circulation plans to relieve localized congestion problems and to meet local transportation system needs.

#### Rural Areas

In the rural areas of the Corridor, congestion should be controlled primarily through land use controls and access management. In addition, the continued provision and possible expansion of shuttle service to winter recreation areas can reduce congestion during peak winter traffic periods.

### *Alternative Modes*

#### Air Service

Management solutions for air travel within the Hood River-Mt. Hood Corridor call for protection of the existing facilities and provision of a supportive environment for future growth. PDX is expected to continue to be the primary airport used by residents, and no significant increase in service within Hood River County is expected. Continued provision of service, protecting access, and protecting facilities from encroaching land uses remain the primary management approach to air service facilities within the Corridor.

#### Bicycle System

Three overall themes are applicable to bicycle improvements in the Corridor:

- Maintenance and cleaning of highway shoulders is often sufficient to significantly improve conditions for cyclists.
- Many bicycle improvement projects can be completed as part of routine pavement overlays. In many cases, an extra foot of shoulder width is easy to provide at minimal cost during an asphalt overlay.
- Stand-alone bicycle projects are not generally recommended, unless they can be combined with other highway projects to share costs.

#### Pedestrian System

The focus for pedestrian improvements is similar to bicycle themes for the rural sections. Within the urban areas, improvements to pedestrian facilities should focus on creating a linked pedestrian network and on enhancing existing facilities to meet ADA standards. In the rural community centers, proposed solutions include shoulder improvements and consolidation of access points, which will improve safety and convenience. In the rural areas, when other roadway improvements are made, safe crossings and adequate shoulders should be provided.

#### Transit Services

Outside of the urban areas, the primary objective is to continue to provide dial-a-ride service and skier shuttles to Mt. Hood. Within the City of Hood River, continuation of the fixed-route, bus system is paramount. Also, new transit facilities (Park and Ride and Park and Pool lots, bus shelters, and possibly a multimodal transportation center) are seen as important for enhancing the transit system and improving intermodal connections. In Cascade Locks, the current dial-a-ride service should be continued. Intercity bus service between Hood River, Cascade Locks, and Portland should be continued.

#### Rail Service

The focus is on protecting and enhancing the existing service within the Corridor, promoting the restoration of Amtrak passenger service, and protecting and improving rail infrastructure throughout the county.

#### Truck Freight

Truck freight will increase or decrease based on market demand. Within the urban areas, access for trucks will be improved at key intersections and at accesses to commercial and industrial sites. In the rural areas, truck safety and travel times will be improved through the provision of chainup areas, improvements to problem intersections, and reducing conflicts between farm vehicle traffic and truck traffic.

### *Roadway Conditions and Safety*

Problems of deficient geometry and poor pavement conditions can affect the safety of motor vehicle drivers, cyclists, and pedestrians. Maintenance of existing facilities to ensure that they remain safe and functional is

established as the highest priority in allocating state resources. Improvements to surface conditions and to high accident locations are priorities throughout the Corridor. Other improvements include solutions such as intersection safety improvements, shoulder widenings and pavement overlays.

The Corridor Plan also addresses safety in the Corridor through a combination of facility management and improvements at potentially unsafe locations. Objectives identify a wide variety of facility management techniques including intersection improvements, improved lighting and delineation, additional signage, and provision of truck chainup areas.

The Confederated Tribes of Warm Springs have requested that ODOT consider moving OR 35 out of Polallie Canyon due to environmental concerns and roadway maintenance and preservation problems. While this section of OR 35 regularly experiences problems with rockfall and undercutting by the East Fork of Hood River, the Plan recommends that management and maintenance efforts be directed towards preservation of the existing alignment given the cost and environmental impacts associated with relocation. Consequently, management and maintenance projects focus on short-term solutions.

#### *Maintenance*

As a first priority, ODOT will focus its resources on the maintenance of existing facilities in order to minimize long-term costs. Maintenance, operations, and management actions comprise the vast majority of implementation actions for improvements to roadway safety and conditions in the Corridor. Improving public safety is a key criterion for the evaluation of maintenance projects. Specific solutions include:

- Increase the “Targeted Opportunity Funds” account to allow ODOT to respond to localized minor needs on the highway system.
- Increase the maintenance limitation budget to allow Districts to conduct minor repairs. Many repairs have been backlogged because of limited maintenance budgets.

#### *Bridges*

The ODOT Bridge Engineering Section has evaluated the bridge structures in the state and determined those that need a seismic retrofit. A Phase 1 upgrade involves connecting bridge superstructure elements such as beams and decks to their supporting members. Phase 2 retrofitting includes strengthening bridge members such as columns. To prioritize seismic retrofitting projects, ODOT classified roadways according to whether they are Priority 1 or 2 lifeline routes.

OR 35 is not a Priority 1 Lifeline Route. Only one bridge was recommended for Phase I retrofit, the West Hood River Interchange bridge (bridge #09017, MP 104.61). Two other bridges, the East Fork Hood River Bridge (bridge #01939, MP 12.90) and Hood River (Tucker Bridge)(bridge #01600, MP 4.95), need seismic retrofit, but are not recommended for retrofitting at this time because they are not on a designated lifeline route.

#### *Environmental Impacts*

All projects undertaken in the implementation of this Plan must consider impacts to wetlands, other water bodies, farmlands, forestlands, threatened or endangered species and other protected resources, including scenic, cultural and archaeological resources. The Oregon Plan (Oregon Coastal Salmon Restoration Initiative Conservation Plan) provides the primary means of addressing impacted anadromous fish runs in the rivers and streams in the Corridor. Numerous culvert repairs are proposed. Other solutions include:

- ODOT, where feasible and appropriate, will work with local governments to integrate mitigation efforts in transportation improvement projects and to avoid or minimize impact on sensitive natural areas when constructing improvements.
- ODOT will take care to manage vegetation along the highway to meet the scenic requirements of State Highway 35 Viewshed Management Guide (USFS, 1991). Specific actions relating to management of the transportation Corridor include minimizing impacts of ditch cleaning, selective thinning of brush to maintain safe sight distances and to provide viewing opportunities, minimizing shoulder and safety zone mowing, providing additional clearly delineated turn out areas where viewing opportunities exist, and minimizing unwanted vehicle tracks in other areas.
- All new transportation projects will include appropriate measures to protect water quality.

#### *Access Management*

In the urban area, access is generally limited to the I-84 interchange and local streets. In the rural areas, the highway is not access controlled as the Corridor is sparsely settled with small farms or large acreage homesites and much of the area is designated for forest uses. About one-half of OR 35 is located within the Mt. Hood National Forest where access is limited per Forest Service policy.

New access management policies are currently being developed as part of the 1999 OHP implementation. In the interim, the access management categories established in the 1991 OHP are applied as follows:

- OR 35--access management Category 4 from I-84 (East Hood River interchange) south to the State Street/US 30 intersection (Button Junction).
- OR 35--access management Category 3 from Button Junction, south to US 26.
- Highway 281 and Highway 282--access management Category 5.
- HCRH (US 30)--access management Category 5 through Cascade Locks and Hood River.
- I-84--access management Category 1.

The Corridor Plan recommends an aggressive program of access management in the rural area to reduce the number of conflicts between through traffic and local traffic entering the highway. In some areas, access management may include eliminating existing access points through the creation of new shared access points for more than one land use.

#### *Land Uses*

Management of and improvements to the transportation system are fully integrated with local government land use planning, resulting in transportation efficient land use patterns that reduce vehicle trips and miles traveled and promote a live-work balance, particularly within the Corridor's urban portion. Within the Corridor's rural portion, additional commercial and residential development is concentrated in designated rural community centers.

In a general sense, the future of the Corridor will be very similar to conditions today. The Corridor will continue to have a moderate population center located at the north end and a substantial amount of recreational opportunities on the southern and northern ends. Based upon a Potential Development Impact Area (PDIA) analysis conducted for the Corridor Plan, there will be very little in the way of new land development in Hood River County outside of UGBs.

No Special Transportation Areas (STAs) have been designated through the Corridor Plan or draft TSPs and there is no appropriate location for an STA on OR 35. OR 35 has no downtown or main street characteristics. STA characteristics are more common in those portions of Hood River and Cascade Locks located on the HCRH. The appropriateness of designating portions of the Hood River and Cascade Locks downtown areas as STAs pursuant to 1999 OHP standards will be assessed as part of the OHP implementation work plan and coordinated with the cities' TSPs.

### *Economic Impacts*

OR 35 is a prime route for access to the principle industries in the County which include agriculture, lumber and wood products, retail trade, and recreation/tourism. A well-functioning transportation system is essential for ensuring the viability of these industries.

Current economic development efforts include plans by the Port of Hood River to redevelop the waterfront in Hood River for a variety of commercial uses, and activities by the Mt. Hood Economic Alliance (as part of the Regional Strategies program) to encourage development of the agricultural, software, hi tech, and tourism industries in Hood River County, using state lottery funds and other sources of revenue as available to provide the public infrastructure needed for business start-ups. Through their Rural Investment Fund, the Alliance will support economic growth in the rural portions of the Corridor by supporting local public health, public safety, education, and economic well-being projects, as well as community planning and project development technical assistance.

The Confederated Tribes of the Warm Springs are currently investigating development of a gaming casino within Hood River or Cascade Locks or at a rural location in the County strategically located to I-84 traffic. This potential development surfaced after completion of most aspects of the corridor planning process and has not been addressed in the Corridor Plan. Should a specific site be identified for casino development, refinement planning will be undertaken and, if necessary, Corridor Plan management direction reviewed and revised.

## **E. FINANCIAL CONSTRAINTS**

### **1.0 Introduction**

A key step in development of the Corridor Plan was prioritizing improvement projects and ensuring that the highest priority projects fit within reasonable funding forecasts. Corridor Plans do not need to pass the rigorous criteria required for the Metropolitan Planning Organizations (such as Metro). Rather, several ranges of funding forecasts, based on different assumptions, have been developed.

In developing funding forecasts, it was recognized that forecasted revenues would not likely fully reflect actual revenues realized over the next 20 years. Funding forecasts are currently uncertain statewide and the relative amounts to be allocated for different types of projects by Corridor have not been decided. Some of these decisions will be made as the OTC responds to the Governor's suggestion that monies be concentrated on maintaining and managing the existing system. The TAC focused primarily on modernization (new construction), safety, and operational (TSM and TDM) improvements. Funding priorities for categories such as bridge projects, maintenance, pavement management and salmon recovery improvement projects reflect input provided by ODOT staff.

## 2.0 Funding Forecasts

Funding for modernization forecasts are based upon the 1999 OHP forecasts along with traditional funding distributions between ODOT Regions, within each Region, between urban/rural areas and among rural counties, and finally to various facilities. The TAC developed a general methodology for determining the target funding levels for new construction (modernization), based upon a 'snap-shot picture' approach with a base year of 1997 and including state revenue and federal highway funds for new construction. Assumptions for projected funding allocation included:

- 20-year projection of funding allocation for new construction projects.
- No changes in state or federal funding levels from the 1997 level.
- No inflation adjustment on project costs.

The 1997 construction funding allocation included \$528 million from the state gas tax and \$99 million from the federal highway fund for statewide construction. The state gas tax money for construction is divided 40% to cities and counties for maintenance and local street improvement and 60% for ODOT statewide. The ODOT percentage is divided into several general categories, road and bridge maintenance and repair (64%), debt service and administration (12%), and funding for expansion of facilities for growth and safety improvements (24%). ODOT's 24% share of the state gas tax would be \$75.8 million for new statewide construction. About \$19 million of this total is dedicated to fixed programs, leaving \$56.8 million per year for new projects statewide. The TAC calculated the 1997 state allocation for new construction as \$56.8 million state funds, and \$99 million federal funds, for a total of \$155.8 million statewide.

Historically, the Region has received an average of 34.2% of the statewide construction funds for new projects. Within Region 1, this allocation has historically been split 80% for the metropolitan planning organization (MPO) area and 20% to the Non-MPO or rural portion of the region. In the Non-MPO area, funding for Corridor Plan projects would be split among the five rural counties. Table 2 summarizes the annual allocation of modernization project funding statewide, for the Region, and for Hood River County.

**Table 2: New Construction Funding Allocation (1997 base year)**

Funding Source	Statewide (million)	Region Share (percentage)	Funding Allocation (million)	Metro Allocation (80%)	Non MPO Allocation (20%)	Hood River County (1)
State Gas Tax (approx. per year)	\$56.80	34.2	\$19.42	\$15.54	\$3.88	\$0.78
Federal Funds	\$99.00	34.2	\$33.86	\$27.09	\$6.77	\$1.35
Total	\$155.80		\$53.28	\$42.62	\$10.66	\$2.13

(1) Based upon even split amount the five Region 1 Non-MPO counties.

### Corridor Funding Forecast

The funding forecasts were developed for the planning horizon and represented 20-year totals. An attempt was made to include other categories such as safety, maintenance, etc. This was difficult, because the description of these categories changed over time. The projected funding forecasts were developed to provide the TAC with a range of funding scenarios to focus and made them aware of funding shortfalls. During the solution process the TAC identified far more solution needs than revenues.

Funding for the forecasts are based upon forecast of the 1999 OHP update with traditional funding distributions between ODOT Regions, within each Region, between urban/rural and among rural counties, and finally to various facilities. Three potential ranges of funding forecasts were developed. Each forecast is based on different assumptions that will produce different levels of funding for improvements. It is important to understand that no one funding forecast is correct, but rather they serve as a range of funding levels to reinforce the existing revenues are inadequate and the TAC must work to develop new sources of revenue.

The first forecast uses a historical split of money to the Region and funding percentage for the Corridor over the past 20 years and applies it to the forecast revenues over the next 20 years. It is not realistic to expect this funding to be available without increased revenues at the state or federal level, or both. Inflation and deferred maintenance and preservation needs will consume an increasing proportion of available revenues.

The second forecast uses the 1998 Draft OHP (September 1998) needs and revenue forecasts and assumes an even split of available funds to address all needs. The OHP projects that 62.5% for the needed revenue will be available over 20 years. An even split would allocate 62.5% of needed funds to each program area. This may also represent more funds than can reasonably be expected for modernization over the next 20 years, given policies to maintain and preserve existing facilities.

Finally, a third forecast prioritizes programs other than modernization, funding only 20% of those needs, while meeting a greater level of need for maintenance, preservation, safety, etc. This assumption addresses several policy objectives, including the emphasis on preserving and managing the existing system. It also reflects current statutes requiring ODOT to spend about \$54 million per year statewide on modernization. This should represent the minimum amount per year available over the 20-year planning horizon.

Table 3 summarizes the three forecasts. The historical STIP analysis is the lowest forecast of the three. It covers only OR 35 and Highways 281 and 282. Past STIP projects for I-84 and the Historic Columbia River Highway (HCRH) were not included in the analysis. Funding for the interstate system involves federal money, which can only be spent on the system.

**Table 3: Projected Modernization Funding Forecast  
20-Year Planning Horizon**

Historical STIP Programming (\$ million)	Even Split of Projected Revenue (\$ million)	Low Mod-High Maintenance & Preservation (\$ million)	
\$1.9			<i>OR 35</i>
\$0.2			<i>OR 281/281</i>
	\$22.0	\$14.0	<i>Hood River County</i>
\$2.1	\$22	\$14	<i>Total</i>

### 3.0 Project Funding Priorities

As noted earlier, limited revenues necessitate managing and improving the existing transportation services and facilities within the Corridor to accommodate the anticipated growth in travel. Accordingly, the Corridor Plan allocates state resources to highway projects according to the following priorities:

- (1) Maintenance of existing facilities to ensure that they remain safe and functional, e.g. fixing potholes.
- (2) Preservation of the roadway by investing in roadbed and pavement reconstruction as needed to minimize maintenance costs;
- (3) Transportation system management to optimize existing highway capacity;
- (4) Safety and capacity improvements; and
- (5) Projects that support economic development, particularly recreation and tourism.

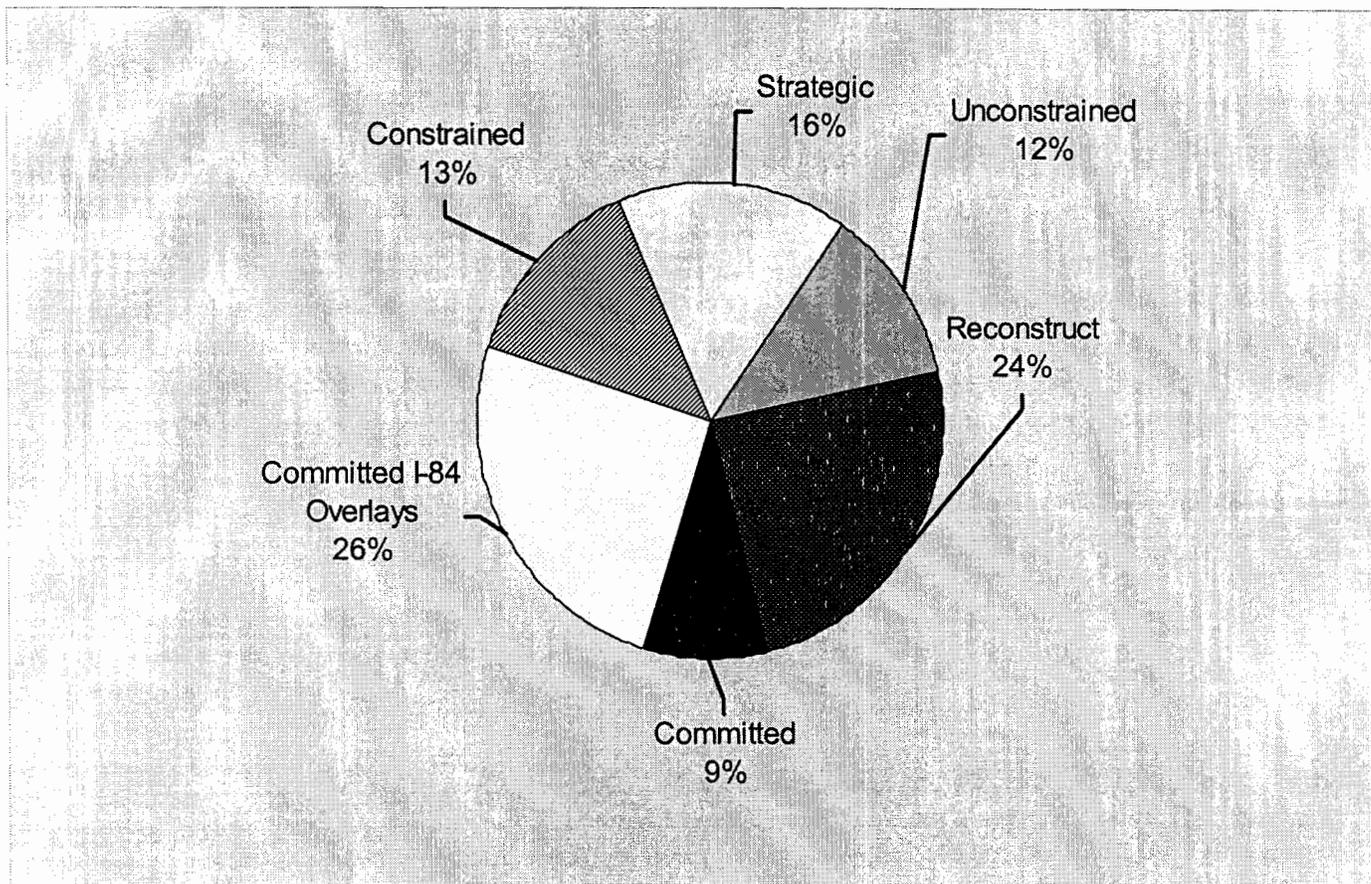
Implementation projects have been prioritized in the Corridor Plan based upon projected available funding over the planning horizon. Funding forecasts are based upon traditional funding distributions among ODOT Regions, within each Region, between urban/rural and among rural counties, and finally to various facilities.

The highest priority projects are placed in the **Committed** and **Constrained** funding categories, meaning they would all be expected to be implemented over the 20-year planning period. Committed projects, which are already funded in the current STIP, total \$30.2 million. \$22.4 of the committed solutions are projects on I-84. Constrained projects, totaling \$11.9 million, would be implemented in later years of the current STIP and are still subject to funding authorization. Next in priority are **Strategic** funding projects which will require new sources of funding in order to be implemented in the intermediate-to-long-term. Strategic funding projects total \$14.3 million in costs. All remaining projects are considered **Unconstrained** or **Reconstruct to Standard**. Based upon current revenue forecasts (including all reasonable additional sources of revenue), these projects are NOT likely to be funded within the 20-year planning horizon. The term "Unconstrained" means that if ODOT had all the funding to meet all Corridor needs, that all projects could be funded. However, these Unconstrained projects could be funded by alternative funding sources, such as development exactions, local improvement districts, urban renewal districts, etc. Unconstrained projects total \$10.6 million. "Reconstruct to Standard" projects, totaling \$21.7 million, were generated through ODOT's HPMS system which identifies projects to bring substandard segments of highway up to highway standards. These projects may not be practical given that attaining maximum grade or curvature standards could require extraordinarily expensive and impractical solutions for a highway like OR 35 which crosses a mountain range and operates in a highly constrained environment. Consequently, these "Reconstruct to Standard" projects are *not* recommended for implementation as part of the Corridor Plan.

The projected total cost for implementation projects included in the Corridor Plan is over \$67 million. If "Reconstruct to Standard" projects are added in, the total increases to \$88.7 million. Costs are preliminary estimates based upon information provided by local governments or developed by ODOT. Local contributions to project costs could result in adjustments to the prioritization of projects. That is, given ODOT's limited resources, the greater the "local match", the higher the likelihood of implementing the project. Figure 20 illustrates the relationship of funding categories to projected available revenues.

Projects are listed by funding category in Section IV. C, Project List by Funding Priority. Costs are preliminary estimates based upon information provided by local governments or developed by ODOT. Local contributions to project costs could result in adjustments to the prioritization of projects. That is, given ODOT's limited resources, the greater the "local match", the higher the likelihood of implementing the project.

Figure 20. Relationship of Funding Categories



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## A. OVERALL MANAGEMENT DIRECTION

### 1.0 Introduction

This section on overall management direction summarizes the more detailed discussions of Corridor management that are included in Volume 2 of this Plan. In particular, common themes are identified that have been incorporated throughout the Plan and the planning process.

### 2.0 Overall Corridor Management Direction

The Corridor serves a variety of activities critical to the state. It links the farm and forest activities of the Hood River Valley to processing and distribution facilities in the City of Hood River, and by connecting to I-84 links Hood River County to other destinations throughout the country. With occasional weather closures of I-84 through the Columbia River Gorge, OR 35 provides an important alternative for moving people and goods between the Willamette Valley and eastern Oregon. It is a major summer and winter recreation route for activities in the Mt. Hood National Forest. The Corridor also passes through difficult terrain and environmentally sensitive areas, the needs of which must be balanced with the need to maintain access.

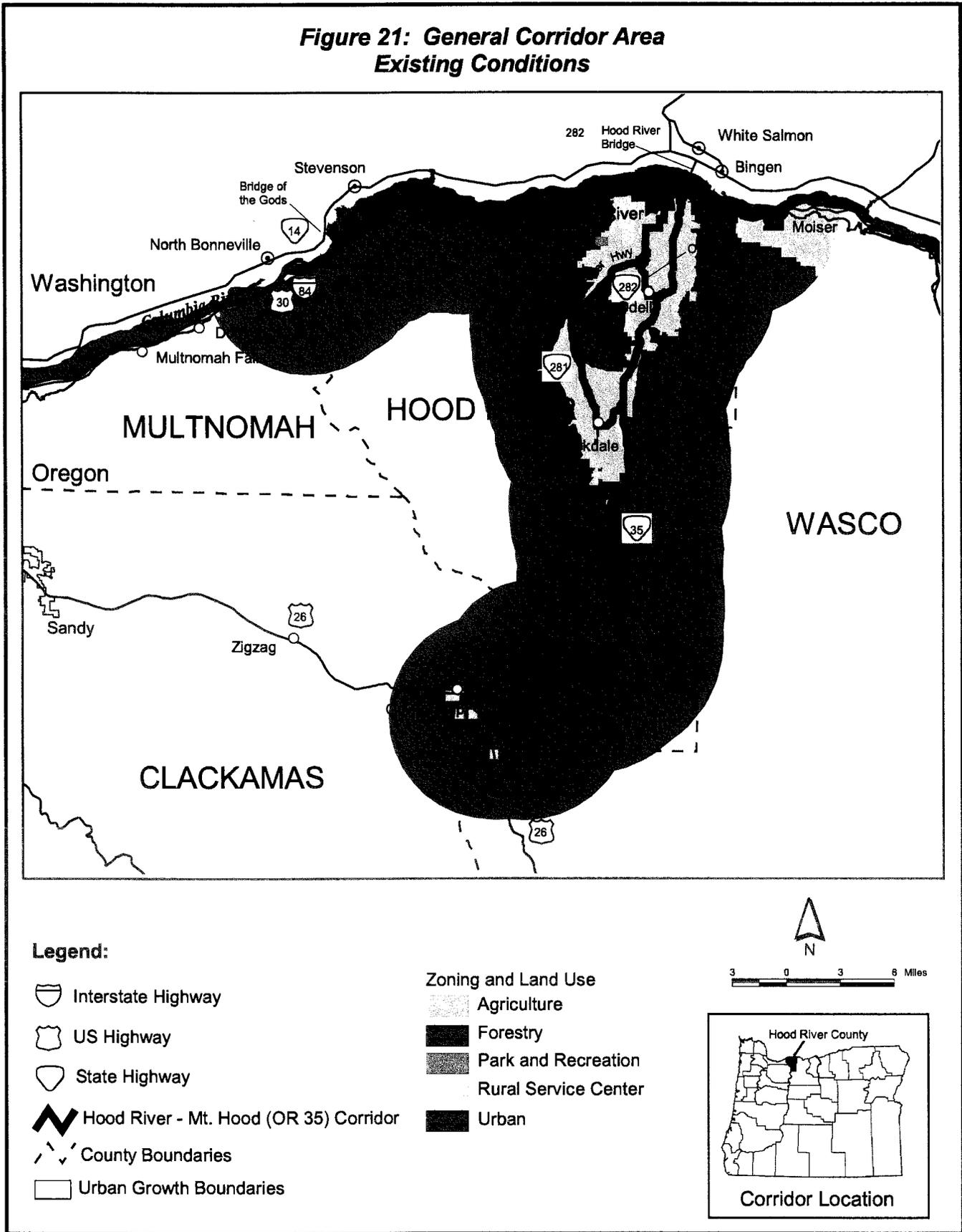
The Corridor includes the urban areas of Hood River and Cascade Locks, as well as the rural community centers of Odell and Parkdale. Each community brings a varying mix of transportation needs, community development patterns, and activity levels. Management direction for the Corridor balances all of these competing needs. The sections that follow will address management direction by Corridor section (Figures 21 and 22). However, there are several key management principles that apply to the entire corridor planning area, albeit in different ways. Major management themes are discussed below.

The Corridor Plan includes a series of objectives, strategies and projects to enhance the Corridor's ability to serve commuter, recreational, freight and other business travel in Hood River County. Consistent with OTP objectives to promote a balanced multi-modal transportation system, the Corridor Plan promotes transportation demand management (TDM) and system management (TSM) strategies as the first course in addressing future needs, especially within the cities of Hood River and Cascade Locks. These TDM and TSM strategies include the development of support facilities for transit and other non-motorized modes, as well as retaining railroad and air services.

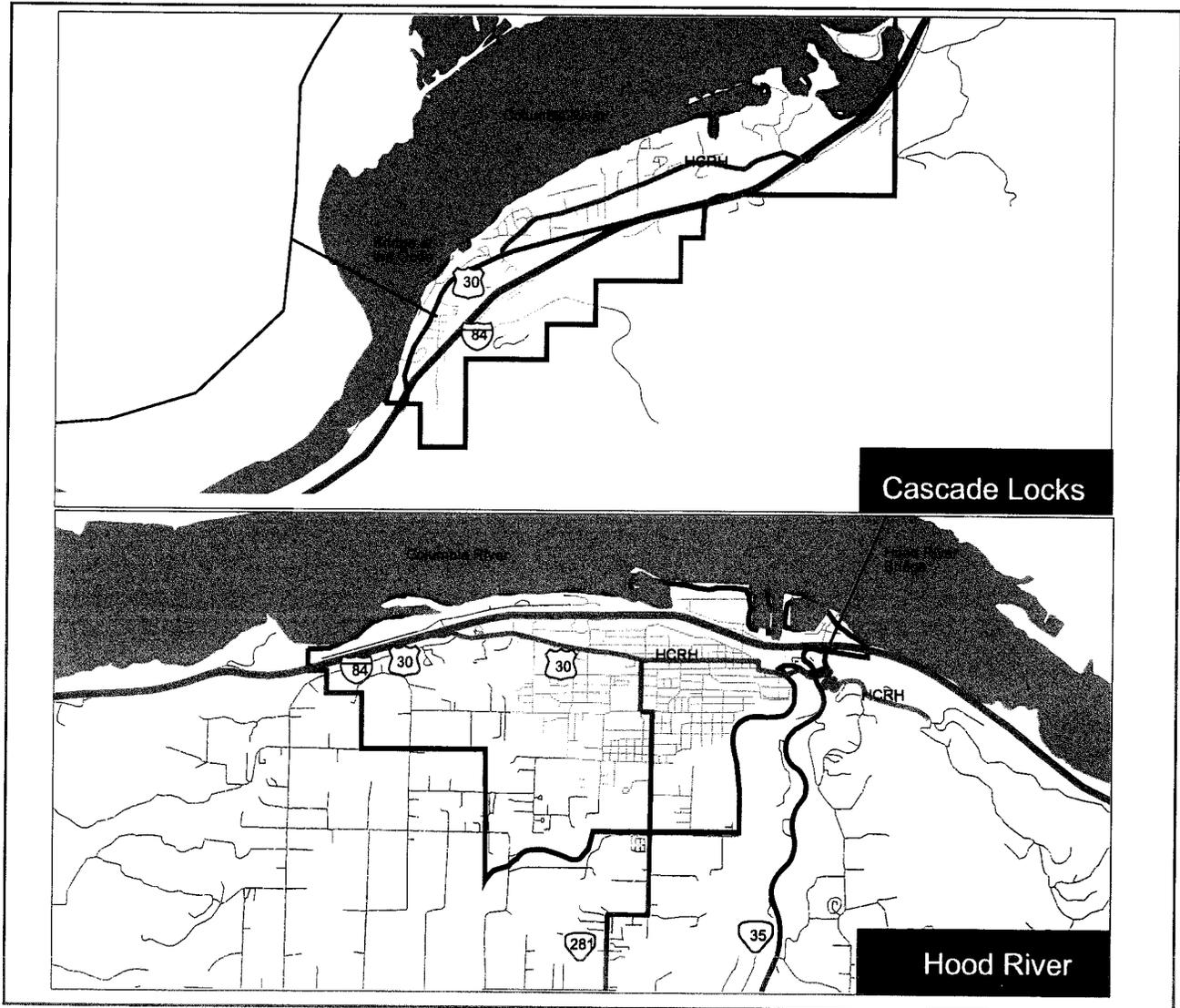
Another overall theme is cost-efficiency. With limited capital improvement and maintenance dollars available, ODOT must stretch its revenues as far as possible. This is accomplished in the Corridor by combining projects for a single mode into multimodal projects where possible. For example, combining bicycle shoulder improvement projects with highway modernization and passing lane projects benefits bicycles, pedestrians, and the movement of truck freight, as well as autos. This allows the implementation of bicycle projects that would not be cost-effective as stand-alone projects. To the greatest extent possible, projects identified that improve transportation balance in the Corridor are pursued through maintenance, operations, management, and service projects that minimize capital expense.

Other key management direction includes:

**Figure 21: General Corridor Area Existing Conditions**

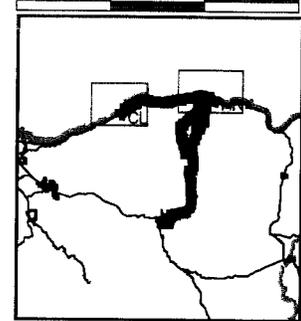
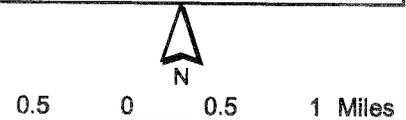


**Figure 22: Cascade Locks and Hood River Urban Growth Areas Existing Conditions**



**Legend:**

- Urban Growth Boundaries
- City Boundaries
- Roads
- Interstate and Highways**
  - Interstate
  - Statewide Highway
  - District Highway
  - Historic Highway



**UGB Locations**

- **Relieve congestion.** This is addressed by capacity expansion in the urban areas pursuant to the Hood River and Cascade Locks TSPs, and by construction of limited improvements, e.g. turning lanes and truck chain-up areas, in the rural areas. These limited improvements are appropriate given existing and proposed traffic volumes and environmental sensitivity.
- **Support use of alternative modes of transportation.** Transit, bicycle and pedestrian modes play a significant role in the urban areas, while in the rural areas these modes have a minor role. Given the distances and limited number of community centers in the rural portions of the Corridor, transit's role is limited.
- **Access management.** Managing the locations of driveways and distance between intersecting streets is the key to preserving the capacity of the statewide highways and local arterials. In the urban areas, access management can provide for opportunities to enter, exit, or cross the highways for vehicles, pedestrians, and bicycles, consistent with local comprehensive plans. In rural areas, access management consists of managing at-grade intersections with the state highways. Access management can preserve the rural residential character of community centers by providing a safer pedestrian and bicycling environment, as well as managing the flow of auto traffic through the area.
- **Economic development.** A principal objective of the Corridor Plan is to ensure the efficient shipment of locally produced fruit and wood products to processing centers within and outside the region. This is accomplished by maintaining capacity on the highway system and managing demand. In addition, the highway provides access to recreational and tourist destinations that fuel the local economy. In the rural areas, access management maintains travel times to assure that connections between Mt. Hood, upper and lower Hood River Valley, and the Columbia River Gorge are preserved.
- **Develop transportation facilities appropriate to the surrounding environment.** Modernization and capacity-related improvements in the urban areas can be acceptable when they support the character of the area and address local and regional travel needs. Modernization improvements in the rural portions of the Corridor may also be appropriate, but the high costs and potential for major environmental impacts should be carefully weighed against potential benefits to motorists. "*Reconstruct to Standard*" projects considered were generated by ODOT needs analyses that brought all substandard portions of OR 35 up to standard. This analysis does not take into account the presence of natural and cultural resources nor land ownerships, e.g., U.S. Forest Service. Consequently, the Corridor Plan does not recommend these projects in recognition of their enormous expense and environmental impacts.
- **Land use coordination.** In all areas of the Corridor, the Plan supports and strengthens the connection between land use and transportation facilities and programs. In the urban area, the TSPs propose interconnected street systems and transportation services in balance with current land uses and anticipated growth. Throughout the Corridor, city and county comprehensive plans are the guiding land use documents. The Corridor Plan is careful in all instances to support applicable land use laws and policy.

### 3.0 Management Direction by Corridor Segment

Given the broad range of topics covered by the Corridor Plan and the variation in needs among the various transportation modes, there are no "one size fits all" solutions to transportation needs in the Corridor. Consequently, the discussion of overall management direction is broken into three sections that define the character of the Corridor: Urban Areas, Rural Areas and Rural Community Centers.

### 3.1 Urban Areas

The urban areas of the Corridor are defined as the areas within the City of Hood River and City of Cascade Locks Urban Growth Boundaries (UGBs). Land uses within the two UGB's are planned and regulated by the cities, while transportation facilities and services are provided by the cities, Hood River County, ODOT, Columbia Area Transit District (CAT), and private service providers. In general, the city Transportation System Plans (currently in draft form) and the transportation elements of their Comprehensive Plans form the basis for management direction of the transportation system in the urban areas. The approach to management of the urban portions of the corridor is summarized as follows:

- **Transportation modal balance is maintained and improved.** With inter- and intra-city bus service, bicycle and pedestrian facilities, and rail-to-rail and truck/rail transfer facilities, the Hood River urban area offers modal choices for passenger and freight movements. The Cascade Locks urban area also provides for pedestrian and bicycle travel, with limited transit service and freight options. Corridor Plan objectives seek to strengthen the role of transit, pedestrian and bicycle modes, as well as to improve truck and rail freight service.
- **An interconnected grid of local streets is planned to ensure direct, convenient circulation within the urban area, to minimize out of direction travel, and to provide alternatives to the state highway system for local travel.** The existing grid systems within the urban areas will be enhanced over time to improve local circulation and access, and to provide alternatives to using I-5, OR 35 and US 30 for local trips.
- **Transportation infrastructure supports land use plans in the urban areas.** The function and design of planned facilities support and are compatible with existing and planned land uses.
- **Transportation investments support efficient rail and truck freight movements.** Planned facility improvements and services support growth and economic development in the urban areas. High priority is given to projects that promote efficient freight access to industrial and commercial sites.

### 3.2 Rural Areas

The rural areas of the Corridor are defined as those areas outside of UGBs and established rural community centers. The Corridor Plan's approach to management of transportation for rural areas includes:

- **Congestion relief is achieved through small-scale capital improvements, such as intersection improvements.** No major areas of congestion are anticipated within the planning period. Localized congestion will be addressed by small-scale capital improvements such as turning lane and intersection improvements. In many cases, projects to bring the highway "up to standard" would be very costly, achieve little to no operational benefits, and have significant environmental impacts. This approach of eliminating "choke points" makes the best use of scarce resources and minimizes environmental impacts.
- **Access management plays an important role in the rural areas.** With multiple at-grade intersections along OR 35 and Highways 281 and 282, the opportunity exists for potential conflicts between highway users and cross-traffic and turning traffic. Access management consolidates access points to the highways and provides safer, more predictable points of interaction between motorized vehicles, bicyclists, and pedestrians.
- **Transportation improvements must minimize impact on significant environmental and cultural resources.** The potential to impact streams, wetlands, plants, wildlife habitat and archaeological sites is

greatest in the rural parts of the Corridor. For this reason, the Plan emphasizes small-scale, strategic safety and congestion-relief improvements.

### 3.3 Rural Community Center Corridor Management

Odell and Parkdale are rural community centers in the Corridor. They include relatively small-scale commercial, industrial, and residential developments. These centers provide economic opportunity for rural residents and are dependent upon OR 35 and Highways 281 and 282 for access and to bring recreational and truck freight traffic to their businesses. Located on district highways with convenient access to OR 35, Odell and Parkdale can access higher speed travel on Highway 35 while restricting travel speeds on the district highways. The slower-moving vehicles mix with pedestrians and bicyclists, with all modes having opportunities to access businesses and residences safely. Balancing community needs and the transportation function of the highways is a key theme in these areas. Other elements of management direction in these rural community centers include:

- **Needs for efficient and safe through movements are balanced with local access and circulation needs.** As district highways, the primary function of Highways 281 and 282 is to serve local traffic and to provide access to adjacent properties. Within the rural centers of Odell and Parkdale, through movements are secondary to local access and circulation for pedestrians, bicyclists, and motorists.
- **Access management is critical to maintain safety and rural community ambiance.** In order to preserve the unique character of the rural communities, pedestrians and bicyclists must be able to move about safely, and transportation improvements cannot overwhelm the surrounding land uses. Access management consolidates access points to the highway and provides safer, more predictable points of interaction among cars, pedestrians and bicyclists.

## B. CORRIDOR PLAN OBJECTIVES

Corridor Plan objectives are intended to establish realistic performance objectives for transportation in the Corridor and to help ODOT and the TAC make major transportation tradeoff decisions. Objectives have been developed for all modes of transportation in the Corridor based upon issues identified by local governments, service providers, interest groups and the public. Objectives address the Corridor as a whole, as well as major segments of the Corridor, but do not address specific sites or transportation improvements. Rather, these objectives were used as guidelines in identifying specific projects for inclusion in the Corridor Plan.

### 1.0 Transportation Balance

#### 1.1 Overall Transportation Balance in the Corridor

A key theme of the Oregon Transportation Plan is the promotion of transportation balance among modes of transportation to ensure an efficient and convenient transportation system. Although dominated by automobile travel, the Hood River-Mt. Hood Corridor, as a rural corridor, has a relatively well-balanced transportation network. It also could become a more balanced transportation network with better utilization of existing rail and telecommunications infrastructure. Additionally, transit service could be improved to provide more travel options.

##### 1.1.1 Future Vision

The Technical Advisory Committee (TAC) developed the following vision for transportation balance in the Corridor:

*A variety of transportation choices exist throughout all portions of the Corridor, serving the needs of residents, visitors, and commerce. The balance of modes reduces reliance on any single mode as the sole solution to the diverse transportation needs of the Corridor.*

### **1.1.2 Overall Direction**

This Corridor has a varying degree of balance in the transportation network. Opportunities for the use of alternative modes to the single-occupant automobile are concentrated in the urban portions of the Corridor. Hood River and Cascade Locks have pedestrian facilities (sidewalks), transit services, and densities conducive to use of these modes as well as the bicycle. Rail connections for freight also exist in the cities. However, no passenger rail exists in the Corridor and air travel is fairly limited at this time. Outside of the urban areas, the automobile predominates. Ski shuttles can be used as a viable alternative to the automobile along OR 35.

There are several unique opportunities to develop a balance of modes in the Corridor that will be discussed in greater detail in the sections that follow. Overall, the Plan calls for providing new or enhancing existing facilities and services for alternative modes of travel, working to maintain efficient travel speeds for truck freight and automobiles throughout the Corridor, managing access onto the highway, and concentrating land development within urban areas and rural community centers.

### **1.1.3 Objectives**

The Corridor Plan Objectives that relate to transportation balance are contained in the modal sections that follow.

## **1.2 Automobiles**

### **1.2.1 Introduction**

In this section, emphasis is placed on the automobile as a mode of transportation, rather than on the performance or management of the road and highway system, which are addressed in the Roadway Conditions and Congestion sections in this chapter.

The Corridor's roadways form the basis of the existing transportation system, which is dominated by roadway facilities for cars and trucks. At the same time, encouraging the use of cars and trucks must be balanced against costs, livability factors, the ability to accommodate other modes of transportation, and negative impacts on adjacent land uses. The Corridor Plan recognizes that the street system will most likely continue to be the basis of the transportation system for the foreseeable future. Therefore, providing for automobile mobility is a high priority in the Plan.

### **1.2.2 Future Vision**

As part of the corridor planning process TAC developed the following Future Vision for automobiles in the Corridor:

*Because the capacities of state highways would not be exceeded during the planning period, no capacity expansions are planned, except for a new intersection at the Mt. Hood Meadows Ski Area. TDM programs, transit, and intersection improvements help to accommodate increased trips associated with population and employment growth.*

### **1.2.3 Overall Direction**

The role of the auto differs throughout the Corridor. In the urban areas, it is one of several travel modes. In the rural areas, in many cases the automobile is the only transportation mode available, making the rural portions of

the Corridor more reliant on automobile travel. The management direction for the role of the automobile in the Corridor therefore differs by rural and urban segments.

In the rural areas, it is recognized that the automobile will, out of necessity, continue to be the overwhelmingly dominant mode in the Corridor. Travel distances between residences and services are generally too long for bicycling and walking. The absence of transit service reduces travel options for those without ready access to an auto in rural areas. Generally, the management approach for rural areas is to:

- Focus on management, maintenance, operations and service improvements in the Corridor, rather than modernization and large capital improvements.
- Maintain Corridor travel times through the strategic use of turning lanes and chain-up areas to eliminate congestion choke points. (The potential for adding capacity through the installation of passing/climbing lanes on OR 35 was evaluated. This option was deemed unwarranted based on traffic volumes and would have unacceptable environmental impacts.)
- Continue to develop transportation alternatives that reduce reliance on the single occupant vehicle. Expanded ski bus service between Hood River and the Mt. Hood ski areas can reduce congestion and provide a viable transportation alternative.
- Encouraging the concentration of services within rural service centers to reduce the need for auto trips.

In the urban area, the management direction is set primarily by the city TSPs. The Hood River and Cascade Locks TSPs call for improving facilities for alternative modes of travel to help balance of auto travel with transit, ridesharing, demand management and other alternatives. In general, the Corridor Plan's management direction for automobiles in the urban areas is:

- Pursue a strategy for improving circulation within the cities. In particular, improve north-south access in the westside of Hood River through the construction of a new access, TDM measures, and promoting alternative routes. Within Cascade Locks, a connection between Wa-Na-Pa Street (HCRH) and Frontage Road would provide better connectivity.
- Reduce reliance on the single-occupant vehicle through the provision and support of alternative transportation modes such as transit and carpooling and through reduction in demand through telecommuting and other methods. The creation of a multi-modal transportation hub is an example of the type of projects that implement this direction.
- Reduce reliance on the auto through efficient land use.

#### **1.2.4 Corridor Plan Objectives**

Corridor Plan Objectives developed by the TAC to address the automobile mode are as follows: (Note: Objectives A1 and A7 were deleted by the TAC due to redundancy with other objectives).

- A2. Accommodate needs for all modes of travel through TDM and other measures and develop an interconnected system of streets to serve existing and planned development.
- A3. Identify solutions, including improvements to the existing road system, construction of a new westside access, TDM measures, and other alternatives to address the need for westside north-south circulation to accommodate westside growth and create an network of connected streets.
- A4. Provide no expansion in highway capacity for state highways, except for turning lanes where warranted.
- A5. Provide a road system that meets the needs for travel between and through the county, recognizing the needs for both local and through travel, with OR 35 and the Hood River Highway (281) as the primary through routes.

- A6. Provide no new interchanges to OR 35, except at the Mt. Hood Meadows Ski Area. Rather, focus on improving existing intersections to address safety and capacity needs.
- A8. Encourage the concentration of services within rural service centers to reduce the need for auto trips.

### 1.3 Air Service

#### 1.3.1 Introduction

As a transportation mode in the Corridor, air service is used in several ways--supporting business, agriculture, emergency services, and personal travel. There are four airports in the county--Cascade Locks State Airport, Hood River County Airport, Hanel Airport, and Green Acres Airpark. In addition, the US Coast Guard has four seaplanes, which operate, out of the Port of Hood River boat basin on the Columbia River. These facilities provide a supportive role to the state transportation system.

The future of air service in the Corridor is impacted by the proximity of the Corridor to the Portland International Airport (PDX) which is the air travel hub of the state. Portland International Airport is approximately 40 miles west of Cascade Locks. It is a full service airport, handling both passengers and cargo. With easy access to such an airport from the Corridor, duplication of services provided at PDX within the Corridor is unlikely.

#### 1.3.2 Future Vision

As part of the corridor planning process TAC developed the following Future Vision for air travel in the Corridor:

*While Portland International Airport continues to serve as the commercial aviation center for the Corridor, the use of state, county, and private airports within the Corridor increases for recreational and business purposes. Agricultural and commuter services are also provided. The proximity of Portland International Airport and relatively low population limit the potential for expansions.*

#### 1.3.3 Overall Direction

The Corridor Plan management direction for air travel within the Corridor calls for protection of the existing facilities and provision of a supportive environment for future growth. The focus is on providing service to the local areas with no significant increase in service expected. Corridor Plan Objectives are based on the recognition that market forces will determine the growth of commercial air service in the region. At the same time, land use and transportation plans can provide a framework to accommodate growth when it is needed.

The Plan promotes increased air travel within the Corridor for business and recreation purposes. It also recognizes that further investigation is needed to determine the best methods for avoiding future conflicts and/or mitigating existing conflicts with other modes of travel.

#### 1.3.4 Corridor Plan Objectives

- A9. In lieu of developing new airports, promote continued use and expansion of existing public use airports.
- A10. Adopt land use regulations and airport master plans that include provisions to protect against land use encroachments adjacent to airports.
- A11. Investigate means to address conflicts associated with the proximity of private airports to highways, e.g., signage, land use controls, etc.
- A12. Develop improved emergency landing facilities.
- A13. Investigate means to avoid conflicts with seaplanes and other river users.
- A14. Encourage the development of aircraft refueling facilities.
- A15. Encourage private airport shuttle service to Portland.

## 1.4 Bicycles

### 1.4.1 Introduction

Bicycles are a low-cost, quiet, and energy-efficient means of transportation. They also provide a form of recreation. Bicycling benefits the community by reducing the number of motorized vehicles on the road, and thereby, reducing congestion and air and noise pollution.

The rural and urban portions of the Hood River-Mt. Hood Corridor have different needs for bicycle facilities. The Corridor is used by many touring cyclists as a route through the Columbia River Gorge and up Mt. Hood. The urban portion of the Corridor provides some marked bicycle lanes that provide day-to-day work and recreational bicycling opportunities for urban residents. In Hood River and Cascade Locks, cycling has the potential to reduce vehicle-miles-traveled for work and other trips. This is not necessarily the case in the rural portion of the Corridor, where origins and destinations are many miles apart. In rural areas, the serious recreational bicycle rider is the most common user of the highway shoulder, not bicycle commuters or short distance "errand-running" riders. In rural community centers however, bicycles may be used for shorter errands between residences and commercial businesses.

Because the bicycle lane system on OR 35 consists of the roadway shoulder, it is physically a part of the roadway shared with autos and trucks. The highway shoulder serves many user groups that include cyclists, pedestrians and motorists. Consequently, the comprehensive inventory of shoulder improvement needs conducted for the plan is addressed in the *Roadway Conditions and Safety* section.

As a matter of policy, improvements to the roadway will include, when feasible, improvements to shoulders to accommodate bicycles, as well as to improve safety for trucks and motorists. There are no stand-alone bicycle projects identified for OR 35, Highway 281, nor Highway 282. All ODOT modernization projects will bring bike and pedestrian facilities up to standard as part of the new or expanded facility when feasible.

### 1.4.2 Future Vision

As part of the corridor planning process TAC developed the following Future Vision for bicycles in the Corridor:

*Improved bicycle routes along all state facilities and improved connections to local bicycle systems are developed over time in conjunction with highway maintenance and improvement projects or through specific bicycle improvement projects. As a result, recreational and commuter bicycling increases within the Corridor.*

### 1.4.3 Overall Direction

The approach to developing bicycle improvements in the Corridor varies depending on the segment of the Corridor. However, some overall themes guide the approach for the entire Corridor. First, stand-alone bicycle projects are not recommended, unless they can be combined with other highway projects to share costs. Second, many projects should be completed as part of routine pavement overlays. In many cases, an extra foot of shoulder width is easy to provide during an asphalt overlay at minimal cost. Third, maintenance and cleaning of the shoulder is often sufficient to significantly improve conditions for cyclists. The Plan's role in implementing these three approaches is to identify where deficiencies exist, and through what method they should be addressed (i.e. as part of a passing lane project, routine overlay or ongoing maintenance.)

As mentioned above, needs vary by location. In the urban areas, a primary concern is for connections to parallel and intersecting bicycle paths that provide access to surrounding development. This route's connectivity is important to tie OR 35 and other highway bicycle improvements together with the region and support the local

TSPs. Coordination with local jurisdictions to ensure connectivity of bicycle routes is important in the urban areas.

In rural community centers, such as Parkdale and Odell, key considerations are for provision of bicycle access while minimizing interaction with motorized traffic. Possible conflicts can arise between bicyclists and motorized vehicles leaving and re-entering the highways at various points to access the businesses and other destinations within the communities.

In rural forested areas of the Corridor, the emphasis is on bringing the shoulder up to standard to provide a safe place for bicycles. The need to improve and widened shoulders has been balanced with the difficulty and cost of doing so. For example, at bridge locations, widening of the shoulders would be cost-prohibitive. In these areas, the Plan recognizes the need to make bicycle travel as safe as possible without physically widening the highway shoulder. Solutions in these areas could include illumination and warning signs that tell motorists to slow down because a bicycle is on a narrow bridge. In the future, if these facilities need to be replaced for structural or seismic reasons, an appropriate bicycle facility will be included.

#### **1.4.4 Corridor Plan Objectives**

The Corridor Plan Objectives for bicycles follow: (Note: Objective A23 was deleted by the TAC due to the redundancy with other objectives.)

- A16. Improve signing of bikeways, particularly destination signing.
- A17. Add or improve bike lanes or widen shoulders as part of planned highway projects or as separate projects. Where feasible, provide standard continuous five-foot (at minimum) shoulders.
- A18. Create alternative routes to avoid conflicts with other modes, per adopted bicycle plans.
- A19. Investigate opportunities to site services, e.g., parking and camping, for cyclists.
- A20. In the long term, expand bridge widths to provide bikeways on all bridges. In the short term, add a bicycle/pedestrian path to I-84 bridges to provide access across railroad tracks to waterfront facilities.
- A21. Design a countywide bike system that facilitates both local and through traffic, and provide connections to local bicycle and hiking systems where feasible.
- A22. Investigate alternative funding sources, use of volunteer groups, and other methods for off-highway bikeway maintenance.
- A24. Reconcile differences between state and local standards for bicycle facilities.
- A26. Emphasize shoulder maintenance (surfacing, cleaning, vegetation removal), particularly in the peak summer cycling months.

### **1.5 Pedestrians**

#### **1.5.1 Introduction**

Pedestrian travel is important to the overall transportation system of the Corridor. Walking not only reduces the number of vehicles on a roadway (reducing congestion and promoting better air quality), it provides an alternative mode of travel to those unable or unwilling to drive. In addition, a good pedestrian environment facilitates transit use.

#### **1.5.2 Future Vision**

As part of the corridor planning process TAC developed the following Future Vision for pedestrian travel in the Corridor:

*Pedestrian access and safety are enhanced within urban areas through sidewalks and other improvements to connectivity, signals and other strategies to ensure safe and convenient street crossings. Pedestrian movement is enhanced in rural community centers through access management projects and safety improvements.*

### **1.5.3 Overall Direction**

The overall management direction for pedestrian activity within the Corridor varies by location. Even so, a common theme throughout the Corridor is that pedestrian facilities (including shoulders) should be added or enhanced when roadway improvements are implemented. (The need for shoulder improvements is addressed under *Roadway Conditions and Safety* section, as shoulders are important for autos, trucks, and bicycles, as well as pedestrians.)

In the urban area, the focus of pedestrian improvements is to provide an interconnected network of sidewalks built to ADA standards. Implementation actions for the urban part of the Corridor also address minimum standards for the design of sidewalks, landscaping and pedestrian facilities. Currently, few of the sidewalks in downtown Hood River contain curb cuts for wheelchair access. Pedestrian connections are a key part of reducing per capita vehicle miles traveled as called for by the State's *Transportation Planning Rule*. Without connections in place, walking can be difficult and hazardous.

Within the rural portions of the Corridor, pedestrian needs and improvements vary between rural community centers like Parkdale and Odell and the forested areas between community centers.

In the rural community centers, the plan's emphasis is on safe pedestrian crossings, adequate shoulders, and access management. Although not as desirable as grade-separated pedestrian facilities, shoulder improvements will help improve pedestrian connections. Multiple auto access points in rural community centers will be consolidated through access management (as described in the *Congestion Section*), creating a more predictable and safe environment for pedestrians.

The emphasis in the rural segments between community centers is on preserving opportunities for the development of new pedestrian links between communities, safe pedestrian crossings, and adequate shoulders. It is also important to maintain trails.

### **1.5.4 Corridor Plan Objectives**

Corridor Plan Objectives for pedestrians are as follows:

- A28. Improve the safety of pedestrian crossings in rural centers through additional/improved signing and lighting and speed control measures.
- A29. Develop a continuous and interconnected pedestrian system that includes Trail 400, HCRH, and Chinook Trail (loop hiking trail).
- A30. In urban areas, at a minimum, provide six-foot sidewalks on both sides of state highways and local arterials and convenient and safe pedestrian crossings. In residential areas, provide at least five-foot sidewalks on both sides of local streets.
- A31. Add shoulders in any improvements to the existing roadway network.

## **1.6 Transit**

### **1.6.1 Introduction**

Transit is an important part of a multi-modal transportation system, and is an essential service for those without access to automobile travel. The Transportation Planning Rule calls for the creation of a multi-modal

transportation network that will reduce reliance on the automobile and “*support a pattern of travel and land use in urban areas which will avoid the air pollution, traffic and livability problems faced by other areas of the country*”.

### **1.6.2 Future Vision**

As part of the corridor planning process TAC developed the following Future Vision for transit service in the Corridor:

*Transit use, particularly by the transportation disadvantaged, grows as services provided by the Hood River County Transit District are expanded. Expanded shuttle services from Hood River to the Mt. Hood ski areas help to reduce winter peak hour congestion on US 26.*

### **1.6.3 Overall Direction**

The overall management direction for transit within the Corridor is to maintain, expand, and enhance transit service in the Corridor. Outside of the urban areas, the primary objective is to continue to provide dial-a-ride service and skier shuttles to Mt. Hood winter recreation areas. Within the City of Hood River, continuation of the fixed-route bus system is a primary strategy. Also, new transit facilities (Park and Ride and Park and Pool lots, bus shelters, and possibly a multimodal transportation center) are seen as important for enhancing the transit system and improving intermodal connections. In Cascade Locks, the current dial-a-ride service should be continued. Intercity bus service between Hood River, Cascade Locks, and Portland should be continued. Throughout the Corridor, opportunities for additional services should be explored. These include new bus stops (particularly in Cascade Locks), new transit service associated with Edgefield Station, additional shuttle service to ski areas, and transit connections to Washington communities.

Connections between transit services to surrounding land uses are important. Connections between any rural transit service and the city transit system must be easy and convenient enough that the system will be used. In the urban and rural areas, pedestrian connections to transit are critical, as is the pedestrian waiting environment.

### **1.6.4 Corridor Plan Objectives**

The Corridor Plan Objectives for transit services are as follows:

- A33. Ensure the continuity of bus and passenger rail services. Encourage stops in Cascade Locks that link to the Locks area.
- A33a. Provide a bus center in uptown Hood River to facilitate low-income access to transit services.
- A34. Investigate the feasibility of transit services to Washington communities to reduce commuting.
- A35. Utilize transit as a primary means to ensure transportation accessibility for the transportation disadvantaged.
- A36. Incorporate transit service needs in land use decisions.
- A37. Investigate opportunities to provide shuttle services to ski areas.
- A38. Analyze the feasibility of a multimodal transportation center.
- A39. Encourage the Transit District to conduct an education campaign on available transit services.
- A40. Investigate transit service opportunities associated with Edgefield Station.
- A41. Ensure ongoing intercity bus service between Hood River, Cascade Locks, and Portland.
- A42. Develop "Park and Ride" and "Park and Pool" lots and additional bus stops and shelters.

## 1.7 Rail Service

### 1.7.1 Introduction

This section addresses rail passenger and freight movement as a mode within the Corridor. Truck freight is addressed in the *Truck Freight* section that follows.

The role of rail in the balance of transportation modes in the Corridor is dependent upon market conditions that determine whether rail or truck freight is appropriate for shipping a specific commodity. For example, although it may be desirable to ship logs from the Corridor by rail, from the standpoint of maintaining roadway capacity and minimizing congestion on the highways, trucking could prove to be more economical, which would ultimately drive the decision on how to ship logs to market. No ODOT policy will influence the market conditions that dictate how goods will be shipped.

The Mt. Hood Railroad provides limited freight service in the rural part of the Corridor, while the Union Pacific Railroad (UPRR) provides freight service in the urban part of the Corridor. Rural freight movement is generally limited to some forest products, which are carried along with passengers on the train. The UPRR carries substantially more freight (primarily fresh fruit and wood products) from depots in both Hood River and Cascade Locks.

Passenger rail service (excluding tourist excursions) is not provided in Hood River County. Amtrak's passenger rail service (the Pioneer Route) previously traveled on the Union Pacific main line track with a stop in the City of Hood River. This route provided a direct link between Portland and Denver. This service was discontinued in November 1997, due to a lack of federal funding. The Mt. Hood Railroad provides tourist excursions from Hood River to Parkdale.

### 1.7.2 Future Vision

As part of the corridor planning process TAC developed the following Future Vision for rail service in the Corridor:

*Amtrak service to Hood River is restored, with a stop in Cascade Locks added. Both freight movement and excursion uses increase on the Mt. Hood Railroad, ensuring long-term financial stability.*

### 1.7.3 Overall Direction

The Corridor Plan management direction for rail calls for protecting and enhancing the existing service within the Corridor, promoting the restoration of Amtrak passenger service, and protecting and improving rail infrastructure throughout the county. Corridor Plan Objectives focus on the need to ensure good connections between rail and other modes and provide for safety at railroad crossings. The Plan also recognizes the important economic function of the rail lines in the Corridor and calls for maintaining rail infrastructure to support current service and possibilities for new service in the future.

Maintenance of infrastructure is another key theme in this Corridor Plan. Upgrades of trackage and at-grade crossings will help to provide a safer environment, both for trains and for vehicles crossing the tracks.

### 1.7.4 Corridor Plan Objectives

The Corridor Plan Objectives for rail include the following: (Objective A46 was deleted by the TAC to reduce redundancy with other objectives.)

A43. Ensure interconnection of rail with other modes.

- A44. Maintain Amtrak service on the Washington side of the Columbia River, and restore Amtrak service on the Oregon side.
- A45. Promote excursion tourism uses on UP, with connections to the Washington side of the Gorge including opportunities for dedicated service to ski areas from Portland via railroad/buses.
- A47. Provide additional signage, flashing lights at railroad crossings as warranted on Highways 281 and 282.
- A49. Explore railbanking opportunities if railroad is closed.
- A50. Make infrastructure improvements (railroad, streets, utilities, etc.) to enhance the investment climate for rail users.
- A51. Maintain active rail service to Parkdale for both freight and excursions.
- A52. Target industrial recruitment on rail shippers.
- A53. Continue programs to upgrade railroad crossings in conjunction with other roadway improvements, with a priority to address safety improvements.

## 1.8 Truck Freight Service

### 1.8.1 Introduction

The highways in the Hood River-Mt. Hood Corridor serve vital economic functions. The ability for these roadways to carry truck freight is essential to the overall economy of Hood River County and the entire region.

### 1.8.2 Future Vision

As part of the corridor planning process TAC developed the following Future Vision for truck freight in the Corridor:

*Truck freight volumes increase on I-84. OR 35 and Highways 281 and 282 grow in importance as seasonal fruit freight routes serving the Hood River mid-valley area. Within urban centers, local transportation system improvements facilitate truck access to industrial sites. Truck freight movement on OR 35 is facilitated through chain-up areas, improvements, and management technologies designed to address the effects of adverse weather on truck traffic.*

### 1.8.3 Overall Direction

Corridor management direction for truck freight focuses on the need to maintain the flow of goods through the Corridor by reducing conflicts between modes, providing adequate access to freight destinations, and maintaining safety. Within the urban areas, the focus is on providing adequate access to commercial and industrial sites. In addition, improvements to problem intersections in the urban areas are intended to improve truck safety and improve travel times. For the rural portion of the Corridor, the overall philosophy for improving truck freight movement is to improve the reliability of operations and improve travel time. The Plan calls for reducing conflicts between trucks and farm vehicles and automobiles in the upper valley, providing chainup areas, improving intersections, and providing better/safer access to forestry sites.

### 1.8.4 Corridor Plan Objectives

- A54. Address conflicts between farm vehicles and autos in the upper valley through signage and increased highway shoulder widths.
- A55. Provide chainup areas before the steep grade on the lower section of OR 35 and on 13th Street, south of Oak Street.
- A56. Improve truck access to commercial and industrial sites, including turn and acceleration/deceleration lanes where appropriate.

- A57. Review and modify, if needed, the current hazardous materials response program. Identify potentially unsafe locations (e.g. access/egress points to industrial sites) and develop necessary improvements to accommodate customary freight transport needs.
- A58. In coordination with the Mt. Hood National Forest, Oregon Department of Forestry, Hood River County, and large private timberland owners in the Corridor, provide safe truck access to OR 35 for forest operations.

## 1.9 Other Transportation Modes

### 1.9.1 Introduction

Other key modes of transportation include waterborne travel, pipelines, and telecommunications. These modes are important for many reasons: the proximity of the Corridor to the Columbia River provides prime opportunities for water travel; the use of pipelines can greatly reduce the number of trucks and rail cars carrying fluids such as natural gas, oil, and gasoline within the Corridor; and telecommunications can reduce the need for travel within the Corridor.

### 1.9.2 Future Vision

The Future Vision for waterborne transportation within the Corridor is:

*As Port of Hood River properties continue to be developed for commercial, residential and recreational purposes, increased traffic on local streets is managed through improvements to the I-84/OR 35/Hood River Bridge area to improve traffic flow through this area and to the Port's waterfront properties. Recreation continues to be the dominant use of Port of Cascade Locks facilities.*

The Future Vision for pipelines in the Corridor is:

*Natural gas service is available to all of Hood River County, with new service to Cascade Locks as a short-term priority.*

The Future Vision for telecommunication is:

*Among other modes, only improvements to telecommunication technologies directly affect the Corridor. Increased telecommuting helps link communities within the planning area, as well as improve connections to the Portland metropolitan area.*

### 1.9.3 Overall Direction

Corridor management direction for waterborne transportation focuses on improving the functioning of the two ports in the Corridor through better docking and passenger loading and unloading facilities, better access to the ports, and better intermodal connections. The Plan also calls for identifying ways of reducing conflicts between commercial and recreational waterway users. Management direction for pipelines aims to accommodate pipelines in highway rights-of-way and make use of current pipeline rights-of-way for bicycle and pedestrian pathways and wildlife corridors. Management direction for telecommunications focuses on the provision of adequate infrastructure to support increased telecommuting, and the responsible installation and siting of the necessary infrastructure. This includes allowing private companies to access ODOT right-of-way to install cables. Also, ODOT and local jurisdictions will work with private companies, utilities, and others to ensure that minimum disruption occurs to traffic operations in the Corridor as a result of construction of microwave towers, fiber-optic cables, and other telecommunications infrastructure.

As with air service, the state's role in managing these three transportation modes is often peripheral to the activities of the private sector, which is the prime driver behind their development. Consequently, the

management direction primarily supports private sector efforts to expand these sectors as alternatives to roadway use.

#### **1.9.4 Corridor Plan Objectives**

The Corridor Plan Objectives for the other modes of transportation include the following:

##### Waterborne Transportation

- A59. Identify means to reduce conflicts among commercial and recreational waterway users.
- A60. Improve docking and passenger loading/unloading facilities.
- A61. Improve access and intermodal connections to port facilities.

##### Pipelines

- A62. Accommodate pipelines in highway rights-of-way.
- A63. To the extent feasible, utilize pipeline rights-of-way as bicycle and pedestrian pathways and wildlife corridors.

##### Telecommunications

- A64. Promote telecommunication technologies and programs that reduce vehicle miles traveled.
- A65. Consolidate telecommunications facilities to reduce the number of towers and visual impacts.
- A66. Coordinate the installation of fiber optics with highway improvements.
- A67. Site communication facilities to eliminate "dead spots" in the Corridor.

## **2.0 Regional Connectivity**

### **2.1 Introduction**

One of the primary goals of Corridor planning is to ensure that connectivity within the Corridor is maintained and enhanced. In its simplest form, connectivity can be viewed as how quickly (in terms of travel times) one can get from one place to another. Connectivity also encompasses the concept of intermodal freight and passenger facilities, which allow freight to be transferred from truck to rail or rail to ship and passengers to switch travel modes. These transfer points are vital links in both the freight and the public passenger transportation systems. The final aspect of connectivity is that of the cooperative approach to transportation system operations in the Corridor. This cooperative approach to transportation is best accomplished through the joint efforts of local and state governments and private transportation interests.

A Corridor Plan must balance the need for regional connectivity with local transportation system needs. The Corridor Plan proposes to maintain connectivity within the Corridor through high levels of facility management (acceleration/deceleration lanes, turn refuges, coordinated signals and access management). These measures are expected to maintain travel times, which will have a positive effect on connectivity. The Plan also proposes to develop intermodal center(s) to improve regional and local connectivity.

### **2.2 Future Vision**

The TAC has developed the following Future Vision for connectivity in the Corridor:

*Limited intermodal connections within the Corridor focus on regional and local transportation modes, e.g., transit connections to the Mt. Hood Railroad and to Mt. Hood ski areas. The greatest growth in traffic within the Corridor is I-84 and OR 35 traffic through the planning area, with local communities capturing additional visitors as a result. Travel times are maintained through high levels of facility management.*

### 2.3 Overall Direction

The Corridor Plan proposes to maintain connectivity by improving both connections between modes and between places through improved travel times and close coordination with communities in the Corridor to address transportation needs. The general approaches to improve connectivity overlap with other areas of the Corridor Plan. For example, improving travel times for better connectivity also reduces congestion and enhances truck freight movement. The nature of this Corridor Plan is for projects or other implementation actions to address multiple needs and objectives.

In the urban areas of the Corridor, improved connectivity is addressed through intersection improvements to OR 35, enhancements to parallel arterials, and the provision of a balanced transportation system that encourages all modes of travel. Connections between facilities in the form of interchange improvements improve the ability to access multiple destinations. Transit, rail, air and truck freight connections are important intermodal connections that occur in the urban area. The Plan calls for providing facilities that improve intermodal connections, improving problematic intersections, and encouraging travelers to use parallel routes to the state system for local trips. It also encourages coordination among the jurisdictions and private entities providing and using these modes.

In the rural portions of the Corridor, no increases in highway capacity (e.g. adding passing lanes) are recommended, rather travel times would be minimized through the use of facility and access management and by improving opportunities for alternative modes of transportation. In addition, travelers information systems (such as signage) should be used to alert travelers to the transportation options available.

### 2.4 Corridor Plan Objectives

The Corridor Plan Objectives for connectivity are as follows: (Note: Objective B2. was deleted by the TAC to reduce redundancy among objectives.)

#### Connections Among Modes

B1. Develop intermodal center(s) in Hood River to improve both regional and local intermodal connectivity.

#### Connections Between Places

B3. In lieu of major capacity expansions, strive to maintain existing travel times for both autos and freight through high levels of facility management (acceleration/deceleration lanes, turn refuges, coordinated signals, and access management).

B4. Investigate improvements to the following junctions to promote safety and maintain travel times:

- I-84/US 30 (East Hood River)
- OR 35/HCRH (Button Junction)
- OR 35/Hwy 281

B5. Promote use of parallel routes to reduce reliance on state facilities for local trips.

#### Interconnected, Cooperative Transportation Roles Among Corridor Communities.

B6. Support development of traveler information systems.

B8. Improve, expand and coordinate signage to inform travelers and trucks of route choices available.

**3.0 Congestion**

**3.1 Introduction**

Congestion is an important concern in the Corridor Plan because it reduces the efficiency, convenience, safety of a transportation system. It also reduces air quality. The Oregon Highway Plan (OHP) addresses congestion in its policies and actions on highway mobility. The OHP provides mobility standards, such as volume to capacity ratio (v/c) during the peak traffic hour, that are geared to the specific characteristics of the facility.

**Table 4: Maximum Volume to Capacity Ratios Outside of the Portland Area**

Highway Category	Land Use Type/Speed Limits					
	Inside Urban Growth Boundary				Outside Urban Growth Boundary	
	STAs	MPO	Non-MPO outside of STAs where non-freeway speed limit <45 mph	Non-MPO where non-freeway speed limit >=45 mph	Unincorporated Communities	Rural Lands
Interstate Highways and Statewide (NHS) Expressways	N/A	0.80	0.70	0.70	0.70	0.70
Statewide (NHS) Freight Routes	0.85	0.80	0.75	0.70	0.70	0.70
Statewide (NHS) Non-Freight Routes and Regional or District Expressways	0.90	0.85	0.80	0.75	0.75	0.70
Regional Highways	0.95	0.85	0.80	0.75	0.75	0.70
District/Local Interest Roads	0.95	0.90	0.85	0.80	0.80	0.75

Source: 1999 Oregon Highway Plan

Management of the transportation system to reduce congestion includes both management of highway operations and development of projects to address areas where congestion levels would become unacceptable in the future. Congestion management applies to autos, trucks, and transit vehicles. Facility management tries to avoid the premature obsolescence of highways by accommodating growth with and without capital-intensive improvements. One of the most important facility management techniques to preserve the function of the highway is access management, which includes regulating the number, spacing, type, and location of driveways, intersections and traffic signals. Another tool is promoting the use of alternative transportation modes.

This Plan approaches the management of congestion in the Corridor in a manner that is consistent with the policy direction set by the OTC. It is the intent of this plan to minimize the number of capital road construction projects and focus on the maintenance and operation of the existing transportation system. In this Corridor, congestion is primarily an issue in the urban areas during the peak-hour or rush hours.

**3.2 Future Vision**

The TAC has developed the following Future Vision for congestion in the Hood River-Mt. Hood Corridor.

*Travel times are maintained through high levels of facility management and intersection improvements. Local access management and circulation plans relieve localized congestion problems. Access management projects consolidate access points and improve safety within rural community centers.*

### 3.3 Overall Direction

Congestion is not currently, nor is it anticipated to become, a problem in the next twenty years within the Hood River-Mt. Hood Corridor. The few areas that experience congestion can be remedied through intersection improvements and employment of TDM and TSM measures.

The management of congestion requires different approaches in different parts of the Corridor. In the urban area, TDM and TSM should be employed. Also, a local access and circulation plan should be created and key intersections should be improved. In the rural areas of the Corridor, congestion should be controlled primarily through land use controls and access management.

**Table 5: Hood River-Mt. Hood Corridor Access Management Categories**

Highway (Street)	Section Description	Class (LOI)	Urban/Rural	Access Category	Signal Spacing	Access Spacing
OR35	I-84 to Historic Columbia River Hwy.	Arterial (Statewide)	Urban (30 Spur)	4	18-2100'	500'
OR35	Historic Columbia River Hwy. to Mt. Hood	Arterial (Statewide)	Rural	3	None	1200'
HCRH (US30)	Cascade Locks & Hood River Historic Columbia River Hwy	Minor Arterial (District)	Urban	5	1500'	300'
Forest Lane, Frontage Road	Cascade Locks	Collector	Urban	-	1500'	250'
C.L. roadways in this class.	Cascade Locks	Minor Collector	Urban	N/A	N/A	100'
H.R. roadways in this class.	Hood River	Collector	Urban	-	1500'	250'
Co. roadways in this class.	Hood River County	Collector	Rural	-	N/A	300'
Hwy 281	Hood River County (Hood River Hwy)	Minor Arterial (District)	Rural	5	N/A	500'
Hwy 282	Hood River County (Odell Hwy)	Minor Arterial (District)	Rural	5	N/A	500'

Throughout the Corridor, facilities management techniques such as encouraging the use of alternative transportation modes, consolidation of access points along arterials and collectors, and the use of motorist information systems (like variable message signs) should be used to minimize congestion.

The projects were evaluated based on their potential to manage congestion in the Corridor in a cost-effective manner. Projects were modified and combined with other projects to achieve multiple objectives with a single project. The overall philosophy for improving congestion in the Corridor is to maintain the reliability of operations and travel times.

### 3.4 Corridor Plan Objectives

The Objectives under this section are divided into three areas: facility management, urban congestion and rural congestion. Objectives for facility management measures, such as access management, are tailored for urban versus rural segments. (Note: Objectives C4 and C8 were deleted by the TAC to reduce redundancy among objectives.)

#### Facilities Management

- C1. Encourage transportation demand management (TDM) and transportation system management (TSM) programs in the Corridor.
- C2. Adopt the highest applicable (most restrictive) access management categories for both arterials and collectors, consistent with existing or planned adjacent land uses.
- C3. Develop consistent street classifications, and speed and access management standards within and between urban areas.
- C5. Consolidate access points along arterials and collectors.
- C6. Encourage state and private timber landowners to utilize existing access points to OR 35 for management, fire protection, harvesting and recreation purposes.
- C7. Allocate state resources to highway projects according to the following priorities:
  - 1. Maintenance of the existing facility to ensure that it remains safe and functional, e.g. fixing potholes.
  - 2. Preservation of the roadway by investing in roadbed and pavement reconstruction as needed to minimize maintenance costs;
  - 3. Safety improvements;
  - 4. Transportation system management to optimize existing highway capacity; and
  - 5. Capacity improvements.
- C11. Promote increased use of incident management and motorist information systems to minimize congestion during peak hours.
- C12. Encourage transit use to accommodate a portion of the growth in trips.
- C13. Provide no improvements to state highways solely for capacity purposes. Provide turning lanes and other improvements to address safety-related issues.

#### Congestion in Urban Areas

- C9. Develop local access management and circulation plans to relieve localized congestion problems and to meet local transportation system needs.
- C10. Investigate signalization as a potential solution to safety and congestion problems at I-84/US 30 (East Hood River) Interchange.

#### Congestion in Rural Areas

- C14. Achieve highway mobility standards for state facilities as established in the 1999 Oregon Highway Plan.
- C15. Preserve rural sections as rural through access management and land use controls.

## 4.0 Roadway Conditions and Safety

### 4.1 Introduction

Safety is a high priority in the OTP, and the improvement of safety is a constant goal of all agencies involved in the provision of transportation services, whether the mode is by automobile, rail, air, transit, pedestrian, or bicycle. This section addresses the conditions of the roadway and how they impact safety. Identifying and correcting deficiencies in the roadway and other systems can help relieve congestion and improve safety.

The Safety Priority Index System (SPIS) is a method developed by ODOT in 1986 for identifying hazardous locations on state highways. The SPIS score is based on three years of accident data and considers accident frequency, accident rate, and accident severity. To become a SPIS site, a location must either have experienced three or more non-fatal accidents or at least one fatal accident in the three previous years. Each year, a list of the top 10% SPIS sites are generated for review by ODOT and appropriate projects developed to address problem sites that would benefit the most. In 1998, the system was modified to improve calculations and reporting, and to report data that would enable ODOT to better rank the most severe problem sites. In particular, key elements have been weighted to more accurately reflect safety concerns and better information on the circumstances surrounding accidents has been added to the database.

#### 4.2 Future Vision

The TAC has developed the following Future Vision for roadway conditions in the Corridor:

*With maintenance of the existing facility as the highest priority for the allocation of state resources, management of the highway focuses on addressing safety needs and maintaining surface conditions at or above state standards. Management and maintenance of OR 35 through the "Narrows" section remains the Corridor's greatest operational challenge.*

The TAC has developed the following Future Vision for safety in the Corridor:

*Overall Corridor safety is improved through a combination of increased enforcement, access management and targeted highway improvements, e.g., intersection improvements, turning lanes, and improved lighting. Safety needs are routinely monitored and addressed in all maintenance and improvement projects. Improvements to the transportation system also facilitate emergency and disaster response by local service providers.*

#### 4.3 Overall Direction

Problems of deficient geometry and poor pavement conditions can affect the safety of motor vehicle drivers, cyclists, and pedestrians. (Roadway geometry refers to the physical configuration of the highway such as lane and shoulder widths, curvature, and alignment.) Corridor Plan Objectives identify facility management techniques including intersection improvements, additional signage, and realignments and widening of sections with above average accident rates. The TAC has identified maintenance of existing roadways as the highest priority in allocating state resources.

The implementation program is divided into three subsections--roadway geometry, roadway conditions and roadway safety -- and there are differences between the approaches used in rural and urban areas. The approach used in the urban areas includes facility management measures, while rural improvements tend to focus on solutions such as intersection safety improvements, shoulder widenings, bridge retrofits and pavement overlays. However, improvements to the surface conditions of roadways and the need to address high accident locations are priorities throughout the Corridor.

Maintenance, operations, and management actions comprise the vast majority of implementation actions for improvements to roadway safety and condition in the Corridor. For general roadway conditions, implementation focuses on maintenance of existing facilities. To address substandard geometry, no cost-effective solutions, other than shoulder improvements and improvements to intersections, have been identified. To address safety issues in the Corridor, ODOT will implement a combination of facility management and improvements at potentially unsafe locations.

#### 4.4 Corridor Plan Objectives

Corridor Plan Objectives for road conditions and safety follow: (Objectives D3, D7, D14, and E14 have been deleted by the TAC to avoid redundancy with other objectives.)

##### Roadway Geometry

- D1. Investigate solutions to problems associated with substandard geometry.
- D2. Install warning signs in areas of substandard geometry, as warranted based upon accident history.
- D4. Improve intersections with limited sight distances by realignment and other means.
- D5. Target realignment and widening to sections with above average accident rates, slide prone areas, and to sections with high congestion rates where there is a favorable cost/benefit ratio.
- D6. In the short term, target pavement of substandard shoulders to “easy fix”/low cost area.

##### Roadway Conditions

- D8. Maintain existing facilities as the highest priority for the allocation of resources.
- D9. For state facilities, maintain roadway surface conditions at 90% fair/better by the year 2010.
- D10. Review and modify as needed maintenance priorities to focus on key locations, e.g. the steep grade entering Hood River and between Mt. Hood Meadows and the US 26/OR 35 intersection.
- D11. Strengthen enforcement of speed and weight restrictions to extend roadway longevity.
- D12. Adequately finance the rockfall management program to address key rockfall problem areas in the Corridor.
- D13. Develop a comprehensive, long-term management and maintenance program for that section of OR 35 being undermined by the East Fork Hood River through “the Narrows” and near Sherwood Campground.
- D15. Upgrade substandard guardrails and shoulders.
- D16. Address drainage problems, including those that affect the function and condition of the roadway.
- D17. Research alternatives for more efficient road maintenance, such as jurisdictional transfers or interagency maintenance agreements.
- D18. Where feasible, use pavement overlay materials that reduce wet pavement spray.
- D19. Investigate solutions to highway pavement stress caused by weather conditions in higher elevations.

##### Safety

- E1. Target resources to reduce accident potential in high accident locations within the Corridor, using the Safety Management System to identify unsafe intersections and highway segments.
- E2. Apply facility management techniques, including access management, to improve safety in congested areas.
- E3. Promote cooperative enforcement among police and sheriff offices and target enforcement activities to high-accident locations.
- E4. Install deer crossing warning devices, e.g., reflectors, in upper Hood River Valley.
- E5. Investigate safety concerns at OR 35/Odell Road intersection, e.g., better signage, more downhill turning storage.
- E6. Evaluate retaining the four-way stop at OR 35/HCRH intersection.
- E7. Explore the need for larger clear zones to improve ice melt and decrease road kill.
- E8. Provide chain up areas at the base of OR 35 (Button Junction area) and 13th Street.
- E9. Investigate the feasibility of signage to indicate lane locations when snow-covered.
- E10. Improve lighting at key locations (e.g. I-84/US 30 intersection) and maintain delineation (e.g. fog lines, reflector buttons) to be highly visible.
- E11. Install safety barriers, e.g. guard rails, gabions, in high hazard locations to meet highway safety standards.
- E12. Install weather condition monitoring devices at strategic locations.
- E13. Review and modify if needed, the current hazardous materials response program. Identify potentially unsafe locations (e.g. access/egress points to industrial sites) and develop necessary improvements to accommodate customary freight transport needs.

- E15. Investigate the need for additional signage at the reduction from two lanes to one lane north of Pine Grove.
- E16. Investigate the need for additional school bus stop signage.
- E17. Consider realignment or other improvements of intersections with limited sight distances.
- E18. Retrofit bridges to meet seismic standards.

## 5.0 Environmental and Energy Impacts

### 5.1 Introduction

Environmental and energy issues in the Hood River-Mt. Hood Corridor are very diverse. Transportation planning in the Corridor is becoming more complex as new environmental issues arise. A central issue is the endangered species listing for steelhead in the Corridor. The Corridor also runs through habitat that is used seasonally or year round by a variety of other state and/or federal threatened or endangered species, including the peregrine falcon, bald eagle, northern spotted owl, and wolverine.

Transportation projects must take into consideration the potential impacts on the environment and energy use. In the Corridor Plan, environmental issues addressed include scenic and natural resources (including sensitive wildlife and habitat), and air and water quality. This section discusses the environment in the Corridor and proposes objectives to help limit potentially adverse impacts on the environment.

The transportation system's energy impacts can be minimized by encouraging fuel-efficient modes of travel, improving vehicle efficiencies, and the efficient design and operation of transportation facilities. This section includes a discussion of the potential impacts on energy consumption.

### 5.2 Future Vision

The TAC has developed the following Future Vision for environmental and energy conservation in the Corridor:

*Environmental and energy conservation considerations are factored into both maintenance practices and improvement projects, with a focus on enhancing salmon and steelhead habitat and enhancing the Corridor's scenic values. The promotion of alternative modes helps to reduce automobile use and associated energy consumption.*

### 5.3 Overall Direction

Environmental and Energy implementation measures in the Corridor address a wide variety of topics. As with most other aspects of this Corridor Plan, the approach is different between rural and urban portions of the Corridor.

Scenic resource protection applies primarily to the rural portions of the Corridor. The 1991 *State Highway 35 Viewshed Management Guide*, developed by the Mt. Hood National Forest, contains a Scenic Resource objective to improve the scenic quality of the views from OR 35. Road management and maintenance activities can contribute to improved scenic quality along OR 35. Recommendations for management to meet Scenic Viewshed objectives include minimizing impacts to roadside vegetation, scaling down the size of ditches and culverts wherever possible, and rehabilitating cutbanks.

In the urban areas, scenic resource issues are addressed more directly by local comprehensive plans. In the rural areas of the Corridor, natural resource protection and mitigation of impacts to natural resources is a requirement for all Corridor Plan projects that affect the roadway. Wildlife crossing issues are important, particularly in the forested portions of the Corridor where elk and deer regularly cross the highway. Improved signage to improve driver awareness in these areas, as well as managing crossing locations, will help minimize impacts to wildlife.

Air quality impacts in the urban areas are managed primarily through measures to reduce vehicle miles traveled through TDM programs, reduced distances between home and work through land use changes, promoting alternative forms of transportation, and staggering work hours. Congestion management in the urban areas also reduces pollution in the airshed. For all projects, ODOT will utilize construction techniques that minimize air quality impacts.

In the rural areas, congestion management in rural community centers is the primary tool to reduce air quality impacts. Also, improved access to and from winter recreation areas (via ski bus shuttles and improved intersections) should reduce congestion and consequently, air quality impacts.

To manage water quality impacts, ODOT will use construction methods and drainage that minimize impacts to water quality. In the rural areas, runoff from impermeable surfaces to streams is a primary concern that can be addressed through proper project design. Water quality is a key component of the plan to improve and restore salmon runs in the Corridor. Installation of culverts to protect water quality and enhance salmon migration are a key component of implementation actions to preserve water quality in the rural areas.

Energy efficiency is addressed in the urban areas by reducing total vehicle miles traveled, as with air quality. Reductions in congestion also make better use of fuel and reduce energy consumption. Encouragement of more fuel-efficient and alternative fuel modes of transportation also help improve efficiency in both the rural and urban parts of the Corridor. ODOT will also use energy efficient construction methods and materials for all construction projects in the Corridor.

#### 5.4 Corridor Plan Objectives

(Note Objective F4. was deleted by the TAC to avoid redundancy with other objectives.)

##### Scenic Resources

- F1. Integrate vegetation management measures into road management and maintenance activities to create and protect scenic vistas, e.g. scenic buffers for timber harvests, and to replace or mitigate for vegetation lost to transportation system projects.
- F2. Remove and prohibit scenic intrusions such as billboards. Investigate alternatives to billboards, e.g. Oregon Tourism Alliance travel information program.
- F3. Identify and construct additional roadside turnoffs at scenic viewpoints.
- F5. Develop protection measures for identified scenic resources in local plans.
- F6. Promote the marketing of the Mt. Hood Loop and other tour routes within the County.

##### Natural Resources

- F8. Use transportation improvement projects to rectify negative impacts to previously impacted natural resources.
- F9. Implement recommendations on road improvement and maintenance practices from the Oregon Coastal Salmon Restoration Initiative Conservation Plan.
- F10. Modify/remove barriers to fish passage as part of road maintenance and improvements projects.
- F11. Avoid/minimize transportation system improvement impacts to sensitive natural areas.
- F12. Minimize impacts from the transportation system, particularly local roads connecting to OR 35, on wildlife migration routes.
- F13. Coordinate transportation system planning with wildlife corridor planning being undertaken by the Oregon Department of Fish and Wildlife.

- F14. Work with the Confederated Tribes of Warm Springs to identify and evaluate long-term programs to restore fish populations and to improve water quality in the East Fork Hood River basin, including the feasibility of relocating OR 35 away from the river.

#### Air Quality/Energy Impacts

- F15. Promote more energy-efficient freight movement by rail and water.  
 F16. Promote the use of alternative fuels.  
 F17. Use construction techniques that minimize negative air quality impacts.  
 F18. Encourage energy conservation in the design, construction, and operation of transportation facilities.

#### Water Quality/Quantity

- F19. Design roadway improvements and new facilities to minimize and treat surface runoff and pollutants.  
 F20. Improve the collection of sand and gravel from roadways to avoid/minimize impacts to watercourses.  
 F21. Design new improvements and retrofit existing transportation improvements to encourage the conservation, restoration, and protection of anadromous fish and bull trout.

## **6.0 Social and Land Use Impacts**

### **6.1 Introduction**

The social and land use impacts of the corridor planning process touch on a wide range of topics that have a core theme: the integration of transportation and land use planning. The corridor planning process seeks to balance the local transportation needs of jurisdictions in the Corridors with the needs of regional through-traffic, while at the same time protecting social, cultural and environmental resources.

In a general sense, the future of land uses in the Corridor will be very similar to conditions today. The Corridor will continue to have moderate population centers located at the north and west ends and a substantial amount of recreational opportunities at the southern and northern ends. Based upon a Potential Development Impact Area (PDIA) analysis conducted for the Corridor Plan, there will be very little in the way of new land development in Hood River County outside of UGBs.

No Special Transportation Areas (STAs) have been designated through the Corridor Plan or draft TSPs and there is no appropriate location for an STA on OR 35. OR 35 has no downtown or main street characteristics. STA characteristics are more common in those portions of Hood River and Cascade Locks located on the HCRH. The appropriateness of designating portions of the Hood River and Cascade Locks downtown areas as STAs pursuant to 1999 OHP standards will be assessed as part of the OHP implementation work plan and coordinated with the cities' TSPs.

### **6.2 Future Vision**

The TAC has developed the following Future Vision for social and land use impacts in the Corridor:

*Management of and improvements to the transportation system are fully integrated with local government land use planning, resulting in transportation efficient land use patterns that reduce vehicle trips and miles traveled and promote a live-work balance, particularly within the Corridor's urban areas. New development along OR 35 is limited and concentrated within rural community centers.*

### 6.3 Overall Direction

Because the *Social and Land Use Impacts* section covers a variety of subject areas, there is no single over-riding principle to guide implementation. This section sets the Corridor Plan apart from other planning efforts, in that it creates ties between transportation, land use and our cultural heritage. Since the intent of Corridor planning is to address issues comprehensively, the social and land use elements play an important part in connecting transportation improvements with the broader context of the human environment within which they function.

The overall Corridor Plan direction for cultural resources is to avoid them whenever possible. Leaving an important archaeological site undisturbed is the first choice for all projects. Next is the minimization of impacts. Through facility design, the impacts on cultural resources must be minimized. If these approaches are not feasible, then mitigation for impacts must be developed. The Corridor Plan emphasizes the need to understand the significance of the cultural resources in the Corridor and then to protect them from transportation-related impacts.

This Corridor Plan is carefully tied to urban and rural land uses authorized by acknowledged comprehensive plans. In the urban areas, the Plan supports the Hood River and Cascade Locks comprehensive plans and TSPs. The overriding land use goal of the Corridor Plan in the urban areas is to help achieve the mandate from the *Statewide Transportation Planning Rule* to reduce vehicle miles traveled. In addition to the strategies contained in other areas of the Plan, the land use section aims to reduce VMT through compact urban development that shortens trip lengths and preserves livability.

In the rural areas, the focus is on minimizing the impacts of development at rural centers off of OR 35. Access management plans will help to reduce the total number of access points on the highway. In addition, the Plan seeks to limit commercial development in the rural areas to established community centers. The aim of these latter objectives is to preserve the unique rural character and livability of the Corridor.

### 6.4 Corridor Plan Objectives

#### Community Livability Impacts

- G1. Design transportation system improvements to preserve community livability and to avoid, minimize or eliminate impacts to sensitive cultural resources and other community resources.
- G2. Encourage building siting and design to reduce noise and visual impacts from adjacent transportation facilities.
- G3. Where feasible, use transportation projects to support development of low income and affordable housing.
- G4. Consult with Native American Tribes, state agencies, and local governments concerning the presence of significant cultural resources and uses.

#### Land Use Impacts

- G5. Encourage transportation-efficient land use patterns that reduce vehicle miles traveled and promote a live/work balance, e.g. increased densities, infill and clustered development, mixed uses, maximum parking ratios, and circulation systems that reduce out-of-direction travel.
- G6. Promote cooperation between ODOT and local governments in planning and project development.
- G7. Utilize access management to limit the impacts of new development on highway congestion.
- G8. Establish standards for setbacks adjacent to state rights-of-way.
- G9. Take advantage of multi-modal capabilities/capacities to promote development that is not solely auto/truck dependent.
- G10. Ensure coordination with local community planning efforts.
- G11. Ensure that city and county comprehensive plans, zoning ordinances and local and regional transportation system plans are consistent with Corridor Plan objectives.

- G12. Limit additional commercial and residential land use designations along the Corridor outside UGBs to designated rural community centers or exception areas.
- G13. Design highway improvements to limit adverse land use impacts, consistent with the TPR and local land use regulations.

## 7.0 Economic Impacts

### 7.1 Introduction

Oregon law (ORS 184.681(4)) directs ODOT to “give economic development and the provision of industrial site services priority in fund allocation decisions.” This direction led ODOT to assess the economic development potential in 25 highway corridors around the state. The *Economic Development Analysis of Highway Corridors* (1995) concluded that the Hood River-Mt. Hood Corridor has a relatively low economic development potential and that the Corridor’s benefit-cost ratio for economic growth generated by highway investments is relatively low. This determination was primarily based on the facts that Hood River County has limited economic development resources to spur growth and a moderate projected level of economic growth. Despite the Corridor economy’s high sensitivity to transportation and a high proportion of lodging employment (an indicator of the level of tourism), the lack of development resources reduces the potential for economic development resulting from improved transportation facilities.

The County’s principal industries are agriculture, lumber and wood products, retail trade, and recreation/tourism. Important agricultural resources are located in the mid and lower portions (up to 2,700 feet) of the Corridor, particularly pear, apple, and cherry orchards. Recreation and tourism destinations are located throughout the Corridor. Mt. Hood Meadows Ski Area, Cooper Spur Ski Area, the Mt. Hood National Forest, several campgrounds, trails and snowparks are located in the southern portion of the Corridor. These and various other recreation sites provide opportunities for winter recreation, camping, and hiking. The Columbia River Gorge, numerous creeks, the Columbia River, and the City of Hood River are located in the northern portion of the Corridor providing opportunities for hiking, shopping, sailboarding, and numerous other water-related and outdoor activities. A well-functioning transportation system is essential for ensuring the viability of these industries.

Current economic development efforts include plans by the Port of Hood River to redevelop the waterfront in Hood River for a variety of commercial uses, and activities by the Mt. Hood Economic Alliance (as part of the Regional Strategies program) to encourage development of the agricultural, software, hi tech, and tourism industries in Hood River County, using state lottery funds and other sources of revenue as available to provide the public infrastructure needed for business start-ups. Through their Rural Investment Fund, the Alliance will support economic growth in the rural portions of the Corridor by supporting local public health, public safety, education, and economic well-being projects, as well as community planning and project development technical assistance.

The Confederated Tribes of the Warm Springs are currently investigating development of a gaming casino within Hood River or Cascade Locks or at a rural location in the County strategically located to I-84 traffic. This potential development surfaced after completion of most aspects of the corridor planning process and has not been addressed in the Corridor Plan. Should a specific site be identified for casino development, refinement planning will be undertaken and, if necessary, Corridor Plan management direction reviewed and revised.

### 7.2 Future Vision

The TAC has developed the following Future Vision for economic impacts in the Corridor:

*Investments in maintenance of and improvements to the Corridor's transportation system promote the efficient movement of agricultural and forest products, as well as improve access to the area's recreational amenities.*

### **7.3 Overall Direction**

Overall management direction for economic impacts involve implementing, maintaining, and improving access to the Corridor and the industries it serves. Improvements to parallel arterials provide improved access to the westside of Hood River from the upper- and mid-Valley. Similarly, intersection improvements enhance access to OR 35. Additions of chain-up areas help maintain travel times through the Corridor, which is important to minimize the cost of trucking freight through the Corridor.

Access to recreational opportunities is also a key component of economic development. Tourism dollars spent within the Corridor are in part due to the recreational opportunities available and the ease of access to those opportunities. Improvements to promote recreational activities in the Corridor involve improved signage and interpretive displays and ensuring convenient access to trails, water recreation, snow-parks and other recreational attractions. Maintaining access to the Corridor by other modes is also a key component of promoting recreational use of the Corridor.

### **7.4 Corridor Plan Objectives**

(Objective H10 has been eliminated by the TAC to avoid redundancy with other objectives.)

- H1. Design transportation improvements to enhance access to existing and planned industrial and commercial sites.
- H2. Promote I-84/OR 35 as an alternative route from Portland to Mt. Hood recreation areas.
- H3. Support projects identified through the Regional Strategies Program and other economic development activities through appropriate transportation system improvements.
- H4. Coordinate transportation system improvements with strategies developed by the County's Economic Development Committee.
- H5. Improve convenient access to a variety of recreational opportunities.
- H6. Provide connections to recreational trails.
- H7. Support recreational opportunities associated with seaplanes and commercial helicopter services.
- H8. Promote excursions and other water recreation uses.
- H9. In coordination with the Forest Service, provide adequate snow-parks to meet recreation demand.
- H11. Improve recreation/tourist-oriented directional signing.

## **8.0 Miscellaneous**

### **8.1 Introduction**

During Corridor Plan development, the TAC identified several issues that are general in nature and do not readily fit into one of the categories above. Among these are the need to pursue alternative financing mechanisms for funding needed improvements in the Corridor and the need for an ongoing advisory body to assist with updating the Corridor Plan.

### **8.2 Corridor Plan Objectives**

- I1. Work with the Gorge Commission and Forest Service to identify additional long-term aggregate sources.
- I2. Investigate opportunities and implications of county assumption of Forest Service roads and local jurisdiction assumption of state highways.
- I3. Investigate alternative funding sources for transportation improvements and maintenance.

- I4. Maintain a corridor-wide advisory group to assist ODOT in prioritizing transportation projects, reviewing Transportation System Plans for conformance with the Corridor Plan, and assisting in updating the Corridor Plan, as needed.

## IV. CORRIDOR MAPPING AND DECISION DETAILS

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## A. DESCRIPTION OF PROCESS

Chapter III details the objectives and overall direction for management of transportation facilities and services within the Hood River-Mt. Hood (OR 35) Corridor. This chapter expands on that management direction by describing how specific solutions will be implemented, fitting those solutions into financial constraints, and mapping the projects throughout the Corridor. The three sections of this chapter are described below.

A Matrix of Objectives and Solutions (Section B) summarizes the implementation actions proposed to fulfill Corridor Plan Objectives. The implementing actions may take the form of service improvements by a transportation service provider; management, operational or maintenance practices or improvements which fulfill an Objective, or capital improvement projects (modernization or other) which fulfill an objective. In a few cases, the Objective does not have a clear solution, and further (refinement) planning is needed at the appropriate time in the future to clearly identify the appropriate solution. In addition to the solutions identified, the matrix also assigns responsibility for carrying out the solution. ODOT will be the lead agency on many solutions, but other local governments and private industry are expected to lead the fulfillment of some solutions.

A Project List by Funding Priority (Section C) summarizes those solutions that could be termed “projects”—there is something specific to build or repair, as opposed to operational practices or procedures. This table lists all of the projects sorted first by funding priority and then by project number. The project numbers are those used in the Matrix of Objectives and Solutions in Section B, as well as in Chapter III. In addition, this table identifies the specific location of the solution (highway and milepoint), the ODOT Region responsible for the project, and the project type (modernization, safety, preservation, etc.). The table also lists the jurisdiction the project is within (county and city if applicable), estimated project cost, a brief project description and comments or justification for the project.

Decision Mapping (Section D) includes maps of the entire corridor illustrating the location of all the projects identified in Sections B and C. The maps are at a scale of 1” = 1 mile for the rural portion of the corridor, and at an enlarged scale of 5” = 1 mile for the urban portion of the corridor. These maps include data “ribbons” in the lower 1/3 of the page which display a line starting and stopping at the limits of each project, or a circle for projects at a point (e.g. intersections, bridges, etc.). Adjacent to each project symbol is the project number, again tied to the tables in Sections B and C. The symbols are color coded to reflect each project’s funding priority. Finally, the data ribbons are categorized by the work type (modernization, bridge, safety, transit, etc.) Some projects are not located on OR 35 and are identified as “off-system” (e.g. parallel county road improvements). Projects that do not specifically fit the regular categories are listed as “other.”

Additional details of how these solutions were developed, including analysis of existing and future conditions, policies and management objectives, are found in Volume 2, Chapter 1 of the Corridor Plan. Additional details and specific location mapping for each project can be found in the Decision Details section of Volume 2 of the Corridor Plan.

## B. MATRIX OF OBJECTIVES AND SOLUTIONS

Corridor Plan objectives are ultimately implemented through a combination of management strategies and projects. The process by which projects were selected and prioritized is described in Volume 2, Chapter 1 of this Corridor Plan.

The matrices below summarize the implementation actions proposed to meet Corridor Plan objectives. The broad subject areas are listed in the left-hand column along with each Corridor Plan objective. For each of these objectives, a list of projects (by number) and other implementation actions are included. Below is a summary of the project type categories. Safety projects are included in all project categories.

- A. Service Improvements – projects implemented by a service.
- B. Management, Operations, and Maintenance – projects implemented through: 1) management of a facility or program, such as a TDM program, 2) changes in operations, such as implementation of Intelligent Transportation System improvements in the urban portion of the Corridor or construction of a rural passing lanes, signals, or intersection improvements in the rural portion and 3) maintenance of facilities, such as adding pavement width to shoulders during routine overlays to implement a bike lane project.
- C. Modernization – projects that result in added system capacity, primarily through widening of facilities or major interchange construction in the urban portion of the Corridor.
- D. Refinement Planning Needs – these projects need an additional step that better defines the project's scope before implementation can occur. Some projects will be refined during the course of implementation through the ODOT project development process and are not included in this category.

In addition to the implementation actions, the entity with responsibility to implement the objective is identified and additional comments are included to cross-reference projects or to explain any special conditions that may exist. The projects are also listed by funding priority. The following is a compilation of the individual implementation action tables found at the end of each implementation section in Volume 2 of the Corridor Plan. Shown is the actions to implement each Corridor Plan objective, with project numbers for Committed or Constrained funding projects shown in **bold**; Strategic funding projects in *italics*; and Unconstrained projects in plain text. For a complete discussion of project funding categories, see Chapter II above.

**1. Automobile****Implementation Solutions for Automobile Travel**

<b>Corridor Plan Objectives</b>	<b>Service Improvements</b>	<b>Maintenance Operations &amp; Management</b>	<b>Modernization</b>	<b>Refinement Planning Needs</b>	<b>Implementing Jurisdiction</b>	<b>Comments</b>
A2. Accommodate needs for all modes of travel through TDM and other measures and develop an interconnected system of streets to serve existing and planned development.		<b>5, 7, 8, 10.1-10.6, 12, 13, 15.1, 15.2, 17, 22, 23, 24, 25, 37, 55, 60, 151</b>	<i>1, 39</i>	<b>2A, B, C, 38A, B, C</b>	ODOT will work with local jurisdictions to identify and implement TDM and TSM measures.	
A3. Identify solutions, including improvements to the existing road system, construction of a new westside access, TDM measures, and other alternatives to address the need for westside north-south circulation to accommodate westside growth and to create a network of connected streets.		<b>5, 7, 18, 21, 22, 23, 24, 32, 36, 37, 55, 60, 151</b>	<i>1, 39</i>	<b>2A, B, C, 38A, B, C</b>	ODOT will work with local jurisdictions to identify and implement TDM and TSM measures.	
A4. Provide no expansion in highway capacity for state highways, except for turning lanes.		<b>5, 7, 21, 22, 23, 24, 36, 37, 55, 60, 151</b>	<i>1, 39</i>	<b>2A, B, C, 38A, B, C</b>	ODOT will work with local jurisdictions to identify and implement TDM and TSM measures	
A5. Provide a road system that meets the needs for travel between and through the county, recognizing the needs for both local and through travel, with OR 35 and the Hood River Highway (281) as the primary through routes.		<b>5, 7, 22, 23, 24, 36, 37, 55, 60, 151</b>	<i>1, 39</i>	<b>2A, B, C, 38A, B, C</b>	ODOT, Hood River County	

**Bold text with underline = committed funding projects;** **bold text = constrained funding projects;** *italicized text = strategic funding projects;*  
plain text = unconstrained funding projects

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A6. Provide no new interchanges to OR 35, except at the Mt. Hood Meadows Ski Area. Rather, focus on rebuilding existing interchanges to address safety and capacity needs.		30, 55		38A, B, C	ODOT	
A8. Encourage the concentration of services within rural service centers to reduce the need for auto trips.		5, 7, 22, 23, 24, 36, 37, 55, 60, 151	1, 39	2A, B, C, 38A, B, C		

**2. Air Service**

**Implementation Solutions for Air Travel**

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A9. In lieu of developing new airports, promote continued use and expansion of existing public use airports.			73		ODOT, County, Ports	Local jurisdictions responsible for comprehensive plan and zoning that protects airports, residences.
A10. Adopt land use regulations and airport master plans that include provisions to protect against land use encroachments adjacent to airports.			73		County, cities, Ports	Local jurisdictions responsible for comprehensive plan and zoning that protects airports, residences.
A11. Investigate means to address conflicts associated with the proximity of private airports to highways, e.g., signage, land use controls, etc.				Investigate perceived conflict with Hanel Airport near OR 35	ODOT, Hood River County	Requires coordination between ODOT and County.

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A12. Develop improved emergency landing facilities.					ODOT Aeronautics Division, USFS	Defers to airport master plan.
A13. Investigate means to avoid conflicts with seaplanes and other river users.				Define potential measures to avoid user conflicts.	ODOT Aeronautics Division, Port of Hood River, USCG, City of Hood River	Will require extensive coordination
A14. Encourage the development of aircraft refueling facilities.					Port of Cascade Locks, ODOT Aeronautics Division	
A15. Encourage private airport shuttle service to Portland.					Port of Hood River, MHEA, CAT	Could reduce traffic on I-84.

**3. Bicycles**

**Implementation Solutions for Bicycle Travel**

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A16. Improve signing of bikeways, particularly destination signing.					ODOT, local jurisdictions, USFS	
A17. Add or improve bike lanes or widen shoulders as part of planned highway projects or as separate projects. Where feasible, provide standard continuous five-foot (at minimum) shoulders.		<b>9, 15.1, 15.2, 40, 41</b>	72		ODOT, County, and cities	

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A18. Create alternative routes to avoid conflicts with other modes, per adopted bicycle plans.		25			County and cities	Implemented in County Bike Plan and County and city TSPs.
A19. Investigate opportunities to site services, e.g., parking and camping, for cyclists.		43			ODOT, USFS	Requires study to determine location.
A20. In the long term, expand bridge widths to provide bikeways on all bridges. In the short term, add a bicycle/pedestrian path to I-84 bridges to provide access across railroad tracks to waterfront facilities.		9			ODOT	Refinement study is needed for bike crossings at the I-84 bridges.
A21. Design a countywide bike system that facilitates both local and through traffic, and provide connections to local bicycle and hiking systems where feasible.		<i>15.1, 15.2, 28, 41</i>	27, 72		ODOT, County, Cities, USFS	
A22. Investigate alternative funding sources, use of volunteer groups, and other methods for off-highway bikeway maintenance.					ODOT, Local jurisdictions	
A23. Provide bicycle facilities in urban areas and provide shoulders to accommodate bicycle use on state highways and local roads, per adopted bicycle master plans.	72	<i>15.1, 15.2, 41</i>	72		ODOT, local jurisdictions	
A24. Reconcile differences between state and local standards for bicycle facilities.		28, 32	27		ODOT, local jurisdictions	ODOT has initiated a process for reconciliation.
A26. Emphasize shoulder maintenance (surfacing, cleaning, vegetation removal), particularly in the peak summer cycling months.		35			ODOT	Subject to available funding, additional shoulder maintenance will be programmed.

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**4. Pedestrian Travel**

## Implementation Solutions for Pedestrian Activity

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A28. Improve the safety of pedestrian crossings in rural centers through additional/improved signing and lighting and speed control measures.					ODOT	Projects to improve pedestrian safety will be identified in consultation with the County.
A29. Develop a continuous and interconnected pedestrian system that includes Trail 400, HCRH, and Chinook Trail (loop hiking trail).		17, 28, 32, 42			ODOT, County, Cities, USFS	
A30. In urban areas, at a minimum, provide unobstructed six-foot sidewalks on both sides of state highways and local arterials and convenient and safe pedestrian crossings. In residential areas, provide at least five-foot sidewalks on both sides of local streets.		3, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 11, 12, 13, 40, 105		38A, B, C	Cities, ODOT	38A, B, C Involves an environmental assessment prior to engineering and construction of intersection improvements.
A31. Add shoulders in any improvements to the existing roadway network.		25	72		ODOT	See <i>Roadway Conditions</i> section for shoulder discussion

**5. Public Transit**

## Implementation Solutions for Transit

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A33. Ensure the continuity of bus and passenger rail services. Encourage stops in Cascade	45	35, 68			ODOT, Local Jurisdictions, CAT, Amtrak.	Dependent on Market forces and Congressional funding.

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
Locks that link to the Locks area. Maintain a bus center in uptown Hood River to facilitate low-income access to transit services.						
A33a. Maintain a bus center in uptown Hood River to facilitate low-income access to transit services.					City of Hood River, CAT	Identify potential locations
A34. Investigate the feasibility of transit services to Washington communities to reduce commuting.					ODOT, CAT, Washington DOT.	
A35. Utilize transit as a primary means to ensure transportation accessibility for the transportation disadvantaged.	<i>45</i>	<i>68, 69</i>			ODOT, Local Jurisdictions	
A36. Incorporate transit service needs in land use decisions.					ODOT, Local Jurisdictions	
A37. Investigate opportunities to provide shuttle services to ski areas.		<i>68</i>			Ski industry and local economic development groups	
A38. Analyze the feasibility of a multi-modal transportation center.		<i>43</i>			Cities, County, CAT.	Requires identification of location
A39. Encourage the Transit District to conduct an education campaign on available transit services.		<i>68</i>			CAT, Local Jurisdictions, ODOT.	
A40. Investigate transit service opportunities associated with Edgefield Station.					CAT, Greyhound, Amtrak, Edgefield Station	
A41. Ensure ongoing intercity bus service between Hood River, Cascade Locks, and Portland.	<i>45</i>				CAT, Local Jurisdictions, Greyhound	

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A42. Develop "Park and Ride" and "Park and Pool" lots and additional bus stops and shelters.		<i>104</i>	67		Cities, CAT, County	

## 6. Rail Service

### Implementation Solutions for Rail

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A43. Ensure interconnection of rail with other modes.		43		43	ODOT, UPRR, County, Cities.	Will require study to determine location of a multi-modal transportation center.
A44. Maintain Amtrak service on the Washington side of the Columbia River; Restore Amtrak service on the Oregon side.		<i>19, 20</i>			ODOT, local jurisdictions	Work with Amtrak, Union Pacific RR, and Congress to restore service.
A45. Promote excursion tourism uses on UP, with connections to the Washington side of the Gorge including opportunities for dedicated service to ski areas from Portland via railroad/buses.					MHEA, rail providers, ODOT, ski areas.	Could tie into Edgefield station if that project proceeds.
A47. Provide additional signage, flashing lights at railroad crossings as warranted on Highways 281 and 282.					ODOT Rail Section	
A49. Explore railbanking opportunities if railroad is closed.					ODOT Rail Section	

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A50. Make infrastructure improvements (railroad, streets, utilities, etc.) to enhance the investment climate for rail users.		<i>19, 20</i>			ODOT, UPRR, Cities, County, MHRR	
A51. Maintain active rail service to Parkdale for both freight and excursions.		<i>19, 20</i>			County, Cities, MHRR	Work with MHRR to secure funding for maintenance of the system.
A52. Target industrial recruitment on rail shippers.		<i>19, 20</i>			Port, MHRR, Cities, County, ORDD	
A53. Continue programs to upgrade railroad crossings in conjunction with other roadway improvements, with a priority to address safety improvements.		<u>E</u>			ODOT, County, Cities	

**7. Truck Freight**

Implementation Solutions for Truck Freight

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A54. Address conflicts between farm vehicles and autos in the upper valley through signage and increased highway shoulder widths.			72		ODOT, County	Shoulder widening projects are identified in the <i>Bicycle</i> section.
A55. Provide chainup areas before the steep grade, on the lower section of Hwy. 35 and on 13 Street, south of Oak Street.		<i>52, 60</i>			ODOT, County, City of Hood River	

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A56. Improve truck access to commercial and industrial sites, including turn and acceleration/deceleration lanes where appropriate.		22, 23, 24, 55			ODOT, County, cities	
A57. Review and modify if needed, the current hazardous materials response program. Identify potentially unsafe locations (e.g. access/egress points to industrial sites) and develop necessary improvements to accommodate customary freight transport needs.					County, emergency services providers	ODOT District staff will work with Emergency providers as necessary.
A58. In coordination with the Mt. Hood National Forest, Oregon Department of Forestry, Hood River County, and large private timberland owners in the corridor, provide safe truck access to OR 35 for forest operations.					ODOT, USFS, Dept. of Forestry, County, private landowners	Per administrative rules and access management standards, access will be regulated.

**8-1. Other Modes**

**Implementation Solutions for Other Modes**

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
<b>Waterborne Transportation</b>						
A59. Identify means to reduce conflicts among commercial and recreational waterway users.					ODOT, ports, waterway users	ODOT will work with the local agencies and water users to identify strategies.

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
A60. Improve docking and passenger loading/unloading facilities.					Ports	Port districts need to identify strategies.
A61. Improve access and intermodal connections to port facilities.		5, 43		2 A, B, C, 38, A, B, C	Ports, Cities, County, CAT	The proposed multi-modal transportation center will require study to determine appropriate location.
<b>Pipeline</b>						
A62. Accommodate pipelines in highway rights-of-way.					ODOT	
<b>Telecommunications</b>						
A63. To the extent feasible, utilize pipeline rights-of-way as bicycle and pedestrian pathways and wildlife corridors.					Local jurisdictions and agencies, utility providers, USFS.	Coordination between local agencies, utility providers, and Forest Service will be necessary.
A64. Promote telecommunication technologies and programs that reduce vehicle miles traveled.					MHEA, Local jurisdictions.	Study on joint installation of fiber optics is underway.
A65. Consolidate telecommunications facilities to reduce the number of towers and visual impacts.					ODOT, County, USFS	Requires Forest Service and local jurisdiction regulation.
A66. Coordinate the installation of fiber optics with highway improvements.					ODOT	This is ODOT standard operating procedure.
A67. Site communication facilities to eliminate "dead spots" in the Corridor.					County, service providers	Coordination between local agencies and service providers will be necessary.

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**C. Regional Connectivity**

**Implementation Solutions for Connectivity**

<b>Corridor Plan Objectives</b>	<b>Service Improvements</b>	<b>Maintenance Operations &amp; Management</b>	<b>Modernization</b>	<b>Refinement Planning Needs</b>	<b>Implementing Jurisdiction</b>	<b>Comments</b>
<b>Connections Among Modes</b>						
B1. Develop intermodal center(s) in Hood River to improve both regional and local intermodal connectivity.		43			ODOT, City of Hood River, MHRR, CAT	Exact location of center has yet to be determined.
<b>Connections Among Places</b>						
B3. In lieu of major capacity expansions, strive to maintain existing travel times for both autos and freight through high levels of facility management (acceleration/deceleration lanes, turn refuges, coordinated signals, and access management).		3, 7, 21, 22, 23, 24, 55		38A, B, C	ODOT, Hood River County	TSM and TDM strategies will help attain this objective.
B4. Investigate improvements to the following junctions to promote safety and maintain travel times: - I-84/Hwy 35 - Hwy 35/Hwy 30 - Hwy 35/Hwy 281		55		38A, B, C	ODOT	Intersection improvements will require further study and environmental analysis.
B5. Promote use of parallel routes to reduce reliance on state facilities for local trips.		36, 37, 60, 151	<i>1, 39</i>		ODOT, County,	
<b>Interconnected, Cooperative Transportation Roles Among Corridor Communities</b>						
B6. Support development of traveler information systems.		30			MHEA, ODOT, Ports, County	

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
B8. Improve, expand and coordinate signage to inform travelers and trucks of route choices available.		30			ODOT, Local Jurisdictions	ODOT will work with jurisdictions to identify needs.

**D. Congestion**

**Implementation Solutions for Congestion**

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
<b>Facility Management</b>						
C7. Allocate state resources to highway projects according to the following priorities: 1. Maintenance of the existing facility to ensure that it remains safe and functional, e.g. fixing potholes. 2. Preservation of the roadway by investing in roadbed and pavement reconstruction as needed to minimize maintenance costs; 3. Safety improvements; 4. Transportation system management to optimize existing highway capacity; and 5. Capacity improvements					ODOT	The overall philosophy for dealing with congestion in the corridor is consistent with this prioritization.
C13. Provide no improvements to state highways solely for capacity purposes. Provide turning lanes and other improvements to address safety-related issues.		<i>3, 21, 22, 23, 24, 36, 44, 55, 60, 151</i>		<b>38A, B, C</b>	ODOT	
C1. Encourage transportation demand management (TDM) and transportation system management (TSM) programs in the corridor.	45	<i>18, 30, 43, 104</i>		<b>38A, B, C</b>	ODOT, County, Cities.	

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
C11. Promote increased use of incident management and motorist information systems to minimize congestion during peak hours.		30			ODOT	ODOT has a program in place for this.
C12. Encourage transit use to accommodate a portion of the growth in trips.	45	<i>18, 43, 104</i>			County, Cities, CAT	Exact location to be determined
C2. Adopt the highest applicable (most restrictive) access management categories for both arterials and collectors, consistent with existing or planned adjacent land uses.					ODOT, County, and Cities	See standards in text.
C3. <b>Develop consistent street classifications, and speed and access management standards within and between urban areas.</b>					ODOT, County, and Cities	The TSPs for the County & 2 cities were designed to ensure consistency.
C5. Consolidate access points along arterials and collectors.					ODOT, County, and Cities	This needs to be implemented by local jurisdictions., especially in rural centers.
C6. Encourage state and private timber landowners to utilize existing access points to OR 35 for management, fire protection, harvesting and recreation purposes.					ODOT	
<b>Congestion in Urban Areas</b>						
C9. Develop local access management and circulation plans to relieve localized congestion problems and to meet local transportation system needs.		<i>3, 21, 30, 32</i>	39		Local Jurisdictions	
C10. Investigate signalization as a potential solution to safety and congestion problems at I-84/OR 35 interchange.				<b>38A, B, C</b>	ODOT, Port, City of Hood River	This will require further study and an environmental assessment.

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
<b>Congestion in Rural Areas</b>						
C14. Achieve LOS standards for state facilities as established in the Oregon Highway Plan, i.e. LOS C or better on Highways 281 and 282 and LOS B on OR 35.					ODOT	
C15. Preserve rural sections as rural through access management and land use controls.					ODOT, Hood River County	

**E. Roadway Conditions and Safety****Implementation Solutions for Conditions and Safety**

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
<b>Roadway Geometry</b>						
D1. Investigate solutions to problems associated with substandard geometry.		<i>23, 24, 55</i>			ODOT	ODOT will perform analysis of trouble spots.
D2. Install warning signs in areas of substandard geometry, as warranted based upon accident history.					ODOT, County	ODOT will monitor accidents and install signs as needed.
D4. Improve intersections with limited sight distances by realignment and other means.		<i>22, 23, 24, 55</i>	<b>2A, B, C,</b>	<b>4, 38A, B, C</b>	ODOT	
D5. Target realignment and widening to sections with above average accident rates, slide prone areas, and to sections with high congestion rates where there is a favorable cost/benefit ratio.					ODOT	

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
D6. In the short term, target pavement of substandard shoulders to "easy fix"/low cost area.		72			ODOT	
<b>Roadway Conditions</b>						
D8. Maintain existing facilities as the highest priority for the allocation of resources.		<u>C, D, E, 5, 7, 8, 26, 57, 101</u>	201, 202, 203		ODOT	
D9. For state facilities, maintain roadway surface conditions at 90% fair/better by the year 2010.		<u>C, D, E, 7, 25</u>			ODOT	
D10. Review and modify as needed maintenance priorities to focus on key locations, e.g. steep grade entering into Hood River and between Mt. Hood Meadows and the US 26/OR 35 intersection.		26, 57			ODOT	
D11. Strengthen enforcement of speed and weight restrictions to extend roadway longevity.					ODOT, State Police, County Sheriff	ODOT Motor Carrier Section will work with state police to identify problem locations.
D12. Adequately finance the rockfall management program to address key rockfall problem areas in the corridor.		<u>C, 57</u>			ODOT	
D13. Develop a comprehensive, long-term management and maintenance program for that section of OR 35 being undermined by the East Fork Hood River through "the Narrows" and near Sherwood Campground		<u>C, 26, 101</u>			ODOT	
D15. Upgrade substandard guard rails and shoulders.		5, 25, 72, 105	72		ODOT	
D16. Address drainage problems, including those that affect the function and condition of the roadway.		26, 27, 101, 105	27		ODOT, County	

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
D17. Research alternatives for more efficient road maintenance, such as jurisdictional transfers or interagency maintenance agreements.					ODOT Districts, local jurisdictions.	
D18. Where feasible, use pavement overlay materials that reduce wet pavement spray.		32			ODOT	ODOT will investigate improvements to pavement and maintenance materials and improved techniques.
D19. Investigate solutions to highway pavement stress caused by weather conditions in higher elevations.					ODOT	ODOT will investigate improvements to pavement and maintenance materials and improved techniques.

**Implementation Solutions for Safety**

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Plan Project	Implementing Jurisdiction	Comments
E1. <b>Target resources</b> to reduce accident potential in high accident locations within the Corridor, using the Safety Management System to identify unsafe intersections and highway segments.		<i>3, 22, 23, 24, 26, 30, 34</i>		4	ODOT	
E2. Apply facility management techniques, including access management, to improve safety in congested areas.					ODOT	See access management standards in Congestion section.

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Plan Project	Implementing Jurisdiction	Comments
E3. Promote cooperative enforcement among police and sheriff offices and target enforcement activities to high-accident locations.					ODOT, County, and Cities	Education and enforcement is a lower cost solution than capital improvements.
E4. Install deer crossing warning devices, e.g., reflectors, in upper Hood River Valley.					ODOT	ODOT Districts will investigate need and install as appropriate.
E5. Investigate safety concerns at OR 35/Odell Road intersection, e.g., better signage, more downhill turning storage.		<b>55</b>			ODOT	Concern over safety.
E6. Evaluate retaining the four-way stop at OR 35/US 30 intersection.				<b>38A, B, C</b>	ODOT, City of Hood River	
E7. Explore the need for larger clear zones to improve ice melt and decrease road kill.					ODOT, USFS	Possible environmental or aesthetic consequences.
E8. Provide chain up areas at the base of OR 35 (Button Junction area) and 13 <sup>th</sup> Street		<b>37, 52, 60</b>		<b>38A, B, C</b>	ODOT, City of Hood River	Chain-up area will improve traffic flow, especially for trucks.
E9. Investigate the feasibility of signage to indicate lane locations when snow-covered.		<b>30</b>			ODOT, emergency service providers.	
E10. Improve lighting at key locations (e.g. I-84/US 30 intersection) and maintain delineation (e.g. fog lines, reflector buttons) to be highly visible.		<i>21</i>		<b>38A, B, C</b>	ODOT	
E11. Install safety barriers, e.g. guard rails, gabions, in high hazard locations to meet highway safety standards.		<i>5</i>			ODOT	

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Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Plan Project	Implementing Jurisdiction	Comments
E12. Install weather condition monitoring devices at strategic locations.		<b>30</b>		2A, B, C	ODOT, County and Cities	
E13. Review and modify, if needed, the current hazardous materials response program. Identify potentially unsafe locations (e.g., access/egress points to industrial sites) and develop necessary improvements to accommodate customary freight transport needs.					ODOT, work with emergency service providers	
E15. Investigate the need for additional signage at the reduction from two lanes to one lane north of Pine Grove.					ODOT, County	
E16. Investigate the need for additional school bus stop signage.					County, school districts	
E17. Consider realignment or other improvements of intersections with limited sight distances.					ODOT, County, Cities	
E18. Retrofit bridges to meet seismic standards.			<i>201, 202, 203</i>		ODOT	

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**F. Environmental and Energy Impacts****Implementation Solutions for Environment and Energy**

Corridor Plan Objective	Service Improvements	Maintenance Operations and Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
<b>Scenic Resources</b>						
F1. Integrate vegetation management measures into road management and maintenance activities to create and protect scenic vistas, e.g. scenic buffers for timber harvests, and to replace or mitigate for vegetation lost to transportation system projects.		28			ODOT, County, Cities, USFS	Vegetation management techniques will be used to protect existing vistas and buffers, and in approved locations, to create new vistas. ODOT will be preparing a management plan to guide the use of vegetation management techniques by milepost throughout the corridor.
F2. Remove and prohibit scenic intrusions such as billboards. Investigate alternatives to billboards, e.g. Oregon Tourism Alliance travel information program.					ODOT, County, Cities, OTA	ODOT will work with the OTA and local jurisdictions to identify signing and other techniques to provide traveler information while protecting the scenic qualities of the Gorge.
F3. Identify and construct additional roadside turnoffs at scenic viewpoints.		28, 32, 34	27		ODOT, USFS	
F5. Develop protection measures for identified scenic resources in local plans.					ODOT, local jurisdictions	ODOT will manage its facilities in conformance with adopted state and local plans.
F6. Promote the marketing of the Mt. Hood Loop and other tour routes within the county.		17, 15.1, 15.2, 18, 32	2A, B, C		ODOT, Regional Economic Development Groups	ODOT supports use of OR 35 as an alternate route to/from ski areas.

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Corridor Plan Objective	Service Improvements	Maintenance Operations and Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
<b>Natural Resources</b>						
F8. Use transportation improvement projects to rectify negative impacts to previously impacted natural resources.		<b>26, 57, 80-89, 91-94</b>			ODOT	
F9. Implement recommendations on road improvement and maintenance practices from the Coastal Salmon Initiative		<b>26, 62, 80-89, 91-94</b>			ODOT	
F10. Modify/remove barriers to fish passage as part of road maintenance and improvements projects.		<b>26, 27, 31, 62, 77, 80-89, 91-94</b>			ODOT	
F11. Avoid/minimize transportation system improvement impacts to sensitive natural areas.		<i>21, 22,, 23, 24, 25, 26, 31, 57, 80-89, 91-94</i>			ODOT, local jurisdictions, USFS	
F12. Minimize impacts from the transportation system, particularly local roads connecting OR 35, on wildlife migration routes.		<i>21, 22,, 23,24, 25, 31, 57, 80-89, 91-94</i>			ODOT, local jurisdictions, USFS	
F13. Coordinate transportation system planning with wildlife corridor planning being undertaken by the Oregon Department of Fish and Wildlife.		<b>80-89, 91-94</b>			ODOT, ODFW	
F14. Work with the Confederated Tribes of Warm Springs to identify and evaluate long term programs to restore fish populations and to improve water quality in the E. Fork Hood River basin, including the feasibility of relocating OR 35 away from the river.					ODOT, Confederated Tribes of Warm Springs.	Study to assess feasibility of relocating OR 35 should be conducted as part of long-term program to restore fish populations and to improve water quality in the East Fork Hood River basin.

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Corridor Plan Objective	Service Improvements	Maintenance Operations and Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
<b>Air Quality/Energy Impacts</b>						
F15. Promote more energy-efficient freight movement by rail and water.		<i>19, 20</i>			ODOT, MHEA, County, Port, MHRM, other service providers	
F16. Promote the use of alternative fuels.					Private Sector	Provision of refueling sites and other necessary infrastructure, if implemented, will be through private sector initiatives.
F17. Use construction techniques that minimize negative air quality impacts.					ODOT, local jurisdictions	ODOT will incorporate dust and emission control measures as appropriate during construction projects.
F18. Encourage energy conservation in the design, construction, and operation of transportation facilities.	<b>67</b>	<i>18, 43, 45, 69</i>			ODOT, local jurisdictions	
<b>Water Quality/Quantity</b>						
F19. Design roadway improvements and new facilities to minimize and treat surface runoff and pollutants.		<b>26, 27, 31, 62, 77, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 91, 92, 94, 105</b>			ODOT, local jurisdictions	Grass-lined swales, catchment basins, and other runoff collection and treatment techniques are incorporated into improvement projects as needed to protect water quality.
F20. Improve the collection of sand and gravel from roadways to avoid/minimize impacts to water courses.		<b>31</b>			ODOT, local jurisdictions	

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Corridor Plan Objective	Service Improvements	Maintenance Operations and Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
F21. Design new improvements and retro fit existing transportation improvements to encourage the conservation, restoration, and protection of anadromous fish and bull trout.		31			ODOT, local jurisdictions	

**G. Social and Land Use Impacts**

Implementation Solutions for Social and Land Use

Corridor Strategy	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
G1. Design transportation system improvements to preserve community livability and to avoid, minimize or eliminate impacts to sensitive cultural resources and other community resources.		10.1-10.6, 11, 21, 22, 23, 24, 25		39	ODOT, County, Cities	TSPs developed for each local agency have considered potential impacts to cultural and other community resources in the evaluation and selection of projects.
G2. Encourage building siting and design to reduce noise and visual impacts from adjacent transportation facilities.					ODOT, County, Cities	ODOT will work with local agencies to identify where zoning and development codes should be used to regulate building siting and design adjacent to transportation facilities.
G3. Where feasible, use transportation projects to support development of low income and affordable housing.					County, Cities	TSPs are consistent with community housing goals, in that they provide for access and circulation and transit services throughout the community.

**Bold text with underline = committed funding projects;** bold text = constrained funding projects; *italicized text = strategic funding projects,* plain text = unconstrained funding projects

Corridor Strategy	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
G4. Consult with Native American Tribes, state agencies, and local governments concerning the presence of significant cultural resources and uses.		<i>21, 23, 24</i>			ODOT, County, Cities	TSPs have considered potential impacts to cultural and other community resources in the evaluation and selection of projects. More detailed study will be conducted as projects move through planning & implementation.
G5. Encourage transportation-efficient land use patterns that reduce vehicle miles traveled and promote a live/work balance, e.g. increased densities, infill and clustered development, mixed uses, maximum parking ratios, and circulation systems that reduce out-of-direction travel.		<i>21, 22, 23, 24, 25, 26</i>		39	ODOT, Local Jurisdictions	Cooperative and coordinated land use and transportation planning has been integrated into the development of local TSPs and this Corridor Plan. ODOT will continue to work with local agencies to adopt policies and ordinances implementing the TSPs and Corridor Plan.
G6. Promote cooperation between ODOT and local governments in planning and project development.					ODOT, County, Cities	
G7. Utilize access management to limit the impacts of new development on highway congestion.			<b>2A, B, C</b>		ODOT	
G8. Establish standards for setbacks adjacent to state rights-of-way.					ODOT, County, Cities	
G9. Take advantage of multi-modal capabilities/capacities to promote development that is not solely auto/truck dependent.		<b>10.1-10.6</b>			County, Cities	

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plain text = unconstrained funding projects

Corridor Strategy	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
G10. Ensure coordination with local community planning efforts.					ODOT, County, Cities	
G11. Ensure that city and county comprehensive plans, zoning ordinances and local and regional transportation system plans are consistent with Corridor Plan Objectives.					ODOT, County, Cities	
G12. Limit additional commercial and residential land use designations along the corridor outside UGBs to designated rural community centers or exception areas.					County, Cities	
G13. Design highway improvements to limit adverse land use impacts, consistent with the TPR and local land use regulations.		<b>10.1-10.6</b>			ODOT, County, Cities	

**H. Economic Impacts**

**Implementation Solutions for Economic Development**

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
H1. Design transportation improvements to enhance access to existing and planned industrial and commercial sites.		<i>19, 20, 22, 23, 24, 55</i>		<b>2A, B, C</b>	ODOT, County and Cities.	
H2. Promote I-84/OR 35 as an alternative route from Portland to Mt. Hood recreation areas.		<b>30</b>		<b>38A, B, C</b>	ODOT, and MHEA	
H11. Improve recreation/tourist-oriented directional signing.		<b>30</b>			ODOT, County, Cities	

**Bold text with underline = committed funding projects; bold text = constrained funding projects; *italicized text = strategic funding projects;* plain text = unconstrained funding projects**

Corridor Plan Objectives	Service Improvements	Maintenance Operations & Management	Modernization	Refinement Planning Needs	Implementing Jurisdiction	Comments
H3. Support projects identified through the Regional Strategies Program and other economic development activities through appropriate transportation system improvements.		5, 7, 8, 9, 19, 20, 28, 32	<u>B</u>	2, 38	ODOT, County, Cities, and MHEA	
H4. Coordinate transportation system improvements with strategies developed by the County's Economic Development Committee.			<u>B</u>		ODOT, County	
H5. Improve convenient access to a variety of recreational opportunities.		<b>10.1-10.6, 11, 19, 20</b>	<u>B</u>		ODOT, County, Cities, USFS	
H6. Provide connections to recreational trails.		17, 32, 42			ODOT, County, Cities, and MHEA.	
H7. Support recreational opportunities associated with seaplanes and commercial helicopter services.					ODOT, Ports	
H8. Promote excursions and other water recreation uses.		<b>12, 13, 15.1-15.2, 17, 18</b>			ODOT, Ports, County, Cities	Waterborne recreation and travel is supported through the provision of efficient, multi-modal access to port properties.
H9. In coordination with the Forest Service, provide adequate snowparks to meet recreation demand.					ODOT, USFS, County	Mt. Hood NF has prepared a master plan in conjunction with ODOT and Hood River County for development of additional snowparks.

**Bold text with underline = committed funding projects;** **bold text = constrained funding projects;** *italicized text = strategic funding projects;*  
 plain text = unconstrained funding projects

## C. SOLUTION LIST BY FUNDING PRIORITY

This section identifies those solutions that could be termed “projects”, i.e., there is something specific to build or repair, as opposed to operational practices or procedures. The following lists all of the projects sorted first by funding priority and then by project number. The project numbers are those used in the Matrix of Objectives and Solutions in Section B, as well as in Chapter III. In addition, this table identifies the specific location of the solution (highway and milepoint), the ODOT Region responsible for the project, and the project type (modernization, safety, preservation, etc.). The table also lists the jurisdiction the project is within (county and city if applicable), estimated project cost, a brief project descriptions and comments or justification for the project.

Costs are preliminary estimates based upon information provided by local governments or developed by ODOT. Local contributions to project costs could result in adjustments to the prioritization of projects. That is, given ODOT’s limited resources, the greater the “local match,” the higher the likelihood of implementing the project.

# Hood River to Mt. Hood Corridor Plan - Solution List

## Solution List by Funding Priority

August 1999

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
<b>FUNDING PRIORITY: Committed</b>										
B	64.08	64.08	26	1	Modernization		Hood River	\$4,000	Reconstruct the Mt. Hood Meadows access road (1.7 miles) and OR 35 interchange	Improve access, safety, and operation of this heavily used roadway connection to Mt. Hood Meadows.
C	72	75	26	1	Operation		Hood River	\$3,694	Rockfall mitigation along OR 35 from MP 72.00 to MP 75.00	Ensure safe and efficient operation of highway.
D	59	65.8	2	1	Operation	City of Hood River	Hood River	\$9,584	Inlay I-84 truck lane/overlay from Mitchell Point to Hood River, including reconstruction of UPRR (WB) bridge #2443	Maintain and preserve efficient highway and rail operations.
E	63.4	64	2	1	Bridge		Hood River	\$420	Replace I-84 deck/rail (w/ pres project) for UP RR (WB) Bridge #2443.	Maintain and preserve efficient highway and rail operations.
F	46	59	2	1	Operation	Cascade Locks	Hood River	\$12,456	Cascade Locks - Mitchell Pt. Asphalt Overlay	Maintenance and preservation of highway.
<b>Summary for FUNDING PRIORITY = Committed (5 records)</b>								<b>\$30,154</b>		
<b>FUNDING PRIORITY: Constrained</b>										
002.A	46.35	46.35	2	1	Modernization	Cascade Locks	Hood River	\$2,000	Study and prepare environmental assessment for new interchange at Forest Lane within Cascade Locks	Project provides full access to I-84 for safety vehicles from Cascade Locks. Full interchange access is critical to development of the eastern side of town and the industrial areas of the Port. Emergency response units can currently be required to travel. A full interchange would enhance the City's ability to attract and retain commercial and industrial employers.

**Hood River to Mt. Hood Corridor Plan - Solution List**

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**FUNDING PRIORITY: Constrained**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
002.B	46.35	46.35	2	1	Modernization	Cascade Locks	Hood River	\$2.000	Forest Lane in Cascade Locks; Prepare Final Engineering Plans and permits for project 2.A	Project provides full access to I-84 for safety vehicles from Cascade Locks. Full interchange access is critical to development of the eastern side of town and the industrial areas of the Port. Emergency response units can currently be required to travel. A full interchange would enhance the City's ability to attract and retain commercial and industrial employers.
002.C	46.35	46.35	2	1	Modernization	Cascade Locks	Hood River	\$2.000	Forest Lane in Cascade Locks; Construct project 2.B	Project provides full access to I-84 for safety vehicles from Cascade Locks. Full interchange access is critical to development of the eastern side of town and the industrial areas of the Port. Emergency response units can currently be required to travel. A full interchange would enhance the City's ability to attract and retain commercial and industrial employers.
010.1	30.81	31.28	100	1	Pedestrian	Cascade Locks	Hood River	\$70	Build sidewalks along Wa-Na-Pa Street (HCRH). Phase 1. Regulator to School.	Help complete pedestrian system, curbs, gutters. Provides safe pedestrian access to shopping areas, the school, and abutting streets. Connects existing sidewalks and crossings for HCRH (WaNaPa Street). Gives the city a better access to shopping.

**FUNDING PRIORITY: Constrained**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
010.2	30.81	31.28	100	1	Pedestrian	Cascade Locks	Hood River	\$31	Build sidewalks along Wa-Na-Pa (HCRH) Street Phase 2. Bridge to Regulator	Help complete pedestrian system, curbs, gutters. Provides safe pedestrian access to shopping areas, the school, and abutting streets. Connects existing sidewalks and crossings for HCRH (WaNaPa Street). Gives the city a better access to shopping.
010.3	30.81	31.28	100	1	Pedestrian	Cascade Locks	Hood River	\$61	Build sidewalks along Wa-Na-Pa (HCRH) Street Phase 3. School to Benson, south side.	Help complete pedestrian system, curbs, gutters. Provides safe pedestrian access to shopping areas, the school, and abutting streets. existing sidewalks and crossings for HCRH (WaNaPa Street). Gives the city a better access to shopping.
010.4	30.81	31.28	100	1	Pedestrian	Cascade Locks	Hood River	\$61	Build sidewalks along Wa-Na-Pa (HCRH) Street Phase 4. School to Benson, north side.	Help complete pedestrian system, curbs, gutters. Provides safe pedestrian access to shopping areas, the school, and abutting streets. existing sidewalks and crossings for HCRH (WaNaPa Street). Gives the city a better access to shopping.
010.5	30.81	31.28	100	1	Pedestrian	Cascade Locks	Hood River	\$53	Build sidewalks along Wa-Na-Pa (HCRH) Street Phase 5 Benson to Forest Lane, south side.	Help complete pedestrian system, curbs, gutters. Provides safe pedestrian access to shopping areas, the school, and abutting streets. existing sidewalks and crossings for HCRH (WaNaPa Street). Gives the city a better access to shopping.

**FUNDING PRIORITY: Constrained**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
010.6	30.81	31.28	100	1	Pedestrian	Cascade Locks	Hood River	\$53	Build sidewalks along Wa-Na-Pa Street (HCRH) Phase 6. Benson to Forest Lane, north side	Help complete pedestrian system, curbs, gutters. Provides safe pedestrian access to shopping areas, the school, and abutting streets. Encourages walking versus automobile use. Keeps pedestrians out of traffic. Connects existing sidewalks and crossings for HCRH (WaNaPa Street). Gives the city a better access to shopping.
012	off			1	Pedestrian	Cascade Locks	Hood River	\$20	Install sidewalk railing along School Access Street from Wa-Na-Pa St.	Provides safe auto and pedestrian access to school. The city and school district completed the paving, curbs and sidewalks along school access road; sidewalk railing was deleted due to lack of funding. The railing provides safety for children.
022	1.29	1.49	282	1	Safety		Hood River	\$750	Realign intersections at Dethman Ridge (2) and Hwy 282	Intersections are difficult to negotiate with large trucks and buses. Realigning the intersections will allow easier turning onto and off of Dethman Ridge. Dethman Ridge is an important road for moving fruit. Project encourages use of high-value farmland in Hood River Valley to remain economically viable.

**FUNDING PRIORITY: Constrained**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
026	65.88	65.88	26	1	Maintenance		Hood River	\$80	Install/upgrade culverts across OR 35 vicinity of Clark Creek	Possible overflow from culverts during Winter could result in freezing water on OR 35 resulting from inadequate drainage facilities. This could result in increased safety hazards to roadway users. Project would help improve drainage along OR 35 and prevent erosion. High water events cause Clark Creek to shift into a variety of channels.
030	64.08	64.08	26	1	Operation		Hood River	\$80	Upgrade elec. reader board at Mt. Hood Mdws access road/OR 35	Directs skier traffic from Mt. Hood Meadows north or south depending upon traffic and road conditions. Encourages bus traffic to ski areas. Sign will warn skiers of danger on these very high traffic roads, and will direct traffic away from congested areas.
031	68.14	68.14	26	1	Maintenance		Hood River	\$100	Improve Robinhood Quarry/bridge to allow disposal of roadway ditch material.	
034	61.24	61.24	26	1	Other		Hood River	\$3	Create a Mt. Hood scenic view site along OR 35- 1/2 mile south of White River Br.	
036	0.78	1.04	281	1	Operation	City of Hood River	Hood River	\$600	Widen 12th St. (Hwy 281) and add one SB lane at south end of couplet to provide center turning lane. Project to include new traffic signal at Pacific.	Improve traffic operations and safety along section of highway convergence/divergence to/from couplet.
037	0.05	0.33	281	1	Operation	City of Hood River	Hood River	\$25	13th St. (Hwy 281) SB between State & May Avenues; Add additional SB lane (by restriping) on 13th St. between State & May Streets- channelization	Addresses need for chain-up area. Improve highway operations.

**FUNDING PRIORITY: Constrained**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
038.A	2C64.07	2C64.62	100	1	Operation	City of Hood River	Hood River	\$50	Hood River - I-84 Connection to OR35 (Button Junction); Study and prepare environmental assessment for signal/intersection improvements @ intersections of OR 35/I-84 with OR 35/HCRH, including installation of actuated signal @ Button Jct.	Facilitate more efficient transportation operations, enhance regional connectivity, reduce congestion, improve safety.
038.B	2C64.07	2C64.62	100	1	Operation	City of Hood River	Hood River	\$100	Hood River - I-84 Connection to OR35 (Button Junction); Prepare Final Engineering Plans and permits for project 38.A	See 38.A
038.C	2C64.07	2C64.62	100	1	Operation	City of Hood River	Hood River	\$1,000	Hood River - I-84 Connection to OR35 (Button Junction); Construct project 38.B.	See 38.A
040	49.44	50.88	100	1	Pedestrian	City of Hood River	Hood River	\$175	Construct sidewalks/bike lanes between Rand & Front Streets along HCRH.	Support alternative modes of travel.
041	0.0	1.17	281	1	Pedestrian	City of Hood River	Hood River	\$50	Construct sidewalks/bike lanes on Hwy 281 between Oak St. & Brookside/Eliot Dr.	Support alternative modes of travel.
055	95.18	95.18	26	1	Safety		Hood River	\$50	Restripe intersection markings to clarify turn movements and improve safety.	Clarify turn movements channelization to improve safety at intersection of two state highways.
057	0.8	0.8	282	1	Maintenance		Hood River		Rockfall Repair	
062	57.42	101.82	26	1	Salmon		Hood River		Length of OR 35 corridor at selected sites; Shoulder Barrier & Sweeper to replace guardrail - Salmon Recovery	Adjust maintenance practices and provide improvements to minimize adverse impacts on salmon habitat.
067	off			1	Transit	City of Hood River	Hood River	\$2	Passenger Shelters	Use of alternative transportation modes. Encourage transit by enhancing convenience of service.

**FUNDING PRIORITY: Constrained**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
069	off			1	Transit	City of Hood River	Hood River	\$10	Transit Phone Upgrades for on-call system.	Support alternative transportation services.
077	65.88	65.88	26	1	Salmon		Hood River	\$150	Clark Creek; Salmon Restoration	Enhance salmon habitat.
080	69.7	69.7	26	1	Salmon		Hood River	\$150	Unidentified creek; Salmon Restoration	Enhance salmon habitat
081	68.57	68.57	26	1	Salmon		Hood River	\$150	Hellroaring Cr; Salmon Restoration	Enhance salmon habitat.
082	69.02	69.02	26	1	Salmon		Hood River	\$150	Engineers Creek; Salmon Restoration	Enhance salmon habitat.
083	76.93	76.93	26	1	Salmon		Hood River	\$150	Crystal Spring Creek; Salmon Restoration	Enhance salmon habitat.
084	78.47	78.47	26	1	Salmon		Hood River	\$150	Cat Creek; Salmon Restoration	Enhance salmon habitat.
085	76.21	76.21	26	1	Salmon		Hood River	\$150	Ash Cr; Salmon Restoration	Enhance salmon habitat.
086	78.16	78.16	26	1	Salmon		Hood River	\$150	Tilly Jane Creek; Salmon Restoration	Enhance salmon habitat.
087	75.85	75.85	26	1	Salmon		Hood River	\$150	Salmon Restoration	Enhance salmon habitat.
088	99.85	99.85	26	1	Salmon		Hood River	\$150	Whiskey Creek; Salmon Restoration	Enhance salmon habitat.
089	64.96	64.96	26	1	Salmon		Hood River	\$150	Meadow Creek; Salmon Restoration	Enhance salmon habitat.
091	61.45	61.45	26	1	Salmon		Hood River	\$150	S Fork of Mineral Creek; Salmon Restoration	Enhance salmon habitat.
092	61.98	61.98	26	1	Salmon		Hood River	\$150	S Fork Iron Creek; Salmon Restoration	Enhance salmon habitat.
093	84.68	64.68	26	1	Salmon		Hood River	\$150	Tieman Cr; Salmon Restoration	Enhance salmon habitat.

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**FUNDING PRIORITY: Constrained**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
094	11.35	11.35	281	1	Salmon		Hood River	\$150	Birdie Creek; Salmon Restoration	Enhance salmon habitat.
101	65.8	65.8	2	1	Maintenance	City of Hood River	Hood River	\$200	Arch Culverts to add drainage capacity	Enhance preservation and maintenance of state facility.

**Summary for FUNDING PRIORITY = Constrained (43 records)**

\$11,874

**FUNDING PRIORITY: Strategic**

001	off			1	Modernization	Cascade Locks	Hood River	\$1,000	New road connecting Frontage Road to Wa-Na-Pa (HCRH) Street	Future reliever for Wa-Na- Pa. Project is required for development within the existing UGB south of I-84 and to enhance access to Port property in this location.
003	30.42	30.42	100	1	Modernization	Cascade Locks	Hood River	\$100	New traffic signal at intersection of Wa-Na-Pa St. (HCRH) and bridge approach road	A traffic signal will reduce traffic conflicts at this intersection by establishing signalized right-of-way.
004	31.09	31.09	100	1	Safety	Cascade Locks	Hood River	\$100	Improve Benson St. to US 30 (HCRH)	Project provides the only access to major undeveloped land south of I-84 to HCRH (WaNaPa). Without this project, during ice and snow, cars will slide down Benson Street at US 30 (HCRH) and will not be able to stop; sliding into oncoming traffic on US 30 (HCRH).
005	off			1	Bridge	Port of Hood River	Hood River	\$8,000	Hood River Interstate Bridge redecking/lift span modernization	Project provides safe passage for modern barge traffic through the lift span. Project also supports local wood, fruit, and service industry traffic. Supports development of the Port of Klickitat (WA) Industrial Park and the Port of Hood River.

**FUNDING PRIORITY: Strategic**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
011	off			1	Pedestrian	Cascade Locks	Hood River	\$154	Forest Lane sidewalk, curb & gutter (north side) Wa-Na-Pa to Jackson Roberts	Project will provide safe pedestrian access along Forest Lane HCRH -- the edge is currently gravel and dirt). It will also improve vehicle safety by providing curbs and gutters to channel rainwater into the storm drain system. Extends existing sidewalk
015.1	off			1	Bike	Cascade Locks	Hood River	\$133	Phase 1 bike lanes with overlay on Forest lane from WaNaPa to Jackson Roberts.	Extends bike path through Cascade Locks and connects to bike path from Portland through town via the Historic Highway. Will encourage bikers to continue into the city and to continue beyond.
015.2	off			1	Bike	Cascade Locks	Hood River	\$180	Phase 2 bike lanes with overlay on Forest lane from Jackson Roberts to I-84 (County Road).	
018	off			1	Transit	Cascade Locks	Hood River	\$50	Create Park and Ride lot in Cascade Locks (specific location to be determined)	Access to a park & ride would make it easier to commute to work. Project reduces auto travel, promotes transit, encourages car/vanpools, links autos to pools or transit. Could lead to increased transit services.
019	off			1	Rail		Hood River	\$500	Tie replacement for Mt. Hood Railroad between City of Hood River and Parkdale	There are 70,000 ties in the 22 mile line. By replacing 2,000 per year, this program will replace them all over a 35 year period, which is an industry-wide objective. Mt. Hood Railroad line addresses freight, passenger, and tourism needs.

## FUNDING PRIORITY: Strategic

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
020	off			1	Rail		Hood River	\$100	Rail retaining wall improvements at Mt. Hood RR switchback location.	Loss of switchback would stop the operation of the Mt. Hood Railway. The railway addresses freight, passenger, and tourism demand in the area. Annually moves over 8,600 tons of freight and 40,000 passengers.
021	48.98	48.98	100	1	Operation	City of Hood River	Hood River	\$100	Add turning lanes & illumination at the intersection of Country Club Road & HCRH (Cascade)	Reduces congestion on Hwy 100 at County Club Road intersection. Vehicles that would turn onto Country Club won't block traffic. Supports increased traffic from residential uses in west side of UGB and rural residential. Provides for safer turn movement/operations.
023	2.72	2.72	282	1	Operation		Hood River	\$600	Add turning lanes to Hwy 282 at Davis Drive	Project provides more efficient movement by vehicles that would otherwise block traffic into a turning lane. Intersection is frequented by trucks hauling fruit. Supports increased traffic to residential-zoned land in Odell.
024	2.38	2.38	282	1	Operation		Hood River	\$150	Install turning lanes at Hwy 282/Chevron/Mud Alley.	Project would provide more efficient movement by moving vehicles that would block traffic into a turning lane. Intersection is frequented by trucks hauling fruit. Supports increased traffic to residentially-zoned land in Odell.
032	65.88	65.88	26	1	Operation		Hood River	\$25	Parking improvements at Clark Creek Tea Cup Sno-Park	Sno Park is used by cross country skiers, pedestrians, snowplayers and snowmobilers in winter, and bikers and hikers in the summer -- project corrects an unsafe situation. There have been car/pedestrian/snowmobile accidents at the intersection.

**FUNDING PRIORITY: Strategic**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
035	off			1	Transit	City of Hood River	Hood River	\$300	Remodel public works shop to house transit vehicles/maintenance operations.	Supports alternative modes of travel.
039	49.00	49.00		1	Modernization	City of Hood River	Hood River	\$2,400	Construct new road connecting US 30 (HCRH) and Fairview Drive.	Enhance regional connectivity
045	off		100	1	Transit	City of Hood River	Hood River	\$200	Independant Fixed Route Bus System	Provide alternative modes of travel. Ensure adequate transportation accessibility to transportation disadvantaged.
052	62	63	26	1	Operation		Hood River		Provide chain-up area NB to Bennett Pass to accommodate safe site for motorists / truckers to chain up in inclement weather.	
068	off			1	Transit	City of Hood River	Hood River	\$40	Kiosks and Marketing Program	Encourage alternate modes of transportation.
104	off		100	1	Transit	City of Hood River	Hood River	\$50	Construct Park & Ride Lots	Encourage alternate modes of travel. Support transit ridership.
105	49.44	49.98	100	1	Operation	City of Hood River	Hood River	\$37	Continue curb. gutter. T.I. on south side of Cascade. Several gaps.	Improve operations and safety of highway by better channeling stormwater runoff, and providing selected turning lane refuges.
201	62.06	62.06	2	1	Bridge		Hood River	\$110	Phase 1 Seismic Retrofit; West Hood River Interchange #09017	Seismic retrofit of bridge to maintain and preserve safe operations in event of earthquake.

Summary for FUNDING PRIORITY = Strategic (22 records)

\$14,329

**FUNDING PRIORITY: Unconstrained**

007	off			1	Maintenance	Cascade Locks	Hood River	\$200	Bridge of the Gods- overlay concrete approaches w/ asphalt membrane or modified concrete. 23,500 sq ft	Exchanges access to bridge as a revenue source for the Port.
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## FUNDING PRIORITY: Unconstrained

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
008	off			1	Bridge	Port of Cascade Locks	Hood River	\$5,000	Re-deck the Bridge of the Gods in Cascade Locks	Long-term maintenance of this major connector is vital because it provides access to Cascade Locks and ODOT Region 1. The bridge also provides access to Port areas, and the Bridge is a revenue center for the Port.
009	off			1	Bike	Port of Hood River	Hood River	\$1,800	Add sidewalk/bicycle access to Hood River Interstate Bridge	Provides bicycle/pedestrian connectivity between two states. Tourism greatly enhanced. Use of existing bridge crossing by pedestrians and bicyclists is discouraged due to safety considerations. Links pedestrian/bicycle improvements on Washington SR14 to H
013	30.42	31	100	1	Pedestrian	Cascade Locks	Hood River	\$116	WaNaPa crosswalks - install 16 stamped concrete crosswalks according to WaNaPa 2000 Plan	Provides curb ramps that will broaden the provision of mobility to handicapped pedestrians accessing housing and shopping. Without ramps, wheelchair users will have to travel along streets. Brings existing sidewalks up to current standards.
017	30.42	30.68	100	1	Pedestrian	Cascade Locks	Hood River	\$200	Develop pedestrian trail from HCRH to Visitor Center in CL	Provides safe access across railroad tracks and avoids making pedestrians walk along a vehicle underpass. Connects paths and sidewalks. Encourages tourists to walk, rather than drive, to visitor center.
025	0.00	14.96	281	1	Safety		Hood River		Shoulder widening/paving of Hood River Hwy 281 (project limits not provided)	Project encourages multi-modal use by bikes, pedestrians and horses. Current shoulders are substandard for an arterial or major collector. Hwy connects population centers of Hood River, Parkdale, Odell and Dec.

**Hood River to Mt. Hood Corridor Plan - Solution List**

August 1999

**FUNDING PRIORITY: Unconstrained**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
027	68.14	68.14	26	1	Maintenance		Hood River	\$50	Robinhood Campground rehab., debris removal under OR 35 Br./rechanneling	Robinhood Campground is trailhead for bikers/hikers and horseriders. The project serves to prevent damage to the Hwy 35 Bridge to to debris buildup, restore the Campground, and increase the attractiveness/utility of the site to users.
028	off			1	Other		Hood River	\$50	Nottingham campsite improvements; toilets, vehicle barriers	Nottingham Campground accesses high use trail for bikers/hikers and horses.
042	off			1	Bike	City of Hood River	Hood River	\$75	Trail improvements along the Indian Creek	Part of "loop" trail around city. Encourage alternative mode of travel. Provide connection to recreation trails.
043	off			1	Transit	City of Hood River	Hood River	\$600	Creation of a multi-modal transportation center near Expo Center- near waterfront.	To facilitate interconnections between transportation modes (transit, rail, waterborne, pedestrian).
060	50.12	50.12	100	1	Operation	City of Hood River	Hood River	\$100	Add right turn lane EB on Oak Street (HCRH) at intersection of 13th Street to take slow-moving vehicles out of the intersection. Serve as chain up area during inclement weather.	Improve Level of Service at intersection and increase safety.
072	0.51	2.76	282	1	Bike		Hood River	\$610	Odell Hwy shoulder widening county wide for bicycle use and roadside safety	Encourage alternative modes of transportation.
073	off			1	Other	City of Hood River	Hood River	\$1,500	Runway extension and land acquisition.	
151	0.33	0.33	281	1	Operation	City of Hood River	Hood River	\$200	12th/13th @ May intersection improvements.	Improve traffic operations, promote parallel routes to reduce reliance on state facilities for local trips.

**FUNDING PRIORITY: Unconstrained**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
202	12.9	12.9	281	1	Bridge		Hood River	\$80	Phase 1 Seismic Retrofit; East Fork Hood River Bridge #01039.	Retrofit of bridge to maintain and preserve safe operations in event of earthquake.
203	4.95	4.95	281	1	Bridge		Hood River	\$70	Phase 1 Seismic Retrofit; Hood River Tucker Bridge #01600	Retrofit of bridge to maintain and preserve safe operations in event of earthquake
								<b>Summary for FUNDING PRIORITY = Unconstrained (16 records)</b>		
										<b>\$10,651</b>

**FUNDING PRIORITY: X-Reconstruct**

102	73.82	73.82	26	1	Bridge		Hood River		Polallie Cr. Bridge reconstruction to accomodate debris flows.	Maintain and preserve facilities. Address drainage issues. Retrofit existing facilities to encourage conservation, restoration and protection of anadromous fish.
200.1	68.21	68.21	26	1	Modernization		Hood River		Replacement of the East Fork Hood River Bridge	No shoulder area for auto and bike safety
200.2	73.20	73.20	26	1	Modernization		Hood River		Replacement of the East Fork Hood River Bridge	No shoulder area for auto and bike safety
200.3	77.60	77.60	26	1	Modernization		Hood River		Replacement of the East Fork Hood River Bridge	No shoulder area for auto and bike safety
202.1	12.90	12.90	281	1	Modernization		Hood River		Replacement of the East Fork Hood River Bridge # 01939	No shoulder area for auto and bike safety
203.1	4.95	4.95	281	1	Modernization		Hood River		Replacement of the Hood River Bridge # 01600	No shoulder area for auto and bike safety
204	94.43	95.45	26	1	Modernization		Hood River	\$3.285	Major widening with alignment improvement	ODOT - Highway deficiency
205	96.26	96.87	26	1	Modernization		Hood River	\$1.349	Major widening improvement	ODOT - Highway deficiency
206	97.97	98.62	26	1	Modernization		Hood River	\$2.278	Major widening improvement	ODOT - Highway deficiency

**FUNDING PRIORITY: X-Reconstruct**

PROJ	BEG MP	END MP	HWY	REG	WORKTYPE	CITY	COUNTY	ESTIMATED COST (\$1000)	DESCRIPTION	JUSTIFICATION
207	99.86	101.82	26	1	Modernization		Hood River	\$5,475	Major widening with alignment improvement	ODOT - Highway deficiency
208	0.00	0.44	281	1	Modernization		Hood River	\$909	Reconstruction with more lanes, with alignment improvements	ODOT - Highway deficiency
209	0.44	1.15	281	1	Modernization		Hood River	\$2,182	Reconstruction with more lanes	ODOT - Highway deficiency
210	1.24	2.07	281	1	Modernization		Hood River	\$1,800	Major widening with alignment improvement	ODOT - Highway deficiency
211	4.99	5.09	281	1	Modernization		Hood River	\$1,847	Major widening with alignment improvement	ODOT - Highway deficiency
212	0.53	0.78	281	1	Modernization		Hood River	\$504	Major widening improvements	ODOT - Highway deficiency
213	0.00	0.51	282	1	Modernization		Hood River	\$1,464	Major widening with alignment improvement	ODOT - Highway deficiency
214	2.72	3.33	282	1	Modernization		Hood River	\$502	Minor widening improvements	ODOT - Highway deficiency
215	3.33	3.45	282	1	Modernization		Hood River	\$116	Minor widening with alignment improvements	ODOT - Highway deficiency
<b>Summary for FUNDING PRIORITY = X-Reconstruct (18 records)</b>										\$21,711

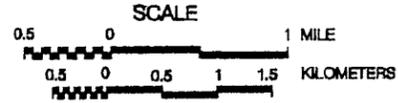
## D. DECISION MAPPING

This section includes maps of the entire corridor illustrating the location of all the projects identified in Sections B and C. The maps are at a scale of 1" = 1 mile for the rural portion of the corridor, and at an enlarged scale of 5" = 1 mile for the urban portion of the corridor. These maps include data "ribbons" in the lower 1/3 of the page which display a line starting and stopping at the limits of each project, or a circle for projects at a point (e.g. intersections, bridges, etc.). Adjacent to each project symbol is the project number, again tied to the tables in Sections B and C. The symbols are color coded to reflect each project's funding priority. Finally, the data ribbons are categorized by the work type (modernization, bridge, safety, transit, etc.) Some projects are not located on state highways and are identified as "off-system" (e.g. parallel county road improvements). Projects that do not specifically fit the regular categories are listed as "other."

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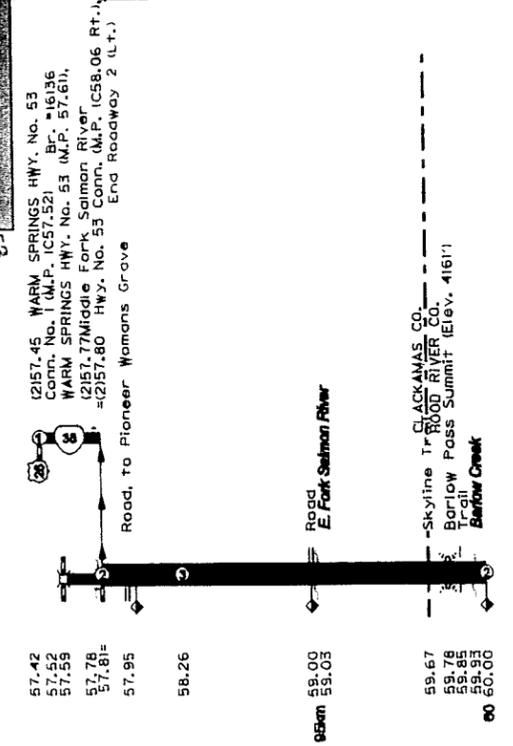
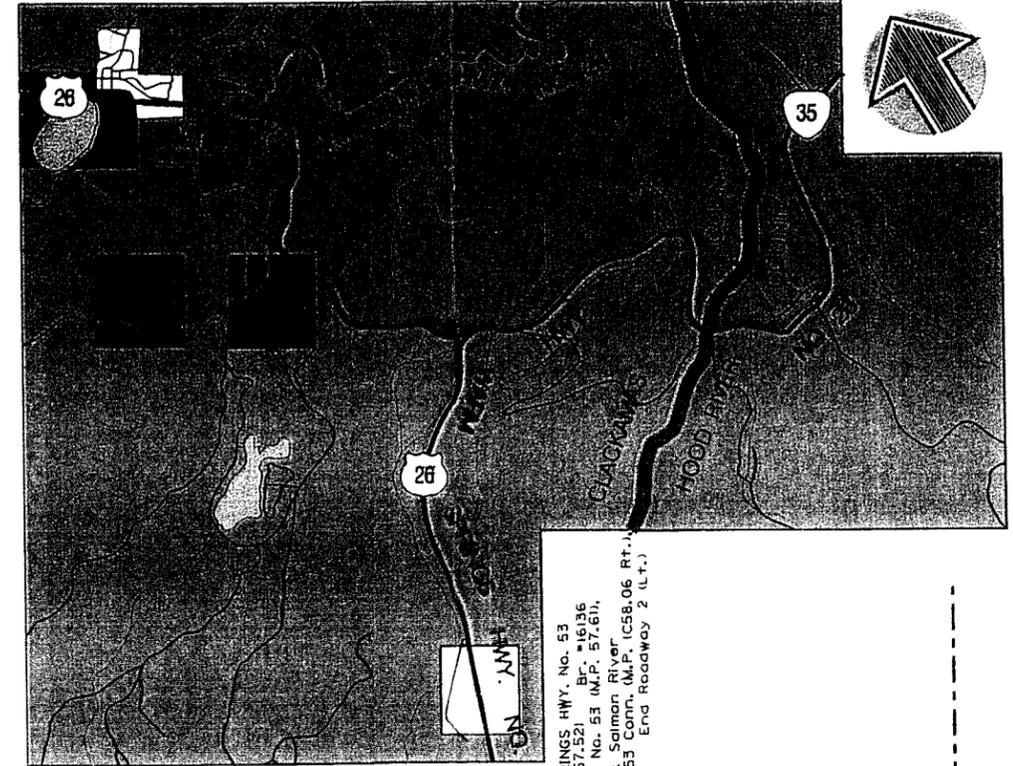


**LOCATIONS OF SOLUTIONS**



**KEY TO FUNDING**

- COMMITTED ● UNCONSTRAINED ●
- CONSTRAINED ● RECONSTRUCT ●
- STRATEGIC ●



Modernization	
TSM Projects	
Bicycle	
Pedestrian	
Safety	
Bridge	
Preservation	
Maintenance	
Salmon Restoration	
Transect	
Off-System	
Other	

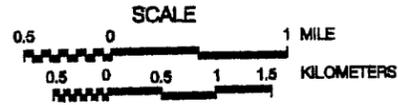
MT. HOOD NATIONAL FOREST



PREPARED BY



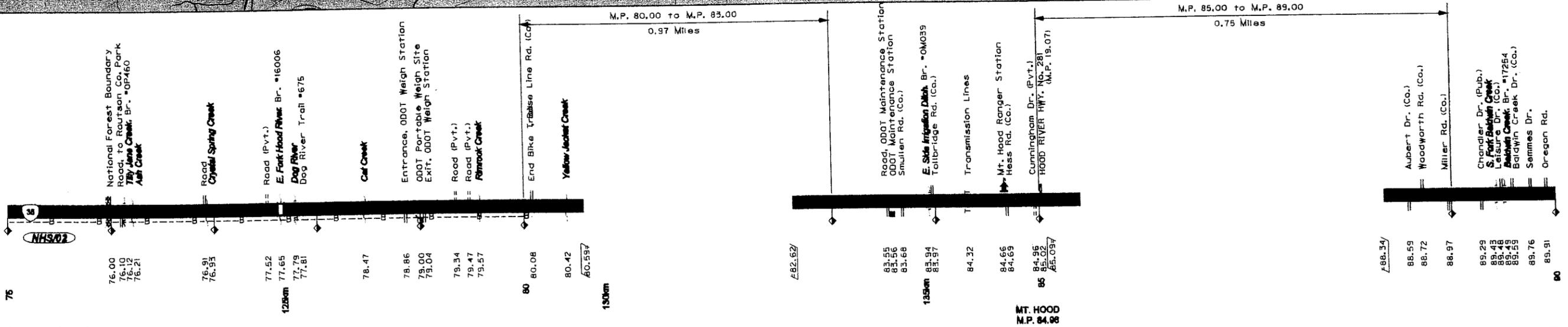
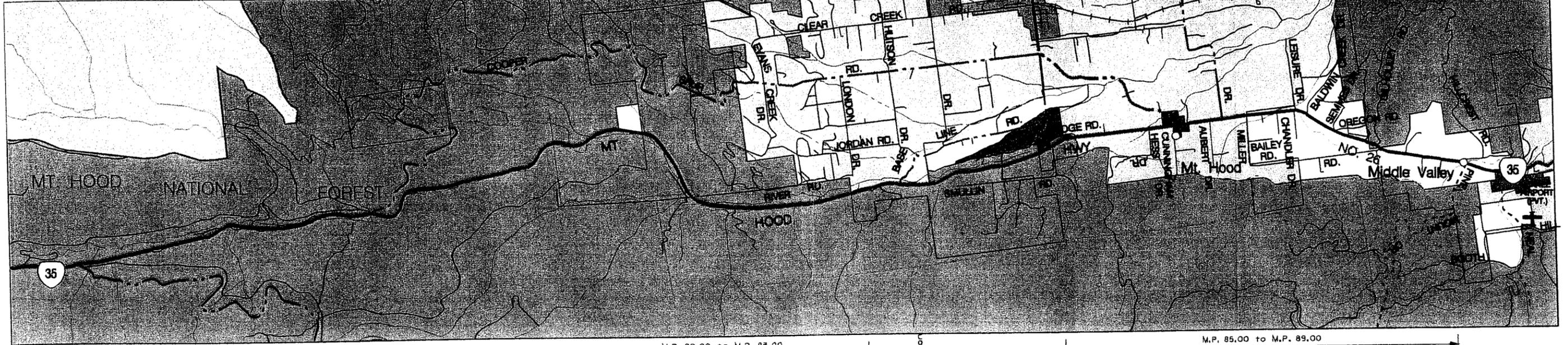
**LOCATIONS OF SOLUTIONS**



**KEY TO FUNDING**

- COMMITTED
- CONSTRAINED
- STRATEGIC
- UNCONSTRAINED
- RECONSTRUCT

NORTH



Modernization	● 200.3
TSM Projects	
Bicycle	
Pedestrian	
Safety	
Bridge	
Preservation	
Maintenance	
Salmon Restoration	● 86 ● 85 ● 83 ● 84 ● 82 ● 83
Transit	
Off-System	
Other	

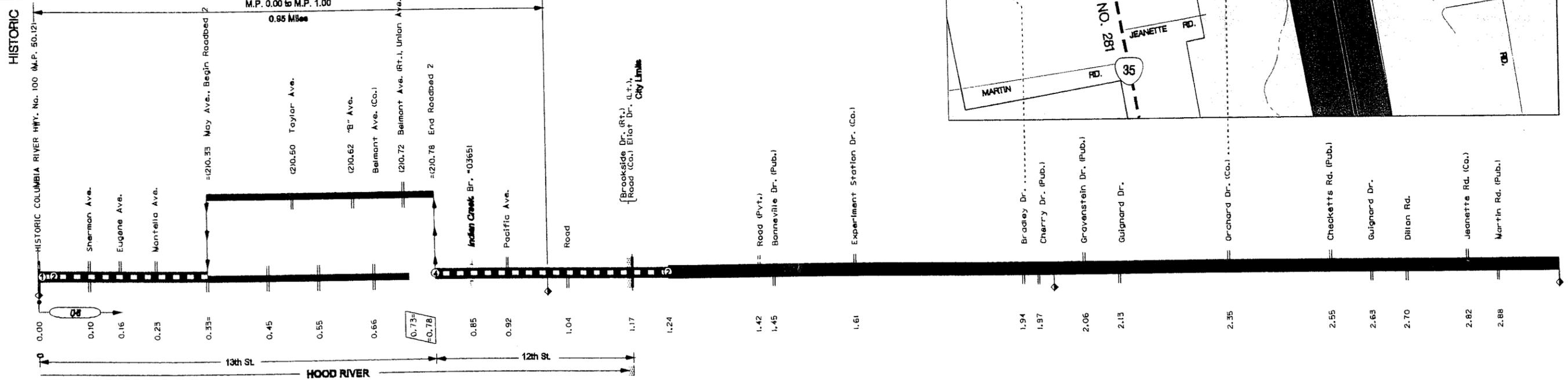
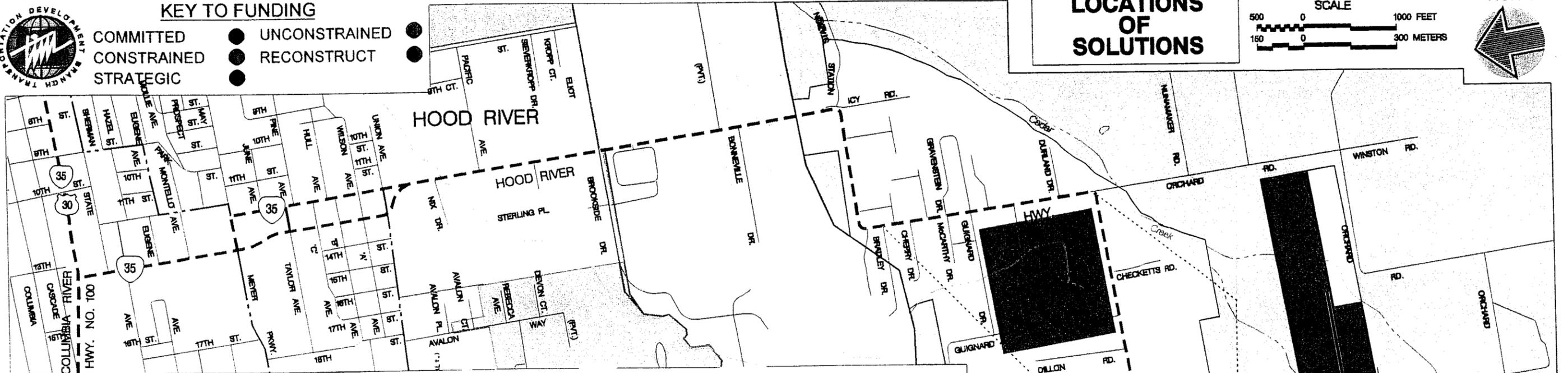
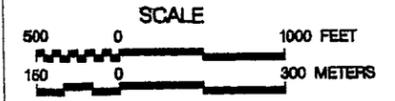




KEY TO FUNDING

- COMMITTED
- CONstrained
- STRATEGIC
- UNCONSTRAINED
- RECONSTRUCT

LOCATIONS OF SOLUTIONS



Modernization	208, 209, 212	210
TSM Projects	37, 151	36
Bicycle		
Pedestrian	41	
Safety		25
Bridge		
Preservation		
Maintenance		
Salmon Restoration		67, 69, 104
Transit		
Off-System	42	
Other		

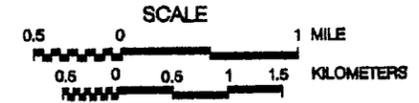
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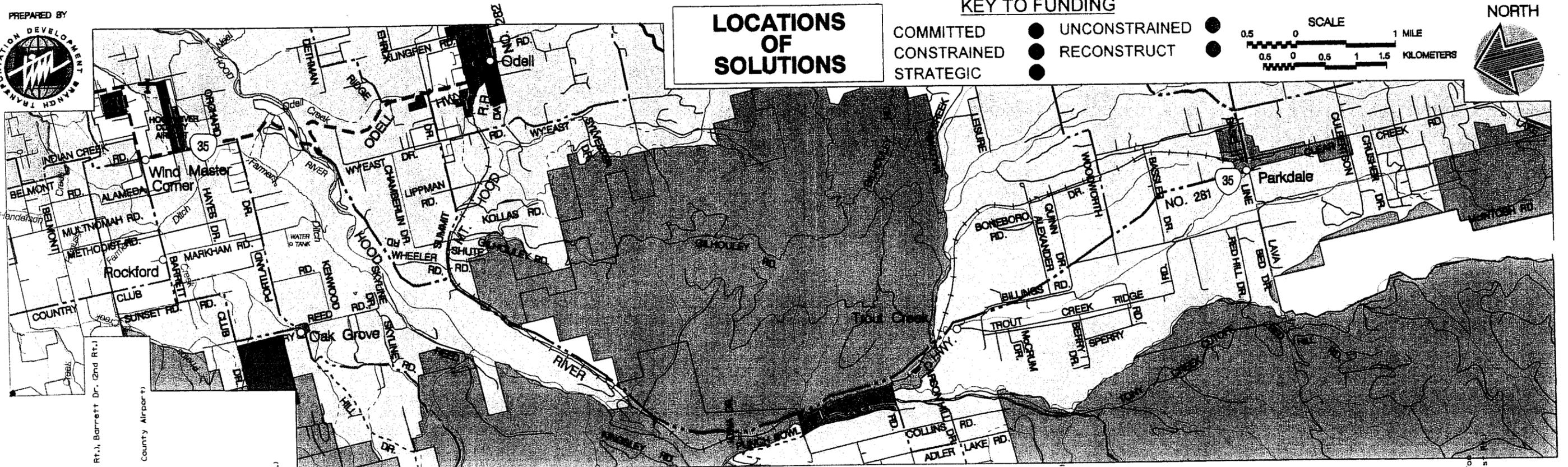
# LOCATIONS OF SOLUTIONS

## KEY TO FUNDING

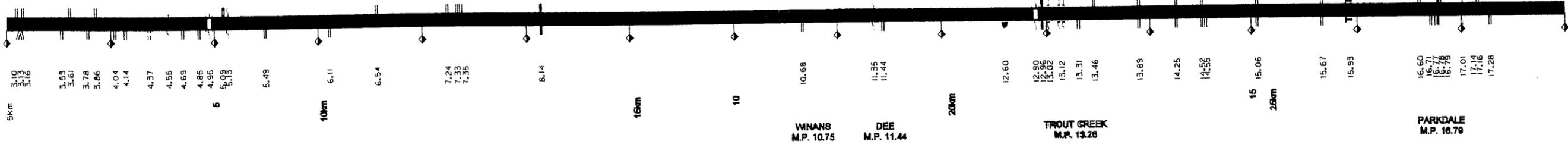
- COMMITTED
- CONstrained
- STRATEGIC
- UNCONSTRAINED
- RECONSTRUCT



NORTH



- Leg. From Hwy. No. 281, Barrett Dr. (2nd Rt.)
- Road (Co.), Indian Creek Rd. (1st Rt.)
- Leg. to Hwy. No. 281
- Hoyes Dr. (Co.)
- Airport Dr. (Co.), (to Hood River County Airport)
- Schull Dr.
- Gr-herd Rd. (Co.)
- Peters Dr. (Pub.)
- Portland Dr. (Co.)
- Road (Pvt.)
- CAMP
- Acree Dr. (Pub.)
- Phasant Dr. (Pub.)
- Hood River Br. #01600, (Tucker Br.)
- HOOD HWY. No. 282 (M.P. 0.00)
- CAMP
- Road, to Tucker Co. Park
- Riverside Dr.
- Wheeler Rd. (Co.)
- Wheeler Rd. (Co.)
- Leg. from Summit Dr. (Co.)
- Summit Dr. (Co.)
- Mt. Hood Ry.
- Iowa Dr. (Co.)
- Birdle Creek
- Lost Lake Rd. (Co.)
- ODOT Stockpile Site
- E. Fork Hood River Br. #01838
- Trout Creek Br. #03652
- Trout Creek Br. #03653
- Trout Creek Br. #03654
- Trout Creek Ridge Rd. (Co.)
- Billings Rd. (Co.)
- Billings Rd. (Co.)
- Alexander Dr. (Co.)
- Quinn Rd. (Co.)
- Old Parkdale Rd. (Co.)
- Woodworth Dr. (Co.)
- Bassler Rd. (Co.)
- Transmission Lines (3 sets)
- Road (Pub.)
- Base Line Dr. (Co.)
- W. Hood Ry. Rd. (Co.)
- 2nd St. (Co.)
- Emil Creek
- Parkdale County Maint. Station
- Road (Co.) Cooper Spur Rd. (1st)
- Gasoline Dr. (2nd Rt.)



- Modernization
- TSM Projects
- Bicycle
- Pedestrian
- Safety
- Bridge
- Preservation
- Maintenance
- Salmon Restoration
- Transit
- Oil-System
- Other

203.1 ● 211

203 ●

202.1 ●

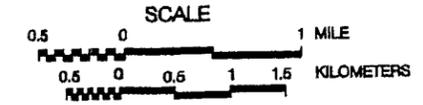
202 ●

204 ●

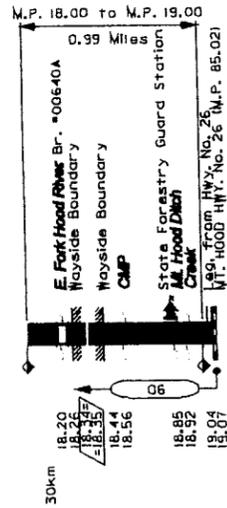
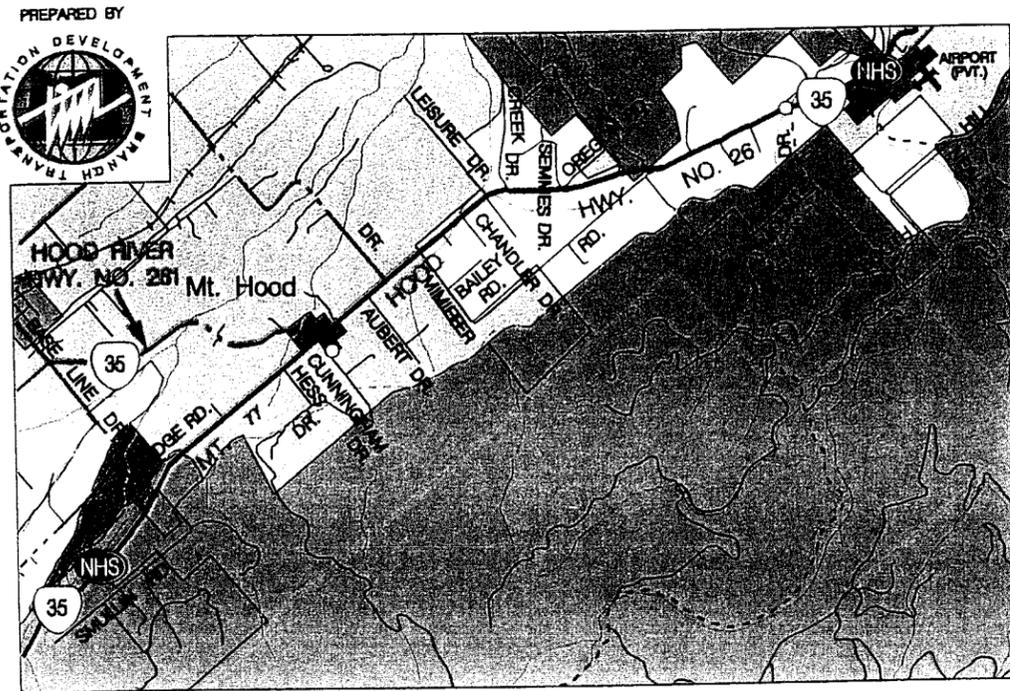
**LOCATIONS OF SOLUTIONS**

**KEY TO FUNDING**

- COMMITTED ● UNCONSTRAINED ●
- CONSTRAINED ● RECONSTRUCT ●
- STRATEGIC ●



NORTH



Ziba Dimmick Wayside Park

Modernization	
TSM Projects	
Bicycle	
Pedestrian	
Safety	
Bridge	
Preservation	
Maintenance	
Salmon Restoration	
Transit	
Off-System	
Other	

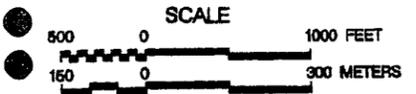


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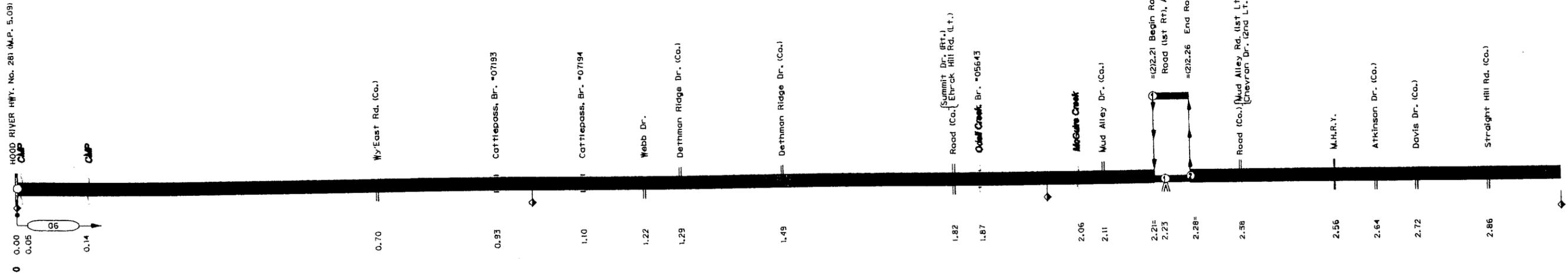
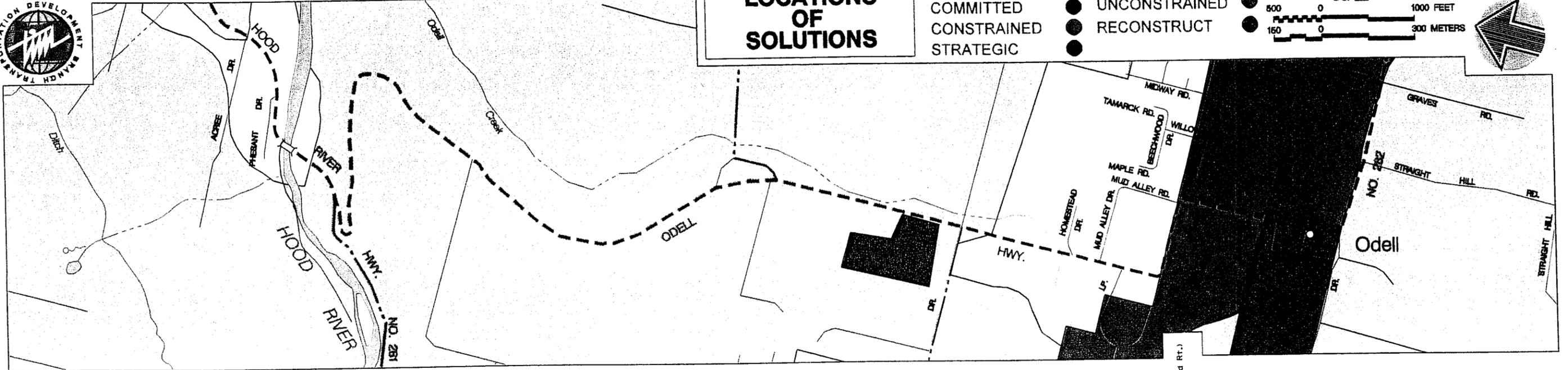
### LOCATIONS OF SOLUTIONS

### KEY TO FUNDING

- COMMITTED
- CONSTRAINED
- STRATEGIC
- UNCONSTRAINED
- RECONSTRUCT

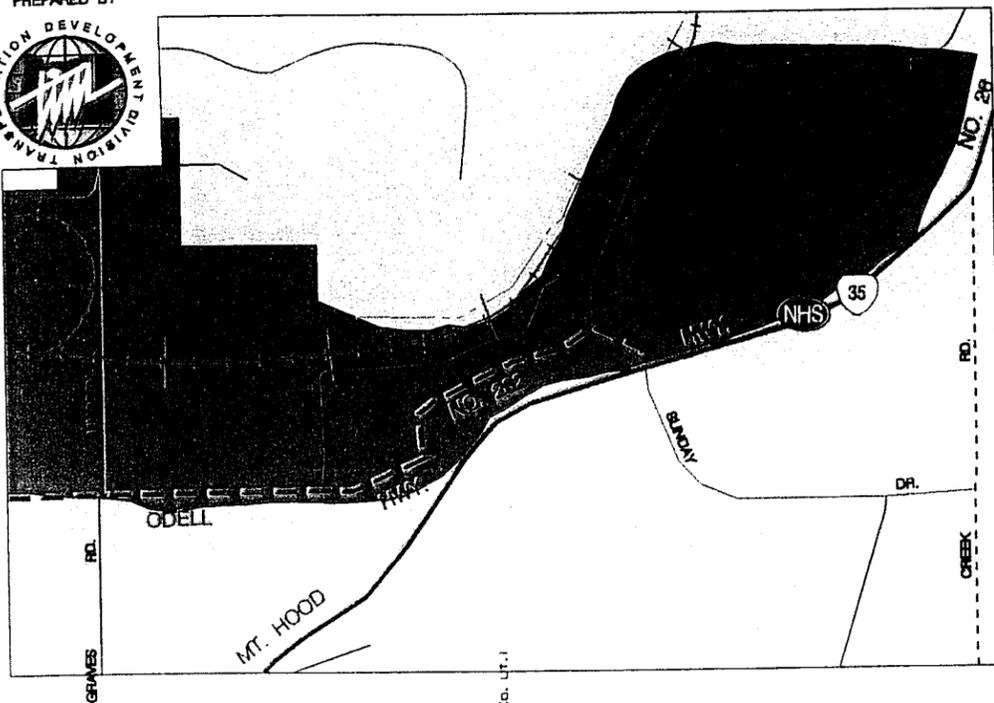


NORTH



Modernization	213	214
TSM Projects		24
Bicycle		72
Pedestrian		22
Safety		57
Bridge		
Preservation		
Maintenance		
Salmon Restoration		
Transit		
Off-System		
Other		

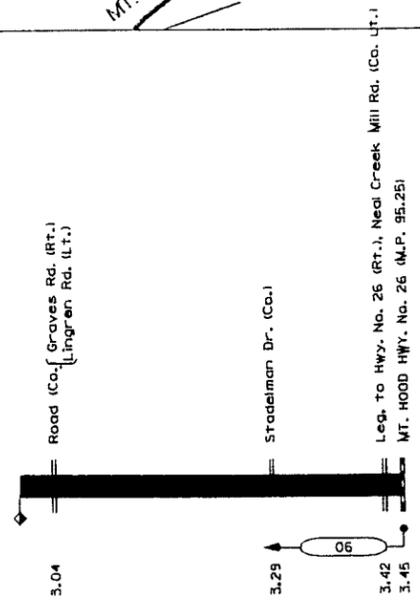
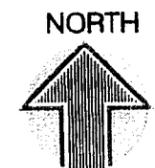
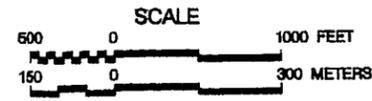
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**LOCATIONS OF SOLUTIONS**

**KEY TO FUNDING**

- COMMITTED
- CONstrained
- STRATEGIC
- UNCONSTRAINED
- RECONSTRUCT



Modernization	214, 215
TSM Projects	
Bicycle	
Pedestrian	
Safety	
Bridge	
Preservation	
Maintenance	
Salmon Restoration	
Transit	
Off-System	
Other	

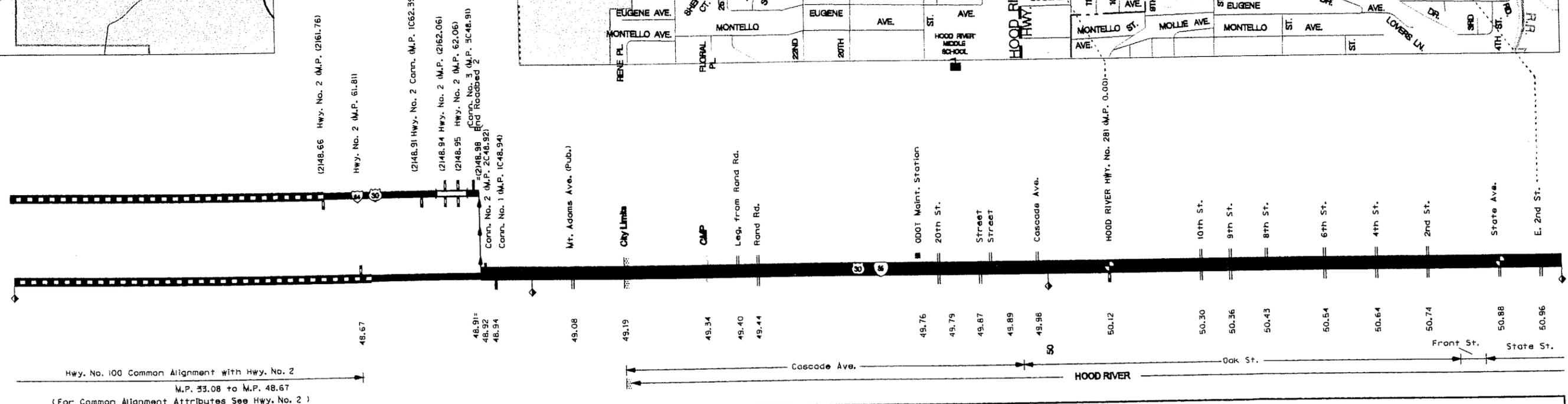
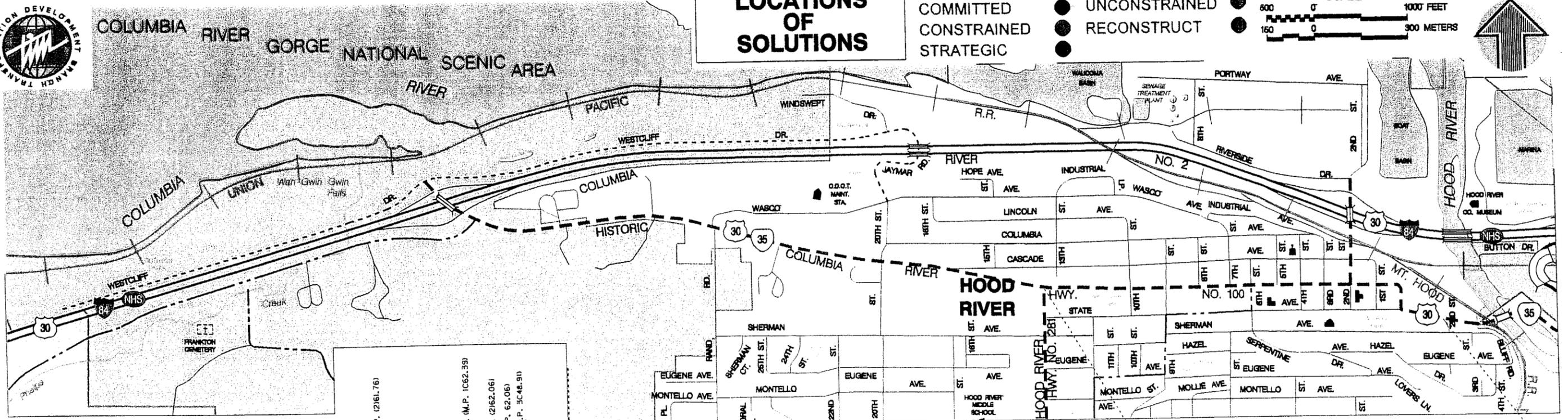
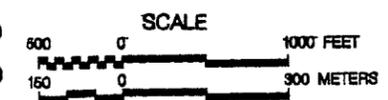


# LOCATIONS OF SOLUTIONS

**KEY TO FUNDING**

COMMITTED  
CONSTRANED  
STRATEGIC

UNCONSTRAINED  
RECONSTRUCT



Modernization	
TSM Projects	21
Bicycle	40
Pedestrian	
Safety	
Bridge	
Preservation	
Maintenance	105
Salmon Restoration	45, 68, 101
Transit	
Off-System	30, 35, 67, 68, 45
Other	

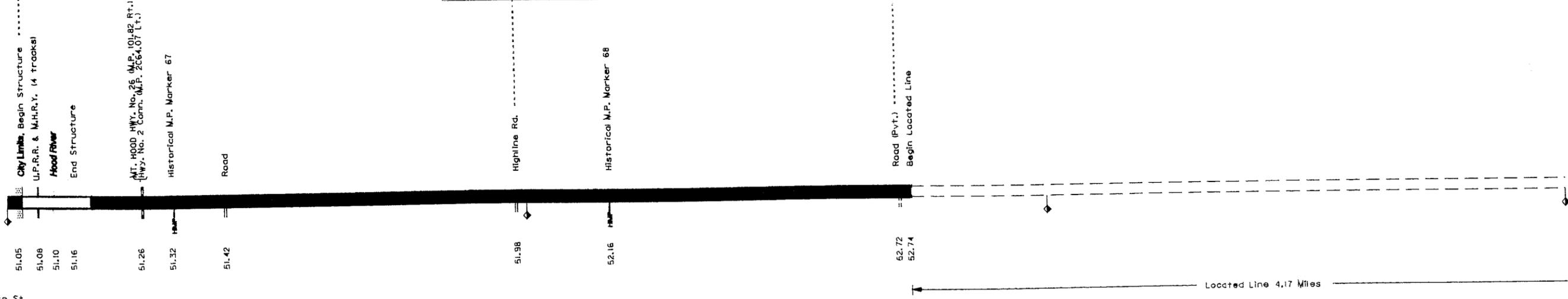
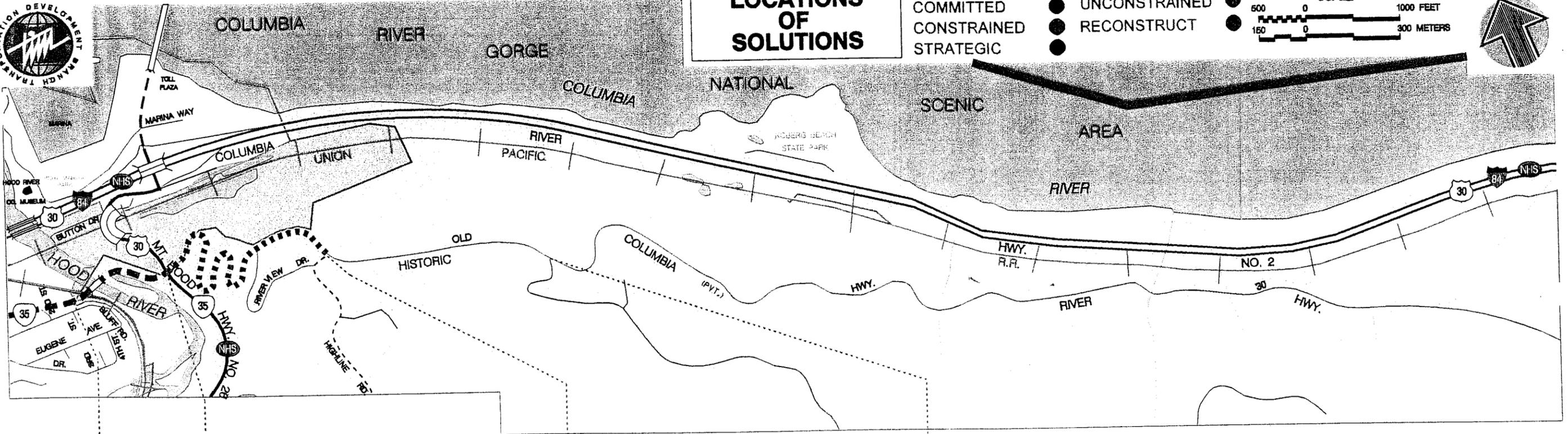
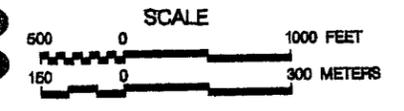
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# LOCATIONS OF SOLUTIONS

## KEY TO FUNDING

- COMMITTED ●
- CONstrained ●
- STRATEGIC ●
- UNCONSTRAINED ●
- RECONSTRUCT ●



State St.  
HOOD RIVER

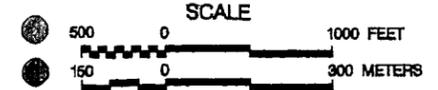
Modernization	
TSM Projects	44
Bicycle	
Pedestrian	
Safety	
Bridge	
Preservation	
Maintenance	
Salmon Restoration	
Transit	
Off-System	9, 5, 6
Other	



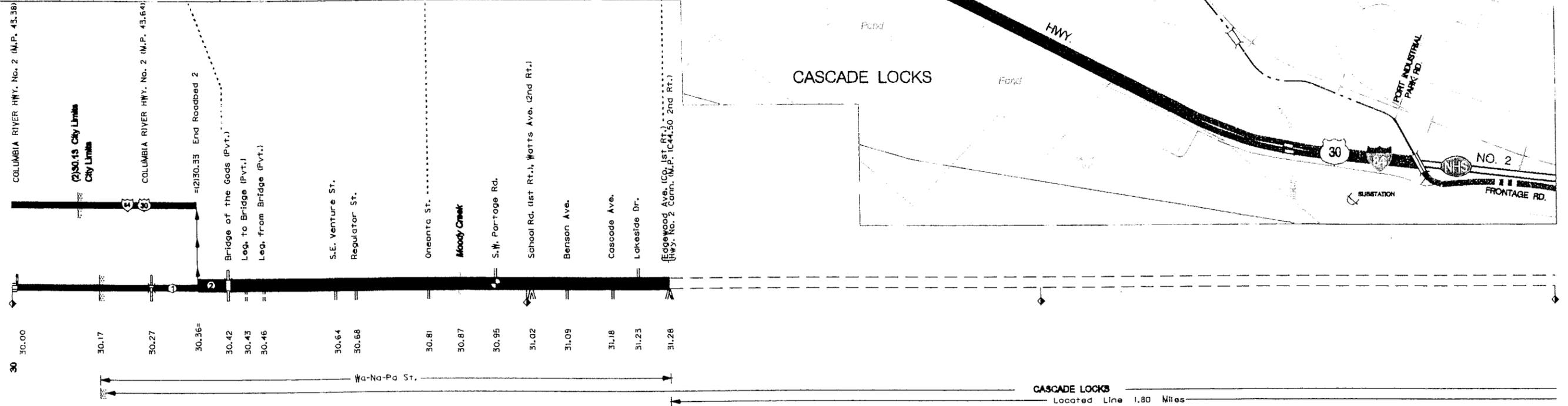
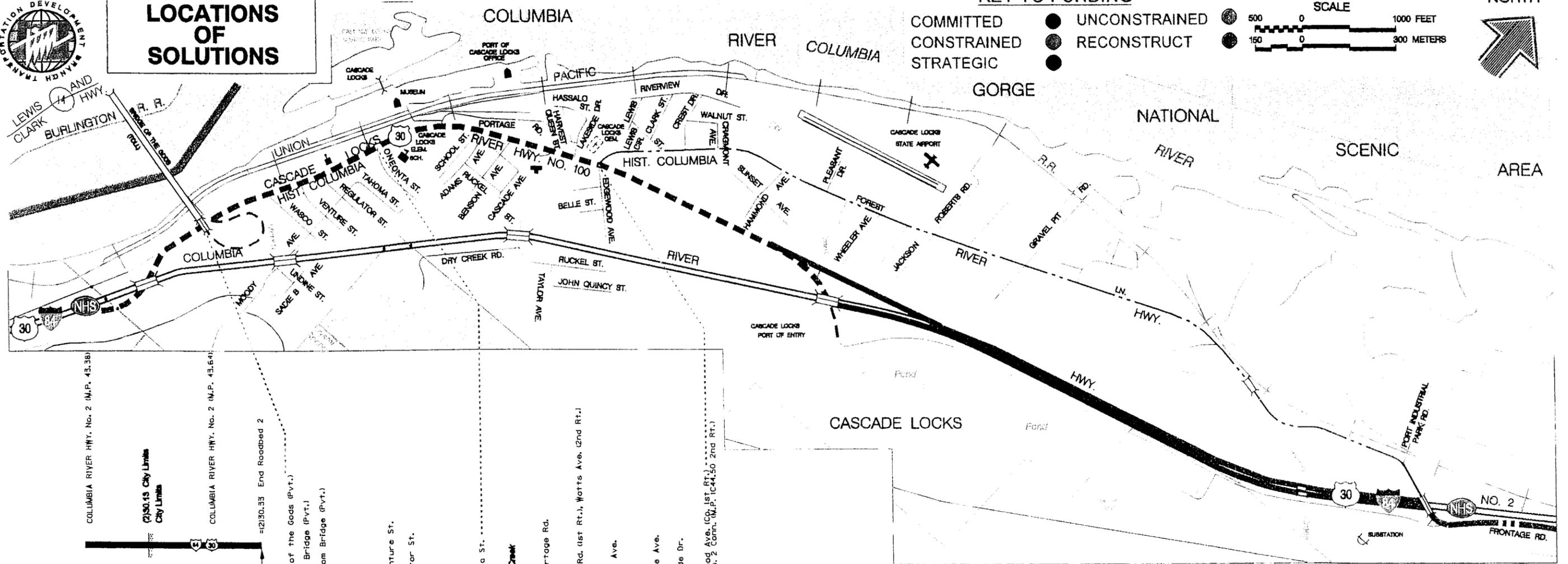
**LOCATIONS OF SOLUTIONS**

**KEY TO FUNDING**

- COMMITTED
- CONstrained
- STRATEGIC
- UNCONSTRAINED
- RECONSTRUCT



NORTH



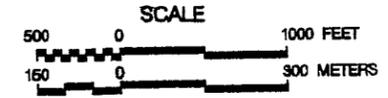
Modernization	2.1, 2.2, 2.3
TSM Projects	3
Bicycle	
Pedestrian	10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 12
Safety	15, 4
Bridge	
Preservation	
Maintenance	
Salmon Restoration	
Transit	16.1, 16.2, 18, 16.2
Off-System	7, 8, 1, 15.1
Other	17



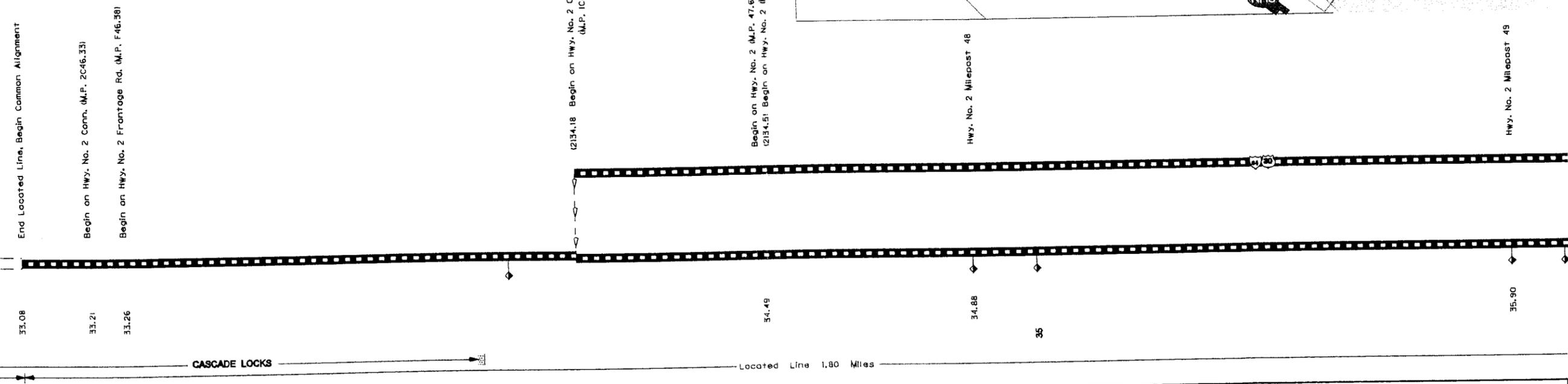
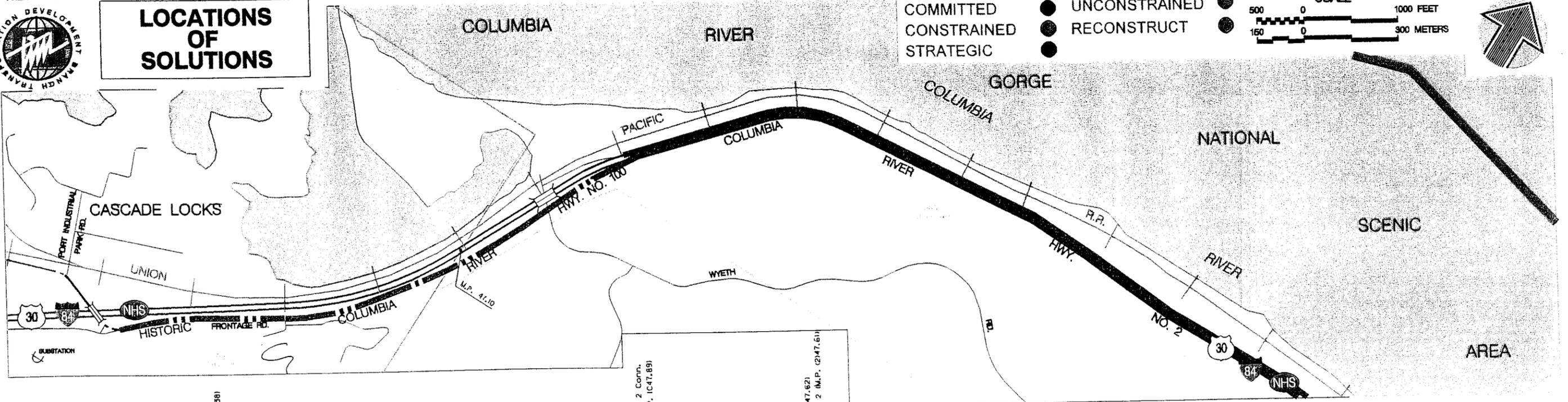
**LOCATIONS OF SOLUTIONS**

**KEY TO FUNDING**

- COMMITTED ● UNCONSTRAINED ●
- CONSTRAINED ● RECONSTRUCT ●
- STRATEGIC ●



NORTH



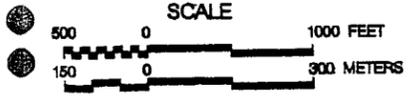
Modernization	
TSM Projects	
Bicycle	
Pedestrian	
Safety	
Bridge	
Preservation	
Maintenance	
Salmon Restoration	
Transit	
Off-System	
Other	



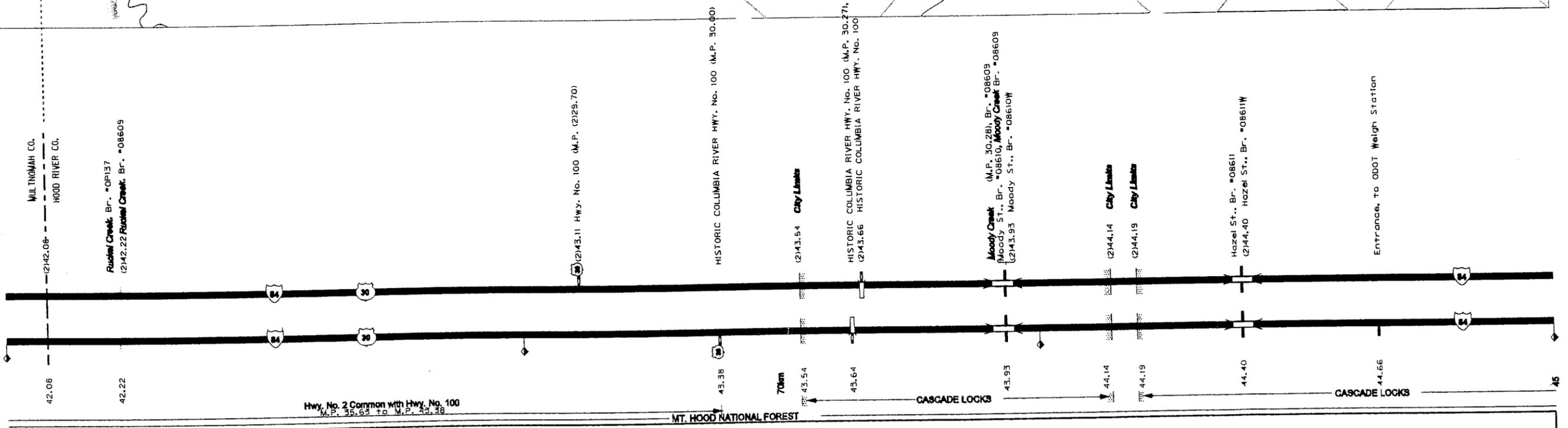
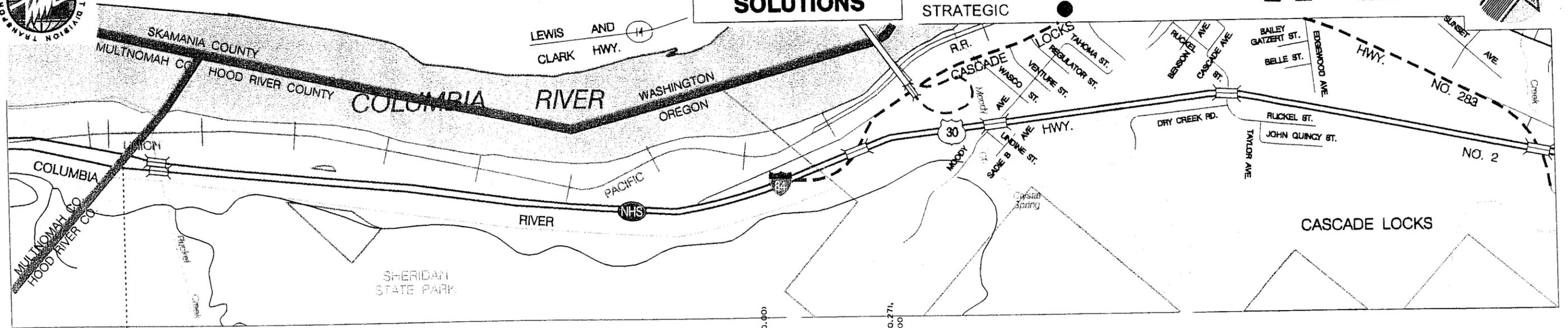
### LOCATIONS OF SOLUTIONS

### KEY TO FUNDING

- COMMITTED
- CONstrained
- STRATEGIC
- UNCONSTRAINED
- RECONSTRUCT



NORTH



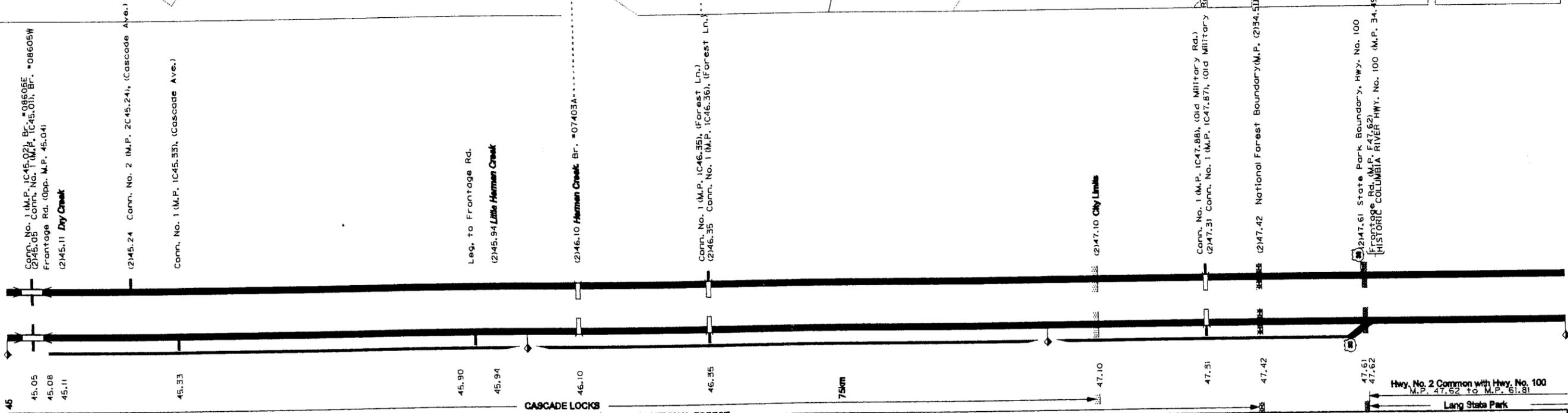
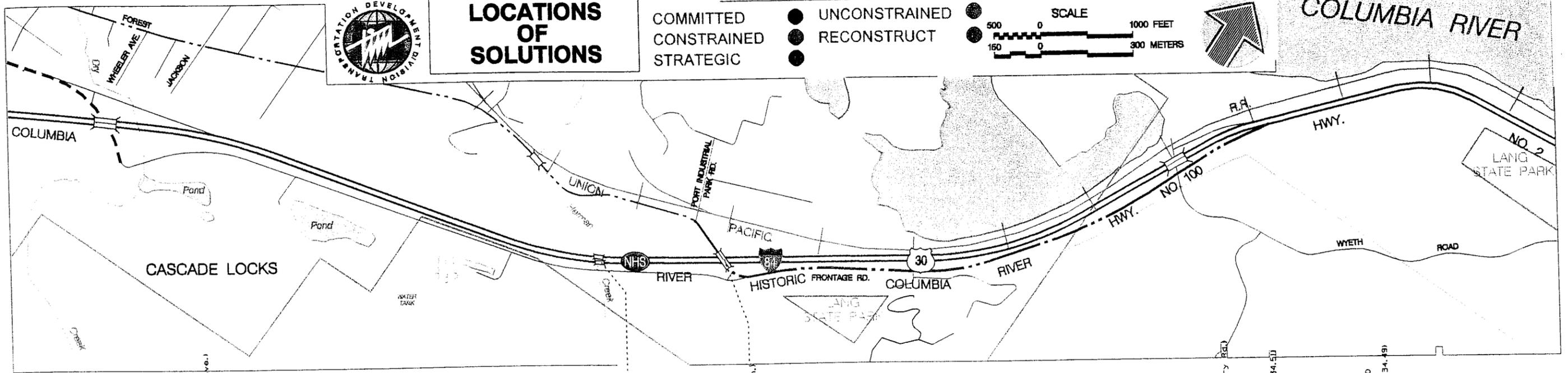
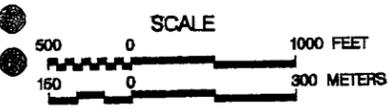
Modernization	
TSM Projects	
Bicycle	
Pedestrian	
Safety	
Bridge	
Preservation	
Maintenance	
Salmon Restoration	
Transit	
Off-System	
Other	



# LOCATIONS OF SOLUTIONS

**KEY TO FUNDING**

COMMITTED STRATEGIC ● UNCONSTRAINED RECONSTRUCT



Modernization	
TSM Projects	
Bicycle	
Pedestrian	
Safety	
Bridge	
Preservation	
Maintenance	
Salmon Restoration	
Transit	
Off-System	
Other	

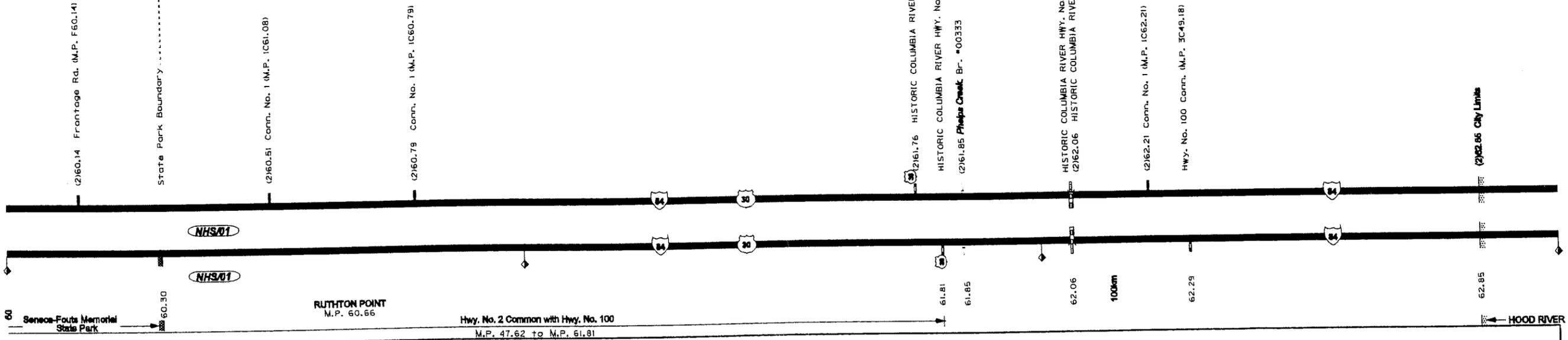
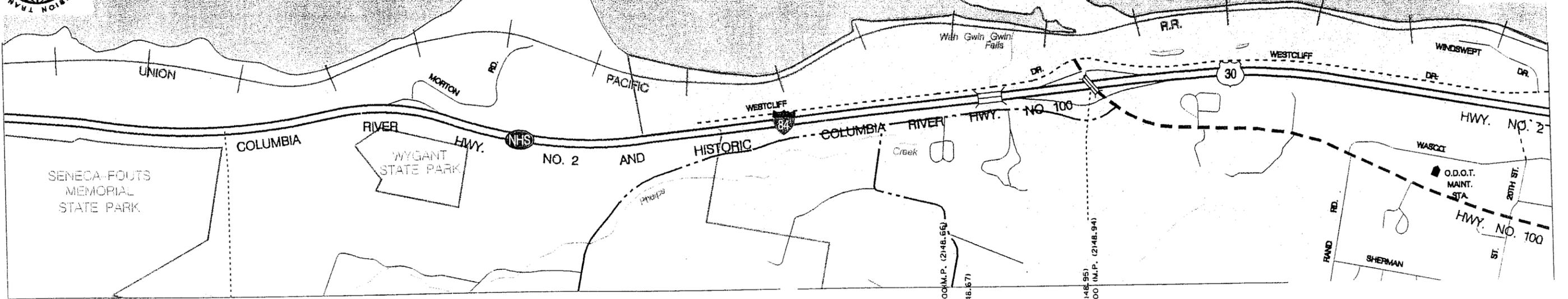
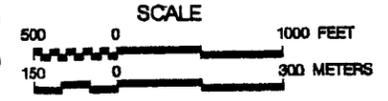


COLUMBIA RIVER

**LOCATIONS OF SOLUTIONS**

**KEY TO FUNDING**

- COMMITTED
- CONSTRAINED
- STRATEGIC
- UNCONSTRAINED
- RECONSTRUCT



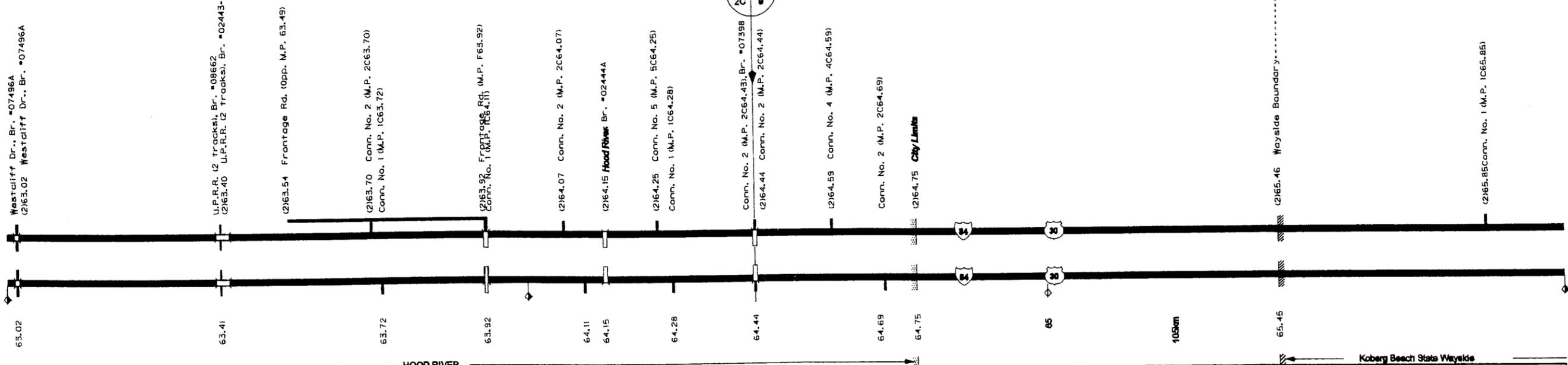
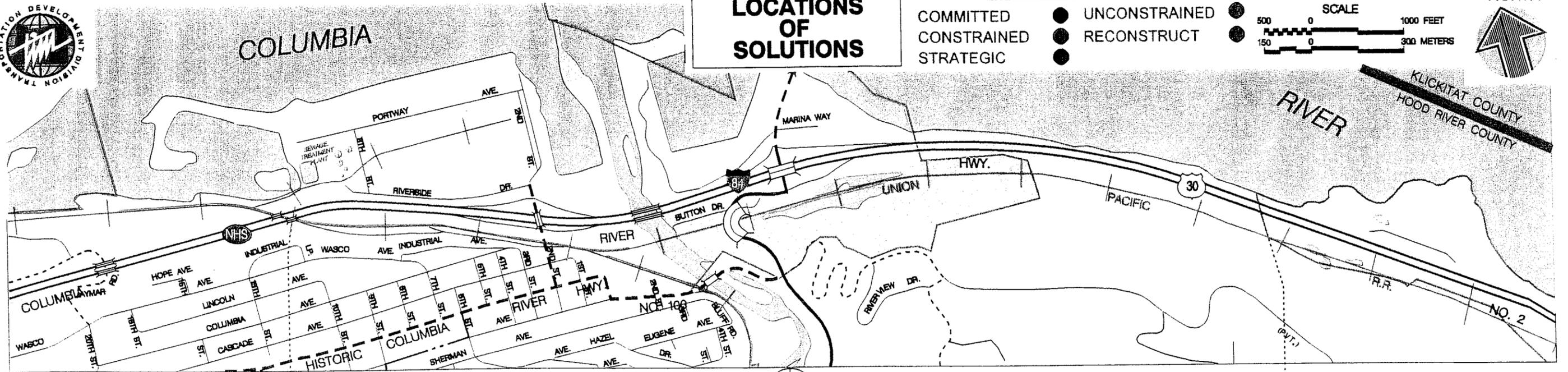
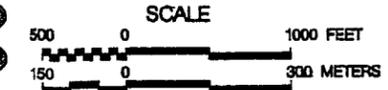
Modernization	
TSM Projects	
Bicycle	
Pedestrian	
Safety	
Bridge	
Preservation	
Maintenance	
Salmon Restoration	
Transit	
Off-System	
Other	



**LOCATIONS OF SOLUTIONS**

**KEY TO FUNDING**

- COMMITTED
- CONSTRUCT
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Modernization	
TSM Projects	
Bicycle	
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Safety	
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038 A, B, C