BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

RESOLUTION NO. 99-220

Supporting the Portland-Astoria US 30 Corridor Plan by the Multnomah County Board of Commissioners.

The Multnomah County Board of Commissioners finds:

a. The State of Oregon, acting by and through its Oregon Transportation Commission (OTC), has submitted to Multnomah County the Portland-Astoria (US 30) Corridor Plan for a resolution of support.

b. The US 30 Corridor Plan has been developed collaboratively with representatives of the cities, counties and other governments within the corridor, federal and state agencies with jurisdiction in the corridor, and in consultation with key stakeholders and the public in the corridor.

c. The US 30 Corridor Plan establishes management direction for the operation, preservation and enhancement of all transportation modes and facilities within the Portland-Astoria Corridor.

d) The Corridor Plan will guide development of local and regional Transportation System Plans for the corridor and refinement plans for specific areas and issues in the corridor.

The Multnomah County Board of Commissioners resolves:

1. To support the Portland-Astoria (US 30) Corridor Plan, and urges its adoption by the OTC.

APPROVED this 4th day of November 1999.

BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

Beverly Stein, Chair

REVIEWED:

THOMAS SPONSLER, COUNTY COUNSEL
FOR MULTNOMAH COUNTY, OREGON

By _____
Matthew O. Ryan, Assistant County Counsel

KSRJ2892.DOC (L0084)

Portland – Astoria (US 30) Corridor Plan

Corridor Steering Committee Members

City of Astoria
City of Columbia City
City of St. Helens
City of Prescott
City of Rainier
City of Clatskanie
City of Scappoose
City of Portland
City of Warrenton
Clatsop County
Columbia County
Multnomah County
Port of Astoria
Port of St. Helens
Port of Portland
Metro
Tri-Met
OR. Dept. of Transportation
WA Dept. of Transportation
OR Dept. of Land Conservation and Development
Cowlitz/Wahkiakum RTPO
Cowlitz.Wahkiakum COG
Cowlitz EDC

Staff Report

September 1999

Oregon Department of Transportation
Prepared by: *ODOT Region 1&2*
David Evans & Associates
Cogan Owens Cogan

I. INTRODUCTION

This Staff Report provides a general overview of the Corridor Plan and solutions identified through the planning process. ***No STAs or UBAs have been designated to date. As part of the review of the final plan, eligible jurisdictions are being consulted with regarding the appropriateness and desirability of applying STA or UBA designations to portions of US 30.*** Identification and prioritization of solutions by a Corridor Steering Committee (CSC) was a key step in the planning process. These solutions include service improvements; maintenance, operations and management actions; modernization projects; and refinement planning needs. Proposed modernization projects include four passing/climbing lanes in the rural area between Columbia City and Astoria and a new truck route in the Astoria area.

A. Corridor Plan Purpose

The Portland–Astoria (US30) Corridor Plan is the product of a cooperative effort between the Oregon Department of Transportation (ODOT), local and regional governments, interest groups, statewide agency and stakeholder committees, and the general public to develop a long-term program for management of and improvements to the Portland–Astoria (US30) Corridor.

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.

The Portland–Astoria (US30) 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 Portland–Astoria (US 30) 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.

The Portland–Astoria Corridor Plan builds on the strategies and policies found in the Oregon Transportation Plan (OTP), the Oregon Highway Plan (OHP) and other modal plans. It has also been closely coordinated with the development of local transportation system plans (TSPs) and Regional Transportation Plans (RTPs) for the Portland and Longview/Kelso/Rainier metropolitan planning organizations (MPOs). Through this local and regional transportation system planning, future refinement planning, periodic review, and local plan amendments, ODOT and the local and regional 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 Corridor Plan as an element of the OTP.

B. Corridor Plan Development

This Corridor Plan has been developed with the active involvement of local and regional governments in the corridor, interest groups, statewide agency and stakeholder committees and the general public. Public comment has been received throughout the planning process through newsletter survey responses, open houses, letters and phone calls and has been incorporated into development of the Corridor Plan. A Corridor Steering Committee (CSC) is the primary author of the Corridor Plan. The CSC (see acknowledgements page for listing of members) 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 random survey of Corridor users was conducted in spring 1993, prior to initiation of the planning process. Issues and needs to be addressed in the Corridor Plan were identified by residents and other interested parties through a newsletter survey mailed in September 1994.
- A newsletter was distributed in January 1995 and open houses were also conducted in January-February 1995 to provide information on the planning process and to solicit input on issues, needed improvements to the transportation system, and priorities to be addressed in the Corridor Plan.
- 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. An August 1995 newsletter and questionnaire solicited public input on key objectives from the recommended Interim Corridor Strategy.
- Endorsement of the Interim Corridor Strategy by local governments in the Corridor and by the Oregon Transportation Commission in January 1996.
- Analyses, or refinement studies, in a number of areas identified by the CSC as needing further study before implementation strategies could be identified and prioritized. ODOT undertook analysis of the potential for vanpool transit services and 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) and by regional governments of the Regional Transportation Plan. Each city and county within the Corridor has developed or is developing a plan for the transportation system within its boundaries.
- 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 various elements into a draft Corridor Plan.
- Following public and agency review, endorsement of the Corridor Plan by local governments and adoption by the Oregon Transportation Commission.

Refinement planning will follow Plan adoption to address special issues. These refinement plans will then be folded into the Corridor Plan. An example of a refinement plan would be determining the best of several possible improvement alternatives for the intersection of Old Rainier Road and Apiary Road, or researching alternative locations for an intermodal transportation center in Astoria.

C. Revision and Amendment Process

Implementation of the Portland–Astoria (US 30) 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.

II. CORRIDOR OVERVIEW

A. Role/Functions

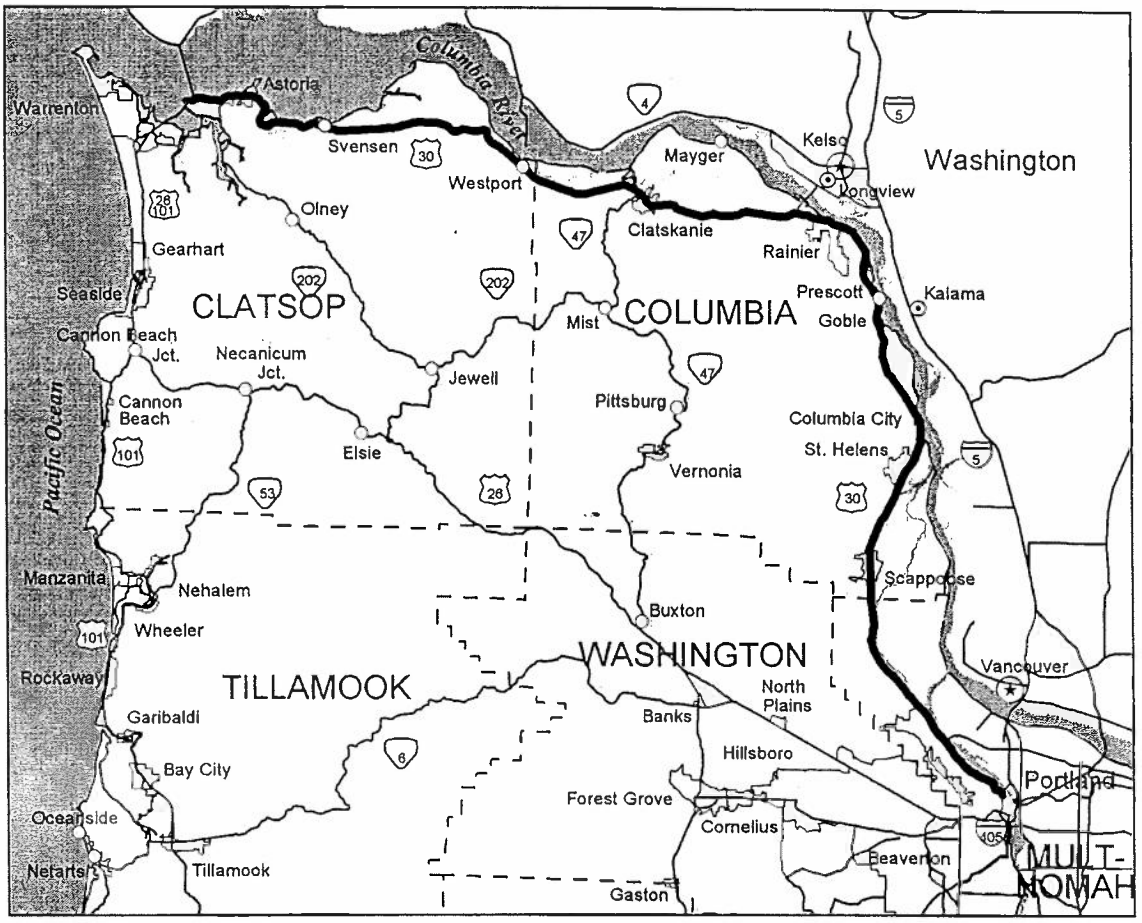
The Portland-Astoria Corridor (Figure 1) is a major route connecting the Portland metropolitan area with the northern Oregon and southern Washington coasts and providing access to communities along the lower Columbia River. It is an important recreational, commuter and commercial traffic Corridor and one of the most multi-modal corridors in the state, with active truck freight, rail, air, and water transport services. Often referred to as the Lower Columbia River Corridor, it extends from the intersection with I-405 in Portland to the intersection with US 101 in Astoria.

In the eastern portion (Portland-Rainier) of the Corridor, use of all transportation modes is increasing and expected to continue to increase over the life (15-20 years) of the Corridor Plan. In this portion, the Corridor has the following primary functions:

- Both an inter-city and intra-city commuter route;
- Access to major employment centers, including the Portland and Rainier/Longview (Washington) metropolitan areas;
- Major regional freight movement; and
- Connections to I-5 (via Longview, Washington).

Figure 1: General Corridor Area

Existing Conditions



Legend:

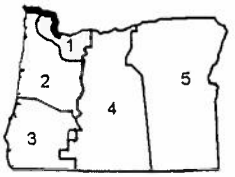
- Interstate Highway
- US Highway
- State Highway
- Portland - Astoria (US 30) Corridor
- Urban Growth Boundaries
- Locales

Washington State Locations

- County Seat
- Incorporated City

N

4 0 4 8 Miles



Corridor Location

Within its western portion (Rainier to Astoria), the Corridor is noted for the following:

- Linkage to the north Oregon coast;
- Tourism and access to recreation opportunities;
- Rural scenic qualities;
- Natural resource amenities, particularly forest lands, and scenic viewpoints, and wildlife sanctuaries and habitats associated with the Columbia River; and
- Freight movement for forest products and other goods.

Although the Portland-Astoria Corridor has multiple transportation modes, it is dominated by automobile and truck use on US 30. The function of US 30 varies in different sections, somewhat similar to the Corridor as a whole, but its proximity to other highways is also important, as seen in the following descriptions:

- Near Portland, a high amount of commuter and commercial traffic uses US 30 to access downtown Portland, the interstate highway system, and the industrial area in northwest Portland. Between St. Helens and downtown Portland, US 30 is an important commuter route.
- West of St. Helens, US 30 assumes more of a rural roadway function, serving trips from outlying areas to the towns and cities in this section, as well as recreational and commercial through-traffic. This section also serves substantial truck traffic due to several lumber mills along the route.
- Between Rainier and Portland, US 30 competes with I-5 in Washington as a travel corridor, with the connection between these highways through Longview, Washington via the Lewis and Clark Bridge over the Columbia River at Rainier. While US 30 is an attractive route between Portland and the coast, I-5 provides a faster alternative route between Portland and Rainier.
- West of Rainier, US 30 is a quicker route than State Route 4 in Washington (which parallels U.S. 30 on the north side of the Columbia River) for destination-oriented travelers to the northern Oregon Coast and Washington's Long Beach peninsula because of better alignment. However, SR 4 may offer a more scenic route.

B. Assumptions

This Corridor Plan makes a number of assumptions regarding other planning efforts and other aspects of the transportation system. These assumptions, which are <u>not</u> repeated as issues or Objectives, include:

Other Planning Processes

- Issues related to US 101 have previously been addressed in the Coastal Highway (US 101) Corridor Plan and are further refined in the Highway 101 Scenic Byway study.
- Corridor plans for other state highways intersecting with US 30, e.g. Highway 47, will be prepared at a future time, although the functioning of these intersections are addressed in this Corridor Plan.

Land Uses and Growth

- Regional (as opposed to corridor-specific) transportation system issues and needs are being addressed in the Regional Transportation Plans (RTPs) for the Portland and Longview/Kelso/Rainier metropolitan planning areas.
- Assumptions regarding use of the portion of the Corridor within the Metro urban growth boundary are based upon Metro's Region 2040 Growth Concept and include:
  - Limited urban growth boundary (UGB) expansion;
  - A Green Corridor along US 30 from the Metro UGB to the Multnomah County boundary; and,
  - Significant growth in local intra-city trips.

- The rural portions of the Corridor are assumed to continue in resource uses, e.g. agriculture and forestry, with growth generally confined to urban reserves within the Portland metro area, acknowledged exception areas and existing rural community centers.
- Population and employment growth will occur primarily in incorporated communities along US 30, particularly those closest to the Metro area.

Highway Use

All uses of US 30 will increase during the 20-year planning period.

Funding Constraints

Current funding constraints are not assumed for purposes of identifying strategies and long-term improvement projects. The purpose of the Corridor Plan is to establish objectives and priorities for long-term management of and improvements to transportation facilities within the Corridor, irrespective of current funding limitations. The ability to implement these objectives and priorities will be dependent upon future available funding.

III. MANAGEMENT DIRECTION

Management solutions, or direction, for all transportation modes in the Corridor, as well as for several functional topics, are the "heart" of the Corridor Plan. Proposed management solutions define the projects, management strategies, or other actions that will be taken to implement the Corridor Plan. As part of the development of the implementation program, issues, opportunities, constraints and Corridor Strategy Objectives were identified and responsibilities for implementation or further analysis needed for implementation were assigned. This resulted in ODOT being identified as principal implementers of a large number of implementing actions, but with cities, counties, port districts, transit districts and the private sector responsible for implementing other solutions.

A. Key Management Direction

The Corridor Plan includes a series of objectives, strategies and projects to enhance the Corridor's ability to serve commuter, recreational, and freight travel between Portland and Astoria. 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 urban portions of the Corridor. These TDM and TSM strategies include the development of support facilities for transit and other non-motorized modes, as well as promoting increased railroad use and shipping as effective means of transporting goods.

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 improvements in urban areas pursuant to their TSPs, intersection improvements in both urban and rural areas, and by construction of limited improvements, e.g. climbing and passing lanes, in the rural areas. These approaches 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 major role in the urban areas, while in the rural areas these modes have a limited role. Transit can make a significant difference in the demand for highways in the urban areas. The Corridor Plan supports opportunities to increase transit service outside urban areas as market demand warrants.

- **Access management.** Managing the locations of driveways and distance between intersecting streets is the key to preserving the capacity of the statewide highway and local arterials. In the urban areas, access management can provide for opportunities to enter, exit, or cross the highway for vehicles, pedestrians and bicycles, consistent with local comprehensive plans and TSPs. In rural areas, access management consists of managing at-grade intersections with the state highway.

- **Economic development.** A principal objective of the Corridor Plan is to ensure the efficient shipment of local products to processing centers within and outside the region. This is accomplished by maintaining capacity and managing demand on the highway system, encouraging the use of rail and waterborne modes, and promoting intermodal transfer facilities. US 30 provides access to recreational and tourist destinations that fuel the local economy. In the rural areas, passing and climbing lanes maintain travel times to assure that access is 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 were generated by ODOT through a needs analysis that looked at upgrading substandard portions of US 30 to the minimum state highway standards. This analysis does not take into account the presence of natural and cultural resources nor land ownerships. 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. At the Portland urban area fringe, Metro's *Green Corridor* policy establishes policies for development adjacent to the urban growth boundary, including the area between the UGB and the Multnomah County boundary. The Corridor Plan is careful in all instances to support applicable land use laws and policy in the Corridor. Pursuant to the 1999 OHP, ODOT is currently reviewing with several Corridor jurisdictions the appropriateness of designating portions of US 30 as either Special Transportation Areas (STAs) or Urban Business Areas (UBAs). Expressway designation is being investigated for the first 1-2 miles of US 30 west from its intersection with I-405 and for the Astoria Truck Route.

B. 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 four sections that define the character of the Corridor: Urban Areas, Urban Fringe, Rural Areas, and Rural Community Centers.

Urban Areas

Urban areas of the Corridor include the portion within the Metro UGB from the junction of US 30 with I-405 to the west city limits of Portland and the city limits of Scappoose, St. Helens, Columbia City, Prescott, Rainier, Clatskanie and Astoria. Inside the Portland and Longview/Kelso/Rainier metro boundaries, several local governments have jurisdiction over transportation and land use issues, but management direction is set primarily by the RTPs. RTP policies reinforce the balance of auto travel with transit, ridesharing, demand management, and other alternatives. While adapted to local conditions, the TSPs of the other cities in the Corridor have similar approaches to the transportation network and seek similar types of solutions, where appropriate. Key management solutions for the urban portions of the Corridor include:

- **Transportation modal balance is maintained and improved.** Corridor Plan objectives seek to strengthen the role of transit, pedestrian and bicycle modes, as well as transportation demand management, carpooling and vanpooling. The Portland Metro portion of the Corridor has a more balanced transportation network compared to the other cities, with regular transit service, and rail, water, and truck freight systems in place. Within other urban areas, the areas to be served are much smaller, and fixed-route transit is often not appropriate. However, other multi-modal solutions are explored, such as improving the local street, pedestrian, and bicycle networks. The *US 30 Transit Feasibility Study* concluded that vanpool service between St. Helens and Portland could be more cost efficient than a fixed-route commuter bus service, as demand is high but diffused in terms of destination and time of travel, and would not be sufficient to support fixed-route service. The study recommended a regional vanpool program to serve the Corridor.

- **Transit, TDM, and TSM measures are the highest priorities to provide greater capacity.** Capacity expansion is the lowest priority to address transportation demand. In accordance with regional policy, if transit, TSM or TDM measures do not meet capacity needs on existing facilities, then and only then will capacity expansion be considered. The Corridor Plan recommends system improvements that will accommodate the level of growth expected in the Portland-Astoria Corridor, as well as improvements to local street networks to reduce local trips on US 30.

- **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 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 US 30 for local trips.

- **Transportation infrastructure supports land use plans in the urban areas.** Implementation actions called for by the Plan are in compliance with local and regional comprehensive plans, which in turn implement local and regional transportation policy.

- **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.

Urban Fringe

The urban fringe is defined as that area immediately outside the Portland metropolitan UGB. This area has a unique set of issues. The area is rural in character but close enough to the urban area to access services and employment. Rural zoning is in place, yet there is pressure from increasing residential use of these lands. Long distance exurban commuting increases vehicle miles traveled and runs counter to the provisions of the *Statewide Transportation Planning Rule*. In this area, TDM measures and alternative modes can reduce demand for highway use. Key elements of the management approach at the urban fringe are detailed below.

- **Telecommuting and other TDM measures have potential to reduce highway demand and VMT.** Given the existing amount of commuter traffic to the Portland area from St. Helens and Scappoose, steady growth in commuting is likely as the region continues to expand and as potential new employers locate on developable industrial land within reach of those cities. Telecommuting has the potential to reduce commuter trips to some extent in the Portland-Astoria Corridor. Telecommunications infrastructure is in place to support the ability to telecommute. The Corridor Plan does not advocate extension of urban transit to serve these outlying areas. However, some privately sponsored vanpools and carpools may be appropriate.

- **Support for *Green Corridor* policies.** Metro has adopted a *Green Corridor* policy that establishes open space or greenbelts around the Portland urban area to prevent sprawl and to maintain an aesthetic difference between rural and urban areas.

Rural Areas

The rural areas of the Corridor are defined as those areas outside of urban areas and established rural community centers. Key management strategies for rural areas are summarized below.

- **Congestion relief is achieved through small-scale capital improvements, such as climbing and passing lanes.** As opposed to the urban area where TDM programs and TSM improvements can make a significant impact on highway demand, the Plan includes small-scale capital improvements to reduce congestion and preserve travel times through the corridor. 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 numerous at-grade intersections through the rural portions of the Corridor, the opportunity exists for conflicts between highway users and cross-traffic and turning traffic. A major strategy will be to restrict new access points and work with users to consolidate existing multiple points where possible.

- **Transportation improvements must minimize impact on significant environmental and cultural resources.** The potential to impact wildlife, natural resources and archaeological sites is greatest in the rural portions of the Corridor. For this reason, the Plan emphasizes small-scale, strategic safety and congestion- relief improvements.

Rural Community Centers

Rural community centers, such as Warren, Deer Island, Alston Corner, and Knappa Junction, are small commercial and residential nodes that have developed along US 30. These centers provide economic opportunity for rural residents and are dependent upon US 30 to bring recreational and truck freight traffic to their businesses. Balancing community needs and the transportation function of the highway is a key theme in these areas. Other key management direction includes:

- **Access management is critical to maintain safety and rural community ambiance.** To preserve the unique character of these areas, 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 between cars, pedestrians and bicyclists.

- **Intersection improvements can improve access to the community centers and improve safety.** In these areas, the ability to safely exit and enter the highway is critical. Intersections and turn lanes are provided to relieve queuing and the safety hazards created by slow moving vehicles entering and leaving the highway.

- **Transportation improvements support the economic health of rural community centers.** If access to these rural community centers were compromised, economic hardship would result for the small businesses located along the highway. Climbing and passing lane improvements elsewhere in the Corridor ensure that travel times are maintained and congestion levels are controlled. These improvements preserve the ability of traffic to flow through the Corridor, which in turn supports the businesses in rural community centers.

C. Approach to Key Issues

Demand for Increased Capacity on US 30

The management of congestion requires different approaches in different parts of the Corridor. In the urban areas, capacity added to highways and arterials would not generally be cost effective. With the exception of truck freight movement through downtown Astoria, other methods, such as TDM and TSM, are expected to be adequate to meet demand and provide an acceptable level of mobility. For example, transit and telecommuting and other TDM measures can play a significant role in managing demand for roads in the urban parts of the Corridor, while that strategy would not be as effective to address rural congestion problems. In the rural areas, most Corridor Plan solutions fall into the management, operations and maintenance category, because they are generally modest improvements that improve the function of the facility.

Urban Areas

Congestion and travel times in the urban areas are expected to increase even if high levels of improvements are applied, so the costs of highway improvements are excessive compared to the travel time saved. The Corridor Plan calls for improving local street networks to reduce local trips on US 30, and enhanced pedestrian, transit, and bicycle facilities to encourage use of alternative modes where practical. The Corridor Plan emphasizes solutions that include:

- No additional expansion in highway capacity, except for transportation system management (TSM) improvements (turning lanes and signal improvements) between Portland and Columbia City, and truck climbing/passing lanes and turn lanes in congested urban areas from Columbia City to Astoria.
- Improvements to existing intersections with US 30 and local street networks within city limits to improve traffic flow.
- Support for TSM and TDM measures, improvements to pedestrian facilities, and increased reliance on transit.
- Development of local access management and circulation plans to relieve localized congestion problems and to meet local transportation system needs.

- Develop an Astoria Truck Route to remove trucks and through-traffic from the Astoria downtown core.

Rural Areas

The Corridor Plan includes no major expansions in highway capacity in rural areas. Rather, passing and climbing lanes provide congestion relief at key "choke points". General purpose widening of US 30 outside the urban areas would be expensive and have significant adverse environmental impacts, as the Corridor passes through or next to wildlife habitat and natural resource sites. Strategically sited climbing and passing lanes can reduce congestion with a much smaller capital investment. In rural community centers, access management and additional turning lanes are the primary tools to relieve congestion. Four areas are targeted for climbing/passing lanes to reduce bottlenecks: John Day Road/Fern Hill, Clatskanie to the Clatsop County line, and between Deer Island and Prescott in Columbia County and from Swedetown to Lost Creek. Intersection realignments or additional turn lanes will also aid traffic flows in congested spots or in areas with heavy truck traffic. Examples include the US 30/Nicolai Cut-Off Road, the Cornelius Pass Road/US 30 intersection, US 30 and Tide Creek Road, and Smith Point in Clatsop County.

Alternative Modes

Air Service

The Corridor Plan recognizes that air service is dependent on the marketplace for its financial viability. Management solutions focus on improvements to existing airports and restoring/maintaining service between Portland and Astoria. Protecting facilities from incompatible land uses is also a key objective.

Bicycle System

Four 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 and other maintenance projects. 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.
- In urban areas, a primary concern is for safe crossings of US 30 and connections to local bicycle routes.

Pedestrian System

Since the Portland-Astoria Corridor contains a large percentage of rural lands that will not typically be highly used for pedestrian travel, the main objective is to ensure adequate facilities are provided within urban areas where they will be most effective. In many cases, the objectives and projects that will improve bicycle facilities will also improve pedestrian access and safety, for example, through widening shoulders or developing pathways separated from automobile traffic.

Transit Service

The primary approach to transit in the Portland-Astoria Corridor is to coordinate with local providers and jurisdictions to ensure that adequate services are provided where they are most effective and needed. Commuters from Scappoose and St. Helens would benefit from a vanpool program, and park and ride services combined with increased Tri-Met service at Sauvie Island.

Rail Service

The Corridor Plan supports the maintenance of existing rail services and improvements to the infrastructure, e.g., intermodal facilities, to enhance the investment climate for rail users. Increased use of rail to convey bulk commodities can limit the growth of truck freight on US 30. Managing the rail line to preserve future opportunities for passenger service is also promoted.

Truck Freight

A limited increase in truck freight is anticipated due to increased reliance upon rail and water for the transport of bulk commodities. Within the Corridor's rural portions, passing/climbing lanes and turn lanes improve truck safety and general highway travel time. Truck travel times are expected to improve with better truck access (e.g., turn lanes at critical points) and with the use of alternative routes, such as I-5 between Longview and Portland and the Astoria Truck Route (if constructed).

Roadway Conditions and Safety

Problems of deficient geometry and poor pavement conditions can affect the safety of motor vehicle drivers, cyclists, and pedestrians. In allocating state resources, the maintenance of safe and functional facilities is established as the highest priority. Improvements to surface conditions and to high accident locations are priorities throughout the Corridor. Other solutions include intersection safety improvements, shoulder widenings, sunken grade repairs, bridge retrofits 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 installation of safety barriers and weather monitoring devices.

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 make minor repairs. Many of the repairs have been backlogged because of limited maintenance budgets.

Bridges

The ODOT Bridge Engineering Section has evaluated the structures in the Corridor and determined that 10 structures are in need of seismic retrofits. Retrofitting consists of two main types: either connecting bridge superstructure elements such as beams and decks to their supporting members (Phase 1), or strengthening substructure elements, such as crossbeams, footings or pilings (Phase 2). Two structures, Goble Creek Bridge and Wauna Interchange, need Phase 1 upgrading only. Five bridges need Phase 2 upgrading only: Longview Interchange, Beaver Creek, Lost Creek, overcrossing of Swedetown County Road, one unnamed (#01740 at MP 13.19). Three bridges need both types of upgrading: Tide Creek, Sauvie Island Partial Viaduct, and John Day River. ODOT and WSDOT are currently evaluating replacement or retrofitting of the existing Lewis and Clark Bridges connecting Rainier with Longview, Wahsington (and I-5) with a $200 million, four-lane toll bridge.

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 cultural and archaeological resources. The overall approach is to seek to protect the environment from vehicle emissions, pollutant runoff and interruption of migration routes. 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. Priorities for culvert repairs were assigned by the Department of Fish and Wildlife based upon the severity of potential biological impact if the culverts were left unrepaired.

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.
- All new transportation projects will include appropriate measures to protect air and water quality.

Access Management

New access management policies have been developed as part of the 1999 OHP. However, the six general categories established in the 1991 OHP apply to transportation plans adopted before January 2000. US 30 is classified as access management Category 2 (equivalent to an Expressway, as defined by the OHP) from I-405 to NW 29th Avenue in Portland's northwest industrial district, and on the proposed Astoria Truck Route from John Day River Bridge to OR 202 (Williamsport) interchange. The remaining portions of the Corridor are Category 3 in the less developed rural/urban areas and Category 4 in the more developed urban areas. A lower number indicates greater restrictions on access, while a higher number has relatively fewer restrictions.

The Corridor Plan recommends an aggressive program of access management in rural areas to reduce the number of conflicts between through traffic and local traffic entering the highway. The Plan also recommends coordinating with the cities and counties to create access management plans and work to consolidate access points where possible.

Land Uses

Management of and improvements to the transportation system are fully integrated with regional and local government land use planning, resulting in transportation efficient land use patterns intended to reduce vehicle trips and miles traveled and promote a live-work balance, particularly within the Corridor's urban areas.

It is assumed that development within the Portland metropolitan UGB will follow the direction set by Metro's *Regional Framework Plan* and *Urban Growth Management Functional Plan*. This would include additional industrial development within the Northwest Portland industrial district and additional residential and industrial development in the Linnton neighborhood, which has approximately 10 percent vacant land, with just over two-thirds zoned industrial.

Outside the Portland UGB, land use patterns will develop according to the acknowledged land use plans for each jurisdiction. Review of these plans using the Potential Development Impact Areas (PDIA) indicates that there is significant vacant developable land within the corridor to accommodate projected

growth, particularly between Scappoose and Clatskanie in Columbia County. Potential solutions have been identified in the Corridor Plan, such as turning lanes, signal improvements and channelization of intersections. With the exception of the Port of St. Helens at Port Westward, most commercial and industrial growth is confined to incorporated cities. Additional residential land uses along the Corridor outside UGBs are expected in designated rural community centers and on vacant rural lands zoned for residential use.

As identified in Metro's Region 2040 Growth Concept, ODOT, Metro and Multnomah County will collaborate to identify "Green Corridor" planning and transportation strategies to preserve the natural areas between the Portland Metro UGB and the Multnomah County boundary.

The 1999 OHP includes provisions for creating Special Transportation Areas (STAs) where a highway acts as a primary city street and Urban Business Areas (UBAs) where the highway bisects other areas of commercial activity. These provisions aim to better coordinate the needs of the state's highway system with local needs. No STAs or UBAs have been designated to date through the Corridor Plan or TSPs. As part of development of a final plan, eligible jurisdictions are being consulted regarding the appropriateness and desirability of applying STA or UBA designations to portions of US 30 through their communities. Expressing designation is proposed for the first 1-2 miles of US 30 west from its intersection with I-405 and for the Astoria Truck Route.

Protection of sensitive cultural (historic and archaeological) resources and effects on community livability must be considered with any proposed improvements to the transportation system. Therefore, part of the process of designing transportation facilities will be to identify and avoid adverse impacts to livability and cultural resources, or where avoidance is not possible, to identify suitable mitigation.

Economic Impacts

The economy of the Corridor is closely tied to the shipping, timber, and tourist industries. Functional and efficient access to employment centers, freight movement, and recreation travel are key to the Corridor's economic health. Improved access to existing and designated industrial and commercial sites is a key objective. Deepening of the Lower Columbia River and improvements to rail and port facilities are supported as key solutions to promote growth for all ports and incorporated communities within the Corridor.

The Northwest Oregon Economic Alliance has identified tourism as a key economic development strategy for in Clatsop, Columbia and Tillamook counties, taking advantage of the corridor's abundant natural and scenic resources. The Corridor Plan includes facility management strategies within urban areas and passing/climbing lanes within the western segment to enhance access to recreation opportunities. Recreation development focuses on the Lower Columbia River, such as a canoe trail from Portland to Astoria. Other measures include objectives to develop or improve access and signage to recreation spots.

VI. 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.

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 CSC 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.

A. Funding Forecasts

Funding forecasts are based upon 1999 OHP forecasts, traditional funding distributions among ODT Regions, within each Region, between urban/rural areas, and among rural counties. The CSC developed a general methodology for determining the target funding levels for new construction based on a 'snap-shot picture' approach with a base year of 1997 and including state revenue and federal highway funds for new construction. Assumptions included a 20-year projection of funding allocation for new construction projects, no changes in state or federal funding levels from the 1997 level, and no inflation adjustment on project costs.

Historically, Regions 1 and 2 have received an average of 34.2% and 23%, respectively, of the statewide construction funds for new projects. The Region 1 allocation has historically been split 80% for the Portland metropolitan planning organization (MPO) area and 20% to the Non-MPO area. Region 2 monies are split among all the ODOT facilities within the region. In Region 1, the Corridor in the urban portion is part of the Metro regional decision-making process, which allocates funding for the Metro region. Table 1 summarizes the annual allocation of modernization project funding statewide and for Regions 1 and 2.

Table 1: Annual New Construction Funding Allocation by Region (1997 base year)($ million)[1]

Funding Source	Statewide	Region 1			Region 2
	(approx. millions per year)	Region 1 Share (34.2%)	Metro (MPO) Allocation (80%)	Non-MPO Allocation (20%)	Region 2 Share (23.0%)
State Gas Tax	$56.8	$19.4	$15.5	$3.9	$13.1
Federal Funds	$99.0	$33.9	$27.1	$6.8	$22.8
TOTAL	$155.8	$53.3	$42.6	$10.7	$35.9

(1) Based upon historical trends in disbursement shares.

Three potential modernization funding forecasts were developed. One forecast uses a historical split of money to the regions and a funding percentage for the corridor over the past 20 years, applying it to the forecast revenues over the next 20 years. This is the highest, most optimistic of the three forecasts. It is not realistic to expect this much money to be available without increased revenues at the state or federal levels, or both. Inflation and deferred maintenance and preservation needs will consume an increasing proportion of available revenues.

The second forecast uses the OHP preliminary needs and revenue forecasts and assumes an even split of available funds to address all needs. An even split would allocate $3.3 billion to Modernization projects over 20 years. This may also represent more funds than can reasonably be expected 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 available over the 20-year planning horizon.

Table 2 summarizes the three forecasts. In the rural areas of Region 1, funding for Corridor Plan projects would be split among the five rural counties.

Table 2: Corridor Projected Modernization Funding Forecast

Region	Historical STIP Programming ($ million)	Even Split of Projected Revenue ($ million)	Low Mod-High Maintenance & Preservation ($ million)
Region 1			
MPO	$30 - $60	$22 - $45	$7 - $14
Rural	$15	$11.0	$7
Region 2	$14	$7.0	$2
TOTAL	$59 - $89	$40 - $63	$16 - $23

B. 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 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) Transportation system management to optimize existing highway capacity;
(4) Safety and capacity improvements; and
(5) Projects that support economic development, particularly recreation and tourism.

The projected total costs for the needs identified during the Corridor Plan process are approximately $264 million. The highest priority projects were 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 are already funded in the current STIP and total $20 million. Constrained projects, totaling $37 million, would be implemented in later years of the current STIP and are still subject to funding authorization. In the Portland Metro area, committed and constrained projects have been identified through the RTP process.

The projects next in priority were listed in the ***Strategic*** funding category that would be expected to be funded if current funding levels are increased due to new sources of funding during the planning period. Strategic projects total $153 million. Two large projects the Lewis and Clark Bridge and the Astoria Truck Route would be included in this funding option. These two projects would be roughly $140 million. The other Strategic projects total only $13 million. Since such increased funding options have yet to be identified, it is assumed that Strategic projects could only be implemented in the intermediate-to-

long-term, i.e., it would take at least five years for funds to be identified and project development completed. Practically speaking, if additional funding is identified, projects identified from the Strategic funding list would move to the Constrained funding list and total funds available for Constrained projects would increase. Per current ODOT policy, project development activities are not undertaken for projects not on the Constrained Funding list (that is, project development is not undertaken for projects that are not funded for implementation).

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. However, Unconstrained projects could be funded by alternative funding sources, such as development exactions, local improvement districts, urban renewal districts, etc. Unconstrained projects total $39 million. The term "Unconstrained" means that if ODOT had all the funding to meet all corridor needs, that all projects could be funded. Unconstrained projects that are summarized in the project matrices are those that originated through the CSC and have a demonstrated need. Reconstruct to Standard projects were generated through ODOT's HPMS system which identifies projects to bring substandard segments of highway up to highway standards. Reconstruct to Standard projects total $15 million. These projects may not be practical given that attaining maximum grade or curvature standards could require extraordinarily expensive and impractical solutions for a highway such as US 30 that crosses mountains and operates in a highly constrained environment. Cost are preliminary estimate bases upon information provided by local governments or generated by ODOT. Figure 2 illustrates the relative amounts of funding by category.

Figure 2: Relationship of Funding Categories