Willamina to Salem Corridor
Oregon Highway Route 22

Highway 18 Interchange

to the Salem Eastern Urban Growth Boundary,
Deer Park (Gaffin Road) Interchange

Interim Corridor Strategy

January 1996
OTC Endorsement
June 1996
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Prepared by:
Oregon Department of Transportation
W&H Pacific
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Implementation of this corridor strategy and plan is dependent upon the availability of funding. Endorsement or adoption of the Plan by the Oregon Transportation Commission does not guarantee adequate financial resources to carry out the projects and programs contained in the Plan, nor can the Commission commit the financial resources of other agencies or public bodies.
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EXECUTIVE SUMMARY
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WHAT IS CORRIDOR PLANNING, AND WHY IS IT BEING DONE?

The Oregon Department of Transportation is developing plans for transportation corridors identified in the Oregon Transportation Plan (OTP) as being of statewide importance, urban area arterial roads, and interchange areas where development pressures have or are threatening operation.

A corridor plan is a long range plan for managing and improving transportation facilities and services to meet needs for moving people and goods. A key element of corridor planning is consideration of the interrelationship between land use and transportation.

Corridor plans follow and carry out the general policies and planning direction contained in the OTP and the adopted modal and program plans. Corridor plans assist in the development of transportation projects for implementation through the Statewide Transportation Improvement Plan (STIP).

Long-term planning in the Highway 22 Corridor is being performed in order to: a) resolve major planning issues; b) protect transportation investments; c) preserve transportation rights-of-way; and d) respond to federal and state planning requirements.

This document proposes a strategy for the operation, preservation and enhancement of transportation facilities within the Oregon Highway 22 Corridor. The corridor strategy covers a 20-year planning horizon, building upon federal, state and local transportation and land use policies and plans, together with a comprehensive consultation with stakeholders in the corridor. This strategy will guide development of the Corridor Plan and Corridor Refinement Plans for the specific areas and issues in the corridor, ensuring that the corridor is preserved and enhanced to the benefit of all users.

THE IMPORTANCE OF THE WILLAMINA-SALEM HIGHWAY 22 CORRIDOR

The portion of the Highway 22 transportation corridor evaluated in this study is about thirty miles, beginning at the Highway 18 Interchange near Willamina and terminating about four miles east of Interstate Highway 5 at the Deer Park (Gaffin Road) Interchange. This coincides with the eastern boundary of the Salem Urban Growth Area. The corridor primarily goes through farm and forest land with little development outside the Salem area. Salem, the state capital, is part of the Salem-Keizer Urban Area with a population of over 182,000. In addition to serving as the center of state government, Salem also is a major agricultural processing center for the region.

Oregon Highway 22 is of importance to a wide range of statewide, regional and local users. It serves as the primary route linkage between the mid-Willamette Valley, the Oregon Coast and Central Oregon. It also is a primary connection to the Interstate
Executive Summary

Highway System for these areas. The corridor is traveled for a number of purposes, including daily commuting and recreational travel. It is relied upon for product movements by agricultural and forest producers and by industrial and commercial users in the Willamette Valley, the Oregon Coast, and Central Oregon. About 5.5 million tons of freight moves through the corridor annually.

In addition to its function connecting regions in the State, Highway 22 is a major east/west arterial within the Salem area. Along this portion of Highway 22 can be found:

- The principal crossing of the Willamette River in the Salem area;
- The Salem Central Business District;
- The State Capitol and the largest concentration of state government employment, as well as Marion County and City of Salem Offices;
- The downtown Salem Transit Mall;
- The Salem Hospital;
- Willamette University;
- The Southern Pacific Railroad and the AMTRAK Station;
- The Fairview Industrial Park;
- The Salem Airport;
- An interchange with Interstate Highway 5; and
- Access to the Lancaster Drive shopping centers.

Highway 22 is routinely used by farmers and businesses for local travel to move equipment from farm to field, or transport gravel or lumber from source to processing facility. It serves as an important farm-to-market road, allowing farm products to be transported to processing plants. The corridor is a vital link for area residents needing health care and emergency services. It also provides access to AMTRAK and Salem's Airport.

The corridor is a major commuting route. A large number of commuters are using the corridor to get from their residences in other cities and locales to their jobs in Salem, and a number of Salem residents are using the corridor to commute elsewhere.

MAJOR ISSUES

Safety was by far the most frequently mentioned issue raised during the public involvement process. Among the more commonly mentioned safety issues were speeding, difficulty crossing Highway 22, hazardous intersections and roadway geometry, passing at inappropriate locations, and roadway markings and illumination.

Other major issues raised during the public involvement process included: a need for commuter transit service; bicycle facilities; farm machinery use/ crossing Highway 22;
the lack of passing and turning lanes; the transition area between the "freeway" portion of Highway 22 on the east end of the corridor and the urban arterial within Salem; the projected capacity limitations of the Willamette River bridges; and that congestion at the Willamette River bridges and in downtown Salem hampers connectivity between the portion of the corridor west of the Willamette River and Interstate Highway 5.

WHAT IS THE STRATEGY FOR THE HIGHWAY 22 TRANSPORTATION CORRIDOR?

The Strategy for the Highway 22 Transportation Corridor consists of a compilation of objectives selected to address the issues identified by the planning effort's public involvement process and the various federal and state policy initiatives. Among the objectives are:

- Improve the safety of corridor transportation facilities;
- Establish transit and park and pool opportunities to accommodate commuter traffic between Salem and other communities along the corridor;
- Develop a plan to reduce or manage recurring congestion within the corridor;
- Provide transportation options to improve the mobility of the transportation disadvantaged population living within or using the corridor;
- Provide additional climbing and passing lanes along the two-lane section of the corridor;
- Analyze the feasibility of developing a multi-modal transportation hub effectively linking all modes of transportation as a long term future;
- Conduct a Major Transportation Investment Study (MTIS) to analyze the need for, and potential location of an additional crossing of the Willamette River. Evaluate mechanisms that could postpone an additional bridge over the Willamette River, and evaluate the potential for a more direct east/west connection to Interstate Highway 5 for traffic originating west of the Salem area;
- Conduct an MTIS to identify appropriate solutions for recurring congestion on Mission Street between 25th Street and Cordon Road.
- Examine alternative ways to provide property access between the Independence Highway and the Willamette River Bridge.
OR 22 Corridor Plan

Willamina Interchange - Salem East U.G.B.

Strategy Segments 1 - 2

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Chapter 1

Overview of Corridor Planning
A. INTRODUCTION

ODOT is developing corridor plans for those corridors identified in the Oregon Transportation Plan (OTP) as being of statewide importance. This document proposes a strategy and objectives for the operation, preservation and enhancement of transportation facilities along Oregon Highway 22 from the Highway 18 Interchange near Willamina to the Deer Park (Gaffin Road) Interchange east of Salem. The corridor strategy covers a 20-year planning horizon, building upon federal, state and local transportation and land use policies and plans, together with a comprehensive consultation with stakeholders in the corridor. The corridor strategy will guide development of the Corridor Plan and Refinement Plans for the specific areas and issues in the corridor.

Plans call for the Corridor Strategy to be endorsed by all of the jurisdictions along the corridor and by the Oregon Transportation Commission. The Corridor Plan will be included in transportation plans and comprehensive land use plans in the future. This will ensure that the corridor is preserved and enhanced to the benefit of all users along the corridor.

This chapter consists of a general overview of the corridor planning process. Chapter Two includes a general description of the corridor, a listing of relevant planning along the corridor, and population and employment projections. The existing condition of transportation and land use is discussed in Chapter Three, and future conditions are discussed in Chapter Four. Issues, opportunities and constraints identified during the planning process are provided in Chapter Five. Chapter Six is the interim corridor strategy.

B. CORRIDOR PLANNING DESCRIPTION AND PURPOSE

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. Corridor plans are currently being developed for the 31 corridors of statewide or interstate importance identified in the OTP. Other transportation corridors will be studied as resources allow. Each corridor planning area includes statewide transportation facilities, systems and land area that influence transportation performance.

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.

ODOT is developing statewide management systems and modal plans for automobile, truck, passenger and freight rail, aviation, bicycle and pedestrian modes, and intermodal facilities, in addition to a transportation safety action plan. While many modes of transportation and transportation facilities are not owned or operated by the state (e.g., railroads, bus 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 corridor planning for the Highway 22 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 for successful project development. Corridor planning provides a framework within which individual projects located in corridor communities can be reviewed and prioritized.

Preservation of Transportation Rights-of-Way — Costs for transportation rights-of-way increase substantially as land suitable for transportation is developed for other purposes. Uncertainty about right-of-way needs may also impact property owners, businesses, and at times entire communities. The scope and 20-year planning horizon of a corridor plan identifies long-range right-of-way needs which serve to direct future development, reducing development costs and environmental, social and economic impacts.

Protection of Transportation Investments — To prevent premature obsolescence of highways and other facilities, corridor planning examines alternative 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.
C. CORRIDOR PLANNING REQUIREMENTS

Several federal and state mandates impact how corridor planning is to be undertaken. The three most important of these are: the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA); the OTP; and the Oregon Transportation Planning Rule (TPR). While very different policy initiatives, all three share several common themes: 1) a requirement that transportation plans provide a balanced transportation system providing transportation options; 2) that transportation plans reduce reliance upon the single occupant automobile and increase the opportunity for modal choice; and 3) that transportation plans be coordinated with land use plans, and address the environmental, social, economic and energy consequences of proposed actions.

A summary of the OTP, the TPR and ISTEA is provided in Appendix E. Appendix F summarizes applicable regional and local plans.

D. CORRIDOR PLANNING PROCESS

Corridor planning is being carried out in three phases that progress from the general to the specific (Figure 1-1). It is important to note corridor planning may not occur in a linear fashion, i.e., that activities described in Phase 1 may occur after Phase 2 or Phase 3 planning.

Phase 1: Interim Corridor Strategy

With requirements to consider a range of transportation modes and impacts on land use and the environment, a corridor strategy is established in order to properly address the goals and policies of the OTP and statewide mode plans. A corridor strategy provides a set of transportation performance and impact objectives for each corridor.

Transportation facilities and systems in each corridor are identified and analyzed for present and future performance in areas of modal balance, intermodal and regional connectivity, congestion and safety. In addition, characteristics of the corridor and the role it plays in the region are described in terms of land use, social, environmental and economic development impacts.

From these analyses come key findings and conclusions regarding the present and future performance and impact of the corridor. These findings and conclusions are the basis for a corridor strategy. This strategy, described in detail through a number of corridor objectives, help ODOT and jurisdictions within each corridor plan for their transportation systems in a manner consistent with the OTP and other plans and policies.
Chapter 1
Overview of Corridor Planning

Figure 1-1
Corridor Planning Process and Phases

Phase One
- Develop Corridor Strategy

Phase Two
- General Planning Process
- City or County Transportation Systems Planning (TSP) Process

Phase Three
- Produce Corridor Plan
- Refinement Planning for Some Sites

Phase Four
- Projects and Programs
Phase 1 corridor planning concludes with the endorsement of an *interim corridor strategy* by cities, counties and metropolitan planning organizations within individual corridors, and by the OTC.

**Phase 2**

Most of the corridor planning effort occurs in Phase 2 and focuses on developing corridor improvement and management elements, and city and county transportation planning (Figure 1-1).

During Phase 2, a *corridor improvement and management element* of each corridor plan is developed to test interim corridor strategy objectives, analyze alternatives, provide general cost estimates and establish implementation priorities. Implementation decisions for each corridor objective may entail transportation improvements, operations and maintenance programs, agency liaison agreements, and management system category assignments. These decisions may be regulatory (e.g., level of importance, access management category assignments, etc.) or advisory (e.g., proposed capital projects, maintenance programs, etc.) in nature.

In conformance with the TPR, *transportation systems plans* (TSPs) are currently being or will be developed for cities, counties and metropolitan planning organizations in Oregon. ODOT staff and financial resources are contributing to these local efforts. Portions of TSPs that impact statewide corridors are incorporated into the corridor improvement and management element of corridor plans to implement the objectives established in the corridor strategy. This process helps link corridor objectives to city and county comprehensive plans.

Counties with populations under 25,000 and cities under 2,500 may apply to the Land Conservation and Development Commission for a full or partial exemption from the requirements to develop a TSP. In order to meet remaining TPR requirements for these jurisdictions and complete corridor plans in these instances, ODOT is assisting exempt local jurisdictions through a process called *general planning*. Similar to transportation systems planning, findings of general planning that impact statewide corridors are included in corridor improvement and management elements.

ODOT uses the general planning process to reach implementation decisions in several circumstances: 1) for any corridor where statewide emphasis regarding transportation facilities and systems is needed; 2) to adequately analyze those portions of corridors that lie within exempt jurisdictions; and 3) where non-exempt local jurisdictions desire that ODOT take the lead for transportation planning in the corridor.

At the conclusion of Phase 2 corridor planning, implementation decisions reached through transportation systems planning or general planning are combined in the transportation improvement and management element. The interim corridor strategy is
then refined to reflect the implementation decisions made. The corridor improvement and management element, together with the corridor strategy, is adopted by OTC as the corridor plan.

Phase 3

Some portions of corridors may require refinement planning during Phase 3 to resolve particular land use, access management or other issues that require a more in-depth analysis than ordinarily required to prepare a corridor improvement and management plan element. Corridor plans may then be amended to incorporate the products of these refinement plans.

Projects and Programs

Prioritized improvements to corridor facilities, systems and management, identified in the corridor plan, provide the basis for update of the State Transportation Improvement Program (STIP) which is responsible for distributing limited transportation resources. Corridor planning is helping ODOT, with the cooperation of local governments and the 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.

Figure 1-1 illustrates the relationship between these phases of the planning process.

E. CORRIDOR PLANNING PARTICIPANTS

The Highway 22 corridor traverses two counties, affects several communities and one of Oregon’s largest urban areas. A multi-jurisdictional approach to planning was needed. Equally important has been the involvement of the general public and various special interest groups located both on and off the corridor.

In order to coordinate and facilitate participation from such a large and diverse group, the following elements were used:

- Corridor Planning Management Team (CPMT) and Corridor Advisory Group (CAG)
- Public Involvement Program
- Statewide Agency Coordinating Committee and Statewide Stakeholders

The Corridor Planning Management Team (CPMT) consisted of representatives of Oregon Department of Transportation, Polk County, Marion County, and the City of Salem. The Mid-Willamette Valley Council of Governments, representing the Salem-Keizer Area Transportation Study and the Salem Metropolitan Planning Organization, also participated. The CPMT has acted as a review and steering committee throughout the planning process in developing the Corridor Strategy. These agencies will be responsible for implementing the programs and projects which will be necessary to implement the plans which will be the final outcome of the corridor planning process.

The Corridor Advisory Group (CAG) was composed of stakeholders and jurisdictions who were not represented on the CPMT, but who have a strong interest in the planning and operation of the Highway 22 Corridor. Twenty-two stakeholders and jurisdictions, including Salem neighborhood groups, the Cities of Dallas, Independence and Monmouth, the Oregon State Police and others were invited to two CAG meetings held during the planning process and their input was solicited in the development of the Highway 22 Corridor Strategy.

2. Public Involvement Program

An extensive public involvement program was held as part of the corridor planning process. This included twelve public meetings, direct mailings soliciting input, and print and electronic media coverage. Input was received and information provided to over 200 persons during the course of the project. The public involvement activities and the public input program are described in greater detail in Appendixes A and B, and public comments submitted at the public meetings and by mail are summarized in Appendix C.

3. Statewide Agency Coordinating Committee and Statewide Stakeholders

Federal and state agencies, tribal representatives, and transportation service providers have been invited to participate in a continuing statewide agency coordinating committee to help facilitate their involvement in corridor planning. Public involvement in corridor planning at the state level is being facilitated by a statewide stakeholders group. The stakeholders group includes representatives of many statewide special interest groups in the transportation, land use, environmental and social service areas. Those interested in a specific corridor participate in corridor planning through involvement on the corridor planning management team and/or through meeting and corresponding with the corridor planning project team. Copies of draft documents were mailed to these groups for review.
Chapter 2
HIGHWAY 22
CORRIDOR OVERVIEW
A. GENERAL CORRIDOR DESCRIPTION

Highway 22 provides access to the Oregon Coast from the central Willamette Valley area, and to Central and Eastern Oregon. The studied corridor intersects a number of highways. These intersecting highways include: The Salmon River Highway (Highway 18), connecting the Portland area to the Oregon Coast; the Kings Valley Highway (Highway 223) connecting to Dallas; the Dallas-Rickreall Highway (Highway 223), also connecting to Dallas; Pacific Highway West (Highway 99W) at Rickreall, connecting to McMinnville and Monmouth; the Independence Highway (Highway 51) leading to the City of Independence, the Dayton-Salem Highway (Highway 221) leading to Dayton, Highway 99E through downtown Salem, and Interstate Highway 5.

Other modes of transportation are present for portions of the route. Railroads are present in certain areas, but no railroad is continuous through the corridor. Public transit exists in the Salem area, and transportation services are provided to disadvantaged persons throughout the corridor. Aviation services are adjacent to Highway 22 at Salem’s McNary Field, and the Independence State Airport also provides general aviation services. Scheduled intercity bus services are available for North-South travel in Salem, but no such service exists through the corridor.

The Highway 22 Corridor is divided into two segments for the purpose of this analysis (Figure 2-1). The western segment, extending from the Highway 18 Interchange to the Highway 51 intersection, is entirely rural in character. The eastern segment, from Highway 51 to Salem’s eastern Urban Growth Boundary at the Deer Park (Gaffin Road) Interchange, includes the Salem Urban Growth Area and a fringe area adjoining it on the west.

Western Segment - Highway 18 To Highway 51

No incorporated communities are on this segment. However, the City of Willamina (population 1,756) is near the corridor’s western end and the City of Dallas (population 10,545) is approximately three miles to the south on Highway 223. The community of Rickreall is about one quarter mile south of the intersection of Highways 22 and 99W. Monmouth (population 7,745) and Independence (population 4,410) are about seven miles south of Highway 22.

1. Physical & Environmental Features

The terrain along this segment varies from rolling forest and farm land in the west to flat farm land in the east. The segment crosses the South Yamhill River at the western end of the corridor as well as a number of other creeks and sloughs, including Gooseneck Creek, Mill Creek, West Salt Creek, Salt Creek/Hoekstra Slough and Rickreall Creek. Most of these are identified by Polk County as significant fish habitat/riparian areas. An area designated by Polk County as elk and deer summer range is south of Highway
### Chapter 2

**Highway 22 Corridor Overview**

**Figure 2 - 1**

Highway Segments
Highway 22, Willamina - Salem East UGB

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<td>Salem (East UGB)</td>
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Highway 22 Corridor Overview

22 about four to six miles east of the Highway 18 Interchange. Remnants of Willamette Valley prairie grasslands exist in the corridor, including highway right-of-way. These areas are habitat for a number of rare native species. Baskett Slough National Wildlife Refuge, a major wildlife refuge developed for migratory waterfowl, particularly a subspecies of Canada Goose, borders Highway 22 northwest of Rickreall. These areas of environmental sensitivity must be considered when decisions about road development and widening projects are considered.

Access to the refuge viewing area has been identified as a problem because there are no highway turn lanes at the viewing area parking lot. ODOT and the U.S. Fish and Wildlife Service are currently constructing access to a new viewing area.

2. Land Use Patterns

The principal land uses along this segment are agriculture and forest with small pockets of rural residential. The largest area of development is found around Rickreall.

3. Cultural Features

This segment passes through areas of rural development. Buell Park is north of the highway. Several historic and cultural sites exist within the rural section of Highway 22. Brunk’s Corner Historic Site is located just west of the Highway 51 intersection. Located near Brunk’s Corner is the Oak Knoll Golf Course. Another golf course is under development north of the highway in the Salt Creek area.

4. Transportation & Travel

West of the intersection with the Dallas-Rickreall Highway, Highway 22 can be characterized as a two-lane highway. Hill climbing lanes exist at significant grades for both westbound and eastbound traffic. Highway 22 becomes a four-lane facility east of the Dallas-Rickreall Highway intersection. The Willamina and Grand Ronde Railroad, connecting the Fort Hill area to Southern Pacific’s Willamina Branch, is at the western end of the corridor. The Southern Pacific’s Westside Branch line crosses the corridor via an underpass east of the intersection of Highway 22 and 99W. Both the Willamina Branch and the Westside Branch are leased to the Willamette and Pacific Railroad. The highway also is crossed by a bicycle/pedestrian overcrossing near the Oak Knoll Golf Course.

Eastern Segment --Highway 51 To Deer Park (Gaffin Road) Interchange

This segment of the corridor begins just east of the Highway 51 intersection and continues through the Salem-Keizer area (population 182,000) to a point approximately four miles east of Interstate 5. Highway 22 becomes an urban arterial street between the Willamette River bridges and Interstate 5 in Salem. East of the Hawthorne Street
intersection, it is a full access-controlled highway with vehicles entering only at the Interstate Highway 5 and the Lancaster Drive Interchanges.

1. Physical and Environmental Features

The Willamette River is parallel to Highway 22 beginning at a point about a mile east of the intersection with Highway 51, and ending at downtown Salem. The Willamette River is significant fish and wildlife habitat as well as a significant scenic feature. The Polk County Significant Resources Map includes the river. Rickreall Creek also is in the western portion of this segment, and Mill Creek, coursing through Marion County and Salem and crossed by the corridor at Interstate Highway 5, also is significant fish habitat. This segment also contains remnants of native Willamette Valley prairie grasslands. The environmental sensitivity along this segment is considered high.

2. Land Use Patterns

Land use in this segment is predominantly urban within Salem, including downtown Salem, urban/suburban strip development, urban residential, and other uses such as governmental (State of Oregon, Marion County and City of Salem offices), educational (Willamette University) and transportation (Amtrak and Salem Airport).

3. Cultural Features

Holman Wayside, a state park and rest stop just east of Doak’s Ferry Road, is on the north side of the highway. Wallace Marine Park and boat landing, on the west bank of the Willamette River at the Willamette River Bridges, is crossed by the corridor via an overpass into downtown Salem. A number of historic structures are located in the downtown historic district. Historic structures at Waterfront Park, the Oregon School of the Blind, Willamette University, the Thomas Kay Woolen Mill and the Amtrak Train Depot are located near Highway 22. At the intersection of Highway 22 and Mission Street is the historic Deepwood House. Cascade Gateway Park is located near the intersection of Highway 22 and Interstate 5. Due to the number of historic structures on or near the highway, the cultural sensitivity within this segment is considered high.

4. Transportation and Travel

Highway 22 contains at least four travel lanes throughout this section. Highway 22 follows a series of different streets as it winds through Salem. Immediately east of the Willamette River, it follows Front Street to the south. The highway then operates on a one-way grid in the Salem central business district: the east-bound lanes are on Trade Street, and the westbound lanes are on Ferry Street. East of this area the highway is on the Pringle Parkway, also known as Bellevue Street. After a short section involving a ramp and Twelfth Street, Highway 22 is on Mission Street, and continues routed onto the North Santiam Highway east of Interstate Highway 5.
B. EXISTING PLANS AND STUDIES

A number of statewide, regional and local plans have been adopted to guide transportation and land use in those jurisdictions primarily served by Highway 22. Corridor planning and these plans must be consistent and supportive of each other. Applicable plans are been listed below. A summary of applicable goals, policies and objectives is provided in Appendices E and F.

Statewide Plans and Studies:

- **Oregon Transportation Plan (OTP).** Adopted by the Oregon Transportation Commission, September 15, 1992. Supporting the OTP are the following modal plans:
  - **Oregon Highway Plan.** Approved by the Oregon Transportation Commission, May 1991.
  - **Oregon Passenger Rail Plan.** Approved by the Oregon Transportation Commission, November 1992.
  - **Oregon Freight Rail Plan.** Approved by the Oregon Transportation Commission, August 1994.
  - **Oregon Bicycle and Pedestrian Plan.** Approved by the Oregon Transportation Commission, June 1995.
  - **Oregon Transportation Safety Action Plan.** Approved by the Oregon Transportation Commission, June 1995.


Regional Plans and Studies:

*Year 2005 Area wide Transportation Plan For the Salem-Keizer Urban Area.* Adopted by the Salem-Keizer Areawide Transportation Study (SKATS) Policy Committee, October 21, 1987. Supporting the area wide transportation planning effort are the following special and modal plans:

- **SKATS Regional Transportation System Plan, Bicycle Element.** Draft, November 1994.
- **SKATS Transportation Improvement Program.** Adopted by the SKATS Policy Committee, June 1994.
- **SKATS Planning Work Program.** Adopted by the SKATS Policy Committee, February 1994.
Local Plans and Studies:

- Salem Transportation Plan. Revised by the Salem City Council, October 1992.
- Salem Transportation System Plan. Expected completion, July 1996.
- McNary Field Airport Master Plan. Adopted by the City of Salem, August 1987.

C. POPULATION AND EMPLOYMENT GROWTH

Population and employment growth in Marion and Polk Counties along the Highway 22 Corridor will significantly impact the level of service on the Highway 22 corridor and will place demands for future transportation facility and service improvements. Specific segments of the highway will be impacted at different levels, depending on population growth and industrial development patterns and trends. Polk and Marion Counties are both projected to experience substantial growth in population and employment during the next 20 years (Figure 2-2, 2-3). The impact of population and employment growth on the Highway 22 Corridor will depend on multiple factors, such as livability, location of housing and jobs, and local economic development efforts.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Marion</td>
<td>151,309</td>
<td>204,692</td>
<td>229,500</td>
<td>271,575</td>
<td>303,507</td>
<td>32</td>
</tr>
<tr>
<td>Polk</td>
<td>35,349</td>
<td>45,203</td>
<td>49,700</td>
<td>58,197</td>
<td>64,286</td>
<td>29</td>
</tr>
</tbody>
</table>

Figure 2-2: County Population Forecasts

1 Demographic and Economic Forecasts, 1990-2030, ODOT, 1993

Population

The regional combination of Marion and Polk Counties make up the Salem Metropolitan Statistical Area. Between 1990 and 2012, population in this area is projected to increase by more than 88,000. Marion County’s population will increase by more than 32 percent; Polk County’s by more than 29 percent. The expected annual average rate of growth for the region is 1.26 percent. If this rate of growth persists, the region’s population will double in 55 years.
Between 1970 and 1990, population within the two counties shifted from urban areas to suburban and rural areas. This shift in population from central cities can be expected to continue well into the next century. This shift reflects a nationwide trend of more dispersed population growth.

In 1990, the Salem Metropolitan Statistical Area was the second-most densely populated region in the state and accounted for 9.8 percent of the total state population. In 2012, the region is expected to contain 9.7 percent of the total state population.

**Figure 2-3**

**County Employment Forecasts**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Marion</td>
<td>55,200</td>
<td>88,300</td>
<td>97,667</td>
<td>118,506</td>
<td>139,114</td>
<td>42</td>
</tr>
<tr>
<td>Polk</td>
<td>2</td>
<td>2</td>
<td>11,458</td>
<td>13,750</td>
<td>15,928</td>
<td>37</td>
</tr>
</tbody>
</table>

2. Polk County employment not reported as part of Salem region until 1990.

**Employment**

Non-agricultural wage and salary employment in the Salem Metropolitan Statistical Area is projected to expand by 45,900 jobs at an annual average rate of growth of 1.61 percent—faster than the rate of population growth. Marion County employment will increase by over 40 percent; Polk County by nearly 37 percent. In 1990, Salem area non-agricultural wage and salary employment accounted for 8.7 percent of total state employment. It is expected to account for 8.6 percent of statewide non-agricultural wage and salary employment in 2012.
Chapter 3

EXISTING CONDITIONS AND FACILITIES
INTRODUCTION

Highway 22 is of importance to a wide range of statewide, regional and local users. It is a principal route linking the Mid-Willamette Valley to the Oregon Coast and Central Oregon. A large number of people use the corridor for recreational purposes. This chapter describes current characteristics of land use and transportation in the corridor.

Highway 22 is regularly used by local farmers to move equipment between fields. Area businesses use it to transport wood products, aggregate materials and other resource materials from source to processing facility. It also serves as an important regional freight corridor and farm-to-market road, accommodating large volumes of trucks moving a diverse array of goods. In addition to this economic use, the corridor also serves as a vital link for residents within the region to reach government offices as well as health care and emergency services in Salem.

Residents of communities along or within several miles of Highway 22 rely upon the corridor as a major commuting route. A large number of commuters use the corridor to get from their residences to their jobs in Salem, the state capital and the region’s largest city. An increasing number of commuters are using the corridor to access jobs in other communities, including Dallas, Monmouth and Independence. The eastern portion of the corridor is used by commuters traveling to and from the area communities, including Stayton, Sublimity, Aumsville, and Mill City.

A. HIGHWAY SYSTEM

1. Traffic Volumes

Between 1975 and 1994, the corridor shows significant growth in traffic volume (Figure 3-1). The rate of traffic growth slowed during the 1980s, but has returned to its previous rate of increase. Annual average growth rates between 1970 and 1992 were between 1.00% and 1.99% for 75% of the corridor mileage. Growth rates for the remaining 25% of corridor mileage were between 2.00% and 2.99%. The latter represents primarily the eastern corridor segment. More than half (54%) of the corridor has traffic volumes between 5,000 and 9,999 vehicles per day. Current volumes are greatest near Salem, ranging from 30,000 to 49,999 vehicles per day over 12% of corridor miles.

Figure 3-2 shows the variation in traffic volumes through corridor from west to east. Near Rickreall, traffic volumes change dramatically because of the volumes associated with Highway 223 (Dallas-Rickreall Highway) and Highway 99W. Highway 51, a route connecting to Independence, produces the next significant change in volume. The most significant single change occurs at the Willamette River Bridges. Traffic volume from West Salem and Highway 221 (Dayton-Salem Highway; Wallace Road) increases
the corridor’s volume to over 70,000 vehicles per day. Traffic volumes remain high throughout the eastern section of Highway 22.

Figure 3-1

Historic Traffic Volumes
Highway 22, Willamina-Salem East UGB

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.01 mile SE of Mill Creek Rd.</td>
<td>4.65</td>
<td>3,300</td>
<td>4,000</td>
<td>4,400</td>
<td>5,500</td>
<td>5,900</td>
</tr>
<tr>
<td>0.01 mile W of 99W</td>
<td>16.11</td>
<td>8,300</td>
<td>9,900</td>
<td>10,200</td>
<td>13,200</td>
<td>14,500</td>
</tr>
<tr>
<td>0.01 mile E of Greenwood Rd.</td>
<td>18.62</td>
<td>9,100</td>
<td>11,300</td>
<td>11,300</td>
<td>17,500</td>
<td>17,600</td>
</tr>
<tr>
<td>0.01 mile E of Doaks Ferry Rd.</td>
<td>22.05</td>
<td>13,700</td>
<td>17,200</td>
<td>16,400</td>
<td>23,100</td>
<td>26,900</td>
</tr>
<tr>
<td>ATR(^2) Site, Salem Bridges</td>
<td>25.72</td>
<td>36,700</td>
<td>44,838</td>
<td>47,658</td>
<td>61,280</td>
<td>70,590</td>
</tr>
<tr>
<td>0.04 mi. E of Airport Road</td>
<td>7.96</td>
<td>16,600</td>
<td>23,900</td>
<td>25,900</td>
<td>39,400</td>
<td>41,800</td>
</tr>
<tr>
<td>0.20 mi. west of Lancaster</td>
<td>1.71</td>
<td>14,500</td>
<td>17,500</td>
<td>17,500</td>
<td>25,600</td>
<td>28,100</td>
</tr>
<tr>
<td>ATR(^2) Site, 0.91 mi. E of Lancaster</td>
<td>2.82</td>
<td>10,700</td>
<td>12,886</td>
<td>13,879</td>
<td>17,334</td>
<td>19,981</td>
</tr>
</tbody>
</table>


Truck freight movements through the corridor is significant based upon tonnage and the percent of truck volumes through the corridor. About 5.5 million tons of freight moved through the corridor by truck in 1992. During that year, about 87 percent of the corridor had truck volumes between 500 and 1,499 vehicles per day. This is more than twice the statewide average for truck volumes on a highway. Thirteen percent of the corridor had truck volumes of 1,500 to 2,999 vehicles per day--also more than twice the statewide average (Figure 3-3).

2. Travel Time

The travel time for the length of the corridor is 41 minutes for cars and 54 minutes for trucks. Travel time per mile is highest at the east end of the corridor near Salem. The average travel time per mile for cars is 1.33 minutes for cars and 1.80 minutes for trucks. However, these figures increase to 2.5 minutes and 3.0 minutes, respectively, for the eastern segment of the corridor (Appendix D).

3. Congestion

Traffic congestion can be defined as “the level at which transportation system performance is no longer acceptable due to traffic interference.” Congestion occurs most frequently and in a recurring manner in the eastern segment of the corridor. Congestion also occurs in the other portions of the corridor in a less predictable
Historic Traffic Volumes, 1975-1994
Willamina to Salem East UGB

Source: ODOT Traffic Volume Tables, 1975-1994
Chapter 3
Existing Conditions and Facilities

Figure 3-3
Highway 22 Corridor Truck Traffic Volumes and Freight Movement, Willamina to Salem Eastern UGB

<table>
<thead>
<tr>
<th>Truck Traffic Volume*</th>
<th>Corridor Mileage</th>
<th>Corridor Mileage</th>
<th>Statewide Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-499</td>
<td>-</td>
<td>-</td>
<td>52</td>
</tr>
<tr>
<td>500-1,499</td>
<td>25.7</td>
<td>87</td>
<td>41</td>
</tr>
<tr>
<td>1,500-2,999</td>
<td>3.8</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>&gt;3,000</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Travel Mode</th>
<th>Freight Moved (thousands of tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck</td>
<td>5,500</td>
</tr>
</tbody>
</table>

* Average Annual Daily Traffic

manner. Rural congestion on the corridor occurs particularly during weekend traffic periods, particularly at the beginning and end of a weekend.

4. Operating Costs and Fuel Consumption

Operating costs and fuel consumption were estimated for vehicles traveling along the corridor over a one year travel scenario. The estimated total annual operating costs in 1996 for automobiles are about $57 million; Truck operating costs are estimated in 1996 at $14.7 million (Appendix D).

5. Safety and Accident Profile

Accident data from 1991 to 1993 was evaluated. Within the corridor, there were 733 reported accidents, including twelve accidents resulting in fatalities and 338 injury accidents (Figure 3-4). Two accidents resulted in multiple fatalities. Figure 3-5 shows the approximate location of the twelve accidents resulting in fatalities. One-third of the fatal accidents occurred in two areas: the Highway 22/99W intersection, and the area known as the West Salem Curves. The 1993 accident rate for the studied corridor is 1.39 accidents per million vehicle miles. The statewide 1993 accident rate for comparable rural highways was 0.75; for comparable urban highways, 3.55. The 1994 Oregon Safety Priority Index System (SPIS) identifies 29 sites on the route in the top 10% of all highway accident locations statewide (Figure 3-5). Additional analysis then can be made to determine whether operational or geometric changes can improve operations and reduce the number or severity of accidents. Figure 3-6 characterizes environmental causes of all the accidents in the corridor. Intersections were involved in 57 percent of all accidents.
Chapter 3
Existing Conditions and Facilities

Figure 3-4
Highway 22 Corridor Accidents
Willamina to Salem East UGB, 1991-1993

<table>
<thead>
<tr>
<th></th>
<th>Highway 30(^1)</th>
<th>Highway 72(^2)</th>
<th>Highway 162(^3)</th>
<th>Corridor Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Accidents</td>
<td>246</td>
<td>394</td>
<td>93</td>
<td>733</td>
</tr>
<tr>
<td>Injury Accidents</td>
<td>105</td>
<td>181</td>
<td>52</td>
<td>338</td>
</tr>
<tr>
<td>People Injured</td>
<td>182</td>
<td>274</td>
<td>94</td>
<td>550</td>
</tr>
<tr>
<td>Fatal Accidents</td>
<td>10</td>
<td>2</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Fatalities</td>
<td>13</td>
<td>2</td>
<td>0</td>
<td>15</td>
</tr>
</tbody>
</table>

1. Highway 18 to the Willamette River.
2. Willamette River to Interstate Highway 5.
3. Interstate Highway 5 to Deer Park (Gaffin Road) Interchange.

In response to the high number of accidents in the corridor, a "safety corridor" has been established between Highway 99W and the Willamette River. The safety corridor's purpose is to increase driver awareness of the need for caution in that area. The "safety corridor" uses increased numbers and variety of signs and traffic enforcement to educate the public about vehicle safety issues.

B. RAILROADS

Freight rail service within the corridor includes branch line railroads serving Willamina, Dallas, and Rickreall, and main line railroads through Salem. However, no railroad extends through the Highway 22 Corridor. The railroads interconnect outside of the Highway 22 corridor in Albany and Portland. Freight service in Salem is provided by the Southern Pacific Railroad and the Burlington Northern. Wood products can be reloaded from trucks onto railroad cars at the privately operated facilities at the Cascade Warehouse Company are located in Salem.

North-South intercity passenger rail service is provided in Salem by AMTRAK, using Southern Pacific’s mainline railroad. The train station is located directly on the Highway 22 corridor but no east-west train service is offered. As part of the Oregon Rail Passenger Policy and Plan (1992), additional passenger train service operated between Portland and Eugene in 1994 and 1995. This service included stops in Salem and Albany. Ridership far exceeded projections and expectations.
FIGURE 3-5
Willamina-Salem Highway 22 Corridor
Fatal Accident & SPIS Accident Locations

LEGEND
ACCIDENT LOCATIONS (1991 - 1993)
- SPIS Accident Locations
- Fatal Accidents
- City Limit
- Urban Growth Boundary

TRANSPORTATION DATA SECTION
INVENTORY & MAPPING
SCALE

1 2 KILOMETERS
C. AIRPORTS

Air service is available at two public airports located along the corridor: Salem’s McNary Field, and the Independence State Airport about 5 miles south of Highway 22 in Independence. McNary Field adjoins Highway 22. Except for seasonal agricultural aerial spraying that may use the airports, the length of the corridor is too short to result in air service within the corridor. Air service available at these airports generally connects to areas outside the corridor. A commercial bus service to Portland International Airport operates from McNary Field in Salem. Aircraft charter, rentals, maintenance, and flight instruction also are available at McNary Field. Air cargo service is available at the airport from Federal Express and United Parcel Service, but most air cargo is routed through Portland International Airport.

McNary Field, an airport with high state importance, has long runways capable of accommodating corporate jets and smaller commercial jet airplanes. Before air passenger service was deregulated, McNary Field was serviced by scheduled commercial passenger service. McNary Field also is near Salem’s Fairview Industrial Park. The Southern Pacific Railroad also is adjacent to the airport. Several companies have developed near the airport.
Chapter 3
Existing Conditions and Facilities

The Independence State Airport is a general aviation airport offering aircraft rentals and flight instruction from businesses located there. It also has a residential subdivision immediately adjacent to the runway which provides direct access from private homes to the runway. The Willamette Valley West Side Branch Railroad Line is adjacent to this airport.

D. PUBLIC TRANSIT AND INTERCITY BUS

Transit service is presently available only within the Salem-Keizer urban area. The smaller communities located along the Highway 22 corridor west and east of Salem have no scheduled service. Services for the transportation disadvantaged also are more limited in the western segment than in the eastern one.

Intercity bus service is provided in Salem. The bus station is located in downtown Salem. The majority of service is north and south along the I-5 corridor. No service is provided west of Salem. No service currently exists via Highway 22 to Bend.

E. BICYCLE FACILITIES

Bicycle use in the corridor can be generally characterized as either short trips most commonly occurring in the Salem area, or longer distance trips frequently taken for recreational purposes. Because the corridor connects to Highway 18, the Oregon Coast is a popular destination for longer distance bicycle touring. Bicycle facilities, either as a bike lane or roadway shoulder/bikeway are provided throughout most of the length of Highway 22. Cyclists sometimes find that the roadway shoulders and bike lanes are littered with gravel and debris, making them difficult to cycle on.

F. PEDESTRIANS AND WALKWAYS

Walkways are provided along most of the urban arterial sections of Highway 22. In some areas of Salem where Highway 22 functions as an expressway, walkways are separated from the road. There are also pedestrian facilities on the Willamette River bridges. The provision of walkways along the highway in the rural sections is not cost-effective because of the general lack of rural area pedestrian trip generators or destinations. Pedestrians use the shoulders in those areas.

The portion of Highway 22 in Salem on Mission Street has a number of businesses as well as a large nearby residential area. Between 17th Street and 23rd Street, a distance of more than 0.30 miles, pedestrians crossing Mission Street must cross four lanes of traffic and a two-way left turn lane with vehicles. Pedestrian crossing opportunities are limited along Front Street in downtown Salem. The City of Salem is
developing Riverfront Park in downtown Salem. This project includes changes to the road that will improve pedestrian crossing opportunities between Riverfront Park and the downtown area. Pedestrian travel along the corridor also is constrained east of Hawthorne Avenue because no separate facilities are provided. Pedestrians crossing Interstate Highway 5 must either use the highway shoulder or use an alternative route such as State Street.

G. PIPELINES

Pipelines within the corridor are operated by and for the exclusive use of Northwest Natural Gas Company to deliver natural gas to their customers in Salem and Dallas. No other products are shipped by pipeline through the corridor. No need for pipeline service has been identified in the corridor.
Chapter 4

FUTURE CONDITIONS
The Federal Highway Administration requires each state to collect information about selected sections of highway. In Oregon, the collection, building, updating and submission of this information is known as the Oregon Highway Monitoring System (OHMS). ODOT has used this information to provide an analysis of existing and future conditions on highways throughout the state. This chapter summarizes the OHMS analysis for future conditions for the Highway 22 Corridor. A more detailed overview of the highway performance analysis methodology and results is provided in Appendix D.

A. HIGHWAY SYSTEM

Using traffic projections to the year 2016, an updated level of service analysis was conducted. Using the ODOT Oregon Highway Monitoring System (OHMS) analytical tool, ranges in highway performance were evaluated for four different cases:

- **Case 1 - No Improvements/Low Management:** This case assumes pavements are maintained, but neither roadway geometry nor capacity will be improved. It also assumes that changes in highway operating characteristics will occur as a result of future changes in land use.

- **Case 2 - No Improvements/High Management:** This case assumes pavements are maintained, but neither roadway geometry nor capacity will be improved. In contrast with Case #1, this case assumes that despite changes in land use, the general operating characteristics of the highway will not change.

- **Case 3 - Improvements/Low Management:** This scenario assumes that roadway geometry and capacity deficiencies are improved, and that changes in highway operating characteristics will occur as a result of future changes in land use.

- **Case 4 - Improvements/High Management:** This scenario assumes that roadway geometry and capacity deficiencies are improved, and that despite changes in land use, the general operating characteristics of the highway will not change.

The analysis indicates that substantial improvements will be needed in the future to maintain current levels of service, safety and economy along Highway 22. If the rate of historic traffic growth continues, the traffic volumes shown in Figure 4-1 would occur. Figure 4-2 displays this growth at certain locations through the corridor, and Figure 4-3 shows the results of a preliminary analysis of expected highway levels of service (LOS) at locations along the route. The LOS analysis presented in Figure 4-3 is based upon historic growth trends in traffic volume and existing lane configurations. Figure 4-3 also shows the number of travel lanes necessary to attain the levels of service called for in the Oregon Highway Plan.
1. Volumes

Based upon historic traffic growth trends, average daily traffic volumes at locations in the corridor are expected to increase by 34 to 60 percent between 1995 and 2105, depending upon the location. New destinations, such as the Native American gaming facilities in Grand Ronde and Lincoln City, can be expected to result in greater traffic volumes than shown in Figure 4-1 and illustrated in Figure 4-2.

2. Travel Time

The OHMS data describes highway performance for the future depending on the level of access management and roadway improvements provided. Corridor travel times from the Highway 18 Interchange to Interstate Highway 5 currently are about 41 minutes for cars and about 54 minutes for trucks. This could degrade to 44 minutes for cars and 56 minutes for trucks if the current traffic growth trends continue, no major improvements occur, and changes in highway operations occur as a result of future land development. This represents a seven percent increase for cars and a four percent increase for trucks. With modeled improvements, the travel times for both
Traffic growth projections are based upon traffic growth trends and linear regression analysis. They do not include the effects of alternative modes, alternative routes or of congestion.
## Chapter 4
### Future Conditions

#### Figure 4-3

Year 2015 Estimated Levels of Service
Highway 22 Corridor, Willamina to Salem Eastern UGB

<table>
<thead>
<tr>
<th>Highway Location</th>
<th>Milepoint</th>
<th>Existing Lanes</th>
<th>Year 2015 AADT</th>
<th>Year 2015 Existing Lanes and Level of Service</th>
<th>Year 2015 Lanes and Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.01 mile southeast of Mill Creek Rd.</td>
<td>4.65</td>
<td>2</td>
<td>7,900</td>
<td>D</td>
<td>4</td>
</tr>
<tr>
<td>0.01 mile west of Highway 99W</td>
<td>16.11</td>
<td>4</td>
<td>19,600</td>
<td>B</td>
<td>6</td>
</tr>
<tr>
<td>0.01 mile east of Greenwood Rd.</td>
<td>18.62</td>
<td>4</td>
<td>27,000</td>
<td>B</td>
<td>6</td>
</tr>
<tr>
<td>0.01 mile east of Doaks Ferry Rd.</td>
<td>22.05</td>
<td>4</td>
<td>36,400</td>
<td>C</td>
<td>6</td>
</tr>
<tr>
<td>ATR Site, Salem Bridges</td>
<td>25.72</td>
<td>8</td>
<td>103,900</td>
<td>F</td>
<td>10</td>
</tr>
<tr>
<td>0.04 mile east of Airport Road</td>
<td>7.96</td>
<td>5</td>
<td>69,400</td>
<td>F</td>
<td>6</td>
</tr>
<tr>
<td>0.20 mile west of Lancaster Drive</td>
<td>1.71</td>
<td>5</td>
<td>46,200</td>
<td>D</td>
<td>6</td>
</tr>
<tr>
<td>ATR Site, 0.91 mile east of Lancaster Dr.</td>
<td>2.82</td>
<td>4</td>
<td>28,700</td>
<td>C</td>
<td>6</td>
</tr>
</tbody>
</table>

1. Average Annual Traffic volumes based upon historic patterns and linear regression analysis.
3. Two -lane analysis.
5. Assumes signal is removed and replaced with an interchange.

#### Figure 4-4

Highway 22 Corridor Travel Times
Willamina to Interstate Highway 5

<table>
<thead>
<tr>
<th>Year/Scenario*</th>
<th>Travel Time Minutes per Trip (car/truck)</th>
<th>Average Time Minutes per Mile (car/truck)</th>
<th>Statewide Average Minutes per Mile (car/truck)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>41/54</td>
<td>1.33/1.80</td>
<td>1.36/1.80</td>
</tr>
<tr>
<td>2016 No Improvements</td>
<td>44/56</td>
<td>1.44/1.86</td>
<td>1.47/1.80</td>
</tr>
<tr>
<td>2016 Improvements</td>
<td>39/51</td>
<td>1.31/1.73</td>
<td>1.23/1.66</td>
</tr>
</tbody>
</table>

* All scenarios assume high management.
types of vehicles will decrease from current times by two minutes for cars, and three minutes for trucks (Figure 4-4).

3. Congestion

In 1996, only nine percent of the corridor is expected to be subject to high levels of congestion. The balance of corridor mileage will be subject to moderate (46 percent) and low levels of congestion (45 percent). At present rates of traffic growth with no improvements, many of the moderately congested areas will be considered highly congested. High levels of congestion could result along 28 percent of the corridor by 2016 (Figures 4-5, 4-6).

4. Safety

Without improvements but with increasing traffic volumes, safety conditions can be expected to worsen. Street improvements and safety awareness could result in lower accident rates. The 1993 Highway 22 Corridor accident rate was 1.39 accidents per million vehicle miles. The rate for comparable rural highways was 0.75; the rate for comparable urban highways was 3.55.

5. Operating Costs

Operating costs will increase in the future due to inflation and costs associated with traveling more slowly (and less efficiently) due to greater congestion. Without improvements, operating costs are expected to increase over 50 percent for cars and nearly 43 percent for trucks. It is estimated that improvements to the corridor could reduce these figures to about 46 percent for cars and about 37 percent for trucks (Appendix D).

B. RAILROADS

Competition from trucking operations and general disinterest by the major railroad companies in serving shippers located on lower volume branch lines resulted in very poor rail service and railroad abandonment. However, operation of branch lines by short line operators such as the Willamette and Pacific Railroad has dramatically changed this. Rail service previously in decline or unavailable is now being expanded, increasing opportunities for railroad service for shippers. As railroad operations and railroad-related activities such as the reload facilities at Cascade Warehouses expands, more shippers will find rail shipment desirable. Because of this change in operations, a greater role for rail service can be expected in the future. While rail service through the corridor is not available, improved rail service will positively affect highway operations by allowing greater volumes of freight to be moved in this manner rather than by truck.
Chapter 4
Future Conditions

Figure 4-5
1996 Congestion
Highway 22 Corridor

Low Congestion
45%

High Congestion
9%

Moderate
Congestion
46%

Figure 4-6
2016 Congestion
Highway 22 Corridor

Low Congestion
36%

High Congestion
28%

Moderate
Congestion
36%
C. AIRPORTS

Factors outside the corridor impact the future of air services at facilities in the corridor. The travel market originating from communities in the Willamette Valley further from Portland International Airport than Salem, such as Eugene, the time required to transport passengers and cargo via surface transportation to Portland International Airport, and the level of airport activity at Portland International Airport all impact the type of airport operations that can be expected to occur at the corridor airports in the future. Aircraft charter, rentals, maintenance, and flight instruction activities can be expected to expand with population increases.

D. PUBLIC TRANSIT AND INTERCITY BUS

Opportunities exist for an expanded role for transit in the corridor due to factors related to future population growth in West Salem and in other corridor communities. Express bus service for commuter travel could be developed from park-and-ride facilities. Such service is more likely to be provided from the West Salem area because of extent of expected population growth in this area, and because the area is within the Salem Transit District. However, the transit district currently is not well-funded.

Intercity bus service through the corridor does not exist. Express commuter bus service exists as a future opportunity. Population increases in corridor communities, and development of destinations such as the Native American gaming halls will impact future intercity bus services.

E. BICYCLE FACILITIES

Good bicycle facilities exist throughout the corridor. West of the Willamette River, a separate bicycle path exists to the Oak Knoll Golf Course. West of this point, bicycle facilities become shared shoulder/bikeways six to eight feet in width. Highway 22 provides an important connection for persons in the Salem/Keizer area to cycle to the Oregon Coast or to Silver Falls State Park and other destinations to the east.

The physical characteristics of bicycle travel on Highway 22 are presented in Chapter 3, Existing Conditions.

F. PEDESTRIAN WALKWAYS

Because of a lack of pedestrian trip generators or destinations within the predominantly rural sections of the corridor, the provision of sidewalks along the roadway in the rural
sections of Highway 22 is not warranted. Pedestrians use the shoulders in those areas. This is not anticipated to change before 2016.

Pedestrian crossing opportunities are limited in various locations within the Salem area. Efforts to improve pedestrian safety along Front Street and in portions of Mission Street will lower barriers to this type of travel.
Chapter 5

CORRIDOR ISSUES, OPPORTUNITIES AND CONSTRAINTS
Chapter 5
Issues, Opportunities and Constraints

A. INTRODUCTION

This chapter consolidates and organizes comments received by participants in the corridor planning process. Comment from members of local governments and organizations, from organizations and agencies with a more statewide interest, and from the general public have been analyzed using the Oregon Transportation Plan's 36 policies guiding transportation planning, and presented as those comments relate to modal balance, regional connectivity, congestion, safety, and economic, social, environmental and energy impacts. This information then serves as the basis for the interim corridor strategy presented in Chapter 6.

B. TRANSPORTATION BALANCE

The Oregon Transportation Plan states that a balanced transportation system is one that provides transportation options at appropriate minimum service standards, reduces reliance on the single occupant automobile where other modes or choices can be made available, particularly in urban areas, and takes advantage of the inherent efficiencies of each mode. What follows is an evaluation of the modal balance within the Highway 22 corridor.

1. Automobile

A. Findings and Issues

The automobile is the primary mode of travel for people within the corridor, providing a high degree of accessibility and mobility. Peak period ("rush hour") auto demand creates capacity problems at certain intersections and bridges within the corridor. Access to property also impacts traffic operations in the corridor. Weekday work commute trips are one of the causes. Recreational trips typically peaking on weekends is another, creating capacity problems west of Highway 99W.

Native American gaming facilities have been developed in Grand Ronde and Lincoln City. Although these facilities will likely capture a percentage of their traffic from travelers already on the route, they will undoubtedly generate a number of new trips. These new trips may exhibit travel demand patterns different from the current recreational traffic.

B. Opportunities and Constraints

Trips in the corridor can be grouped by purpose - through trips, work commute, recreational related, shopping, medical, education, etc. With the exceptions of work commute, education, and recreational related trips, the rest of the trips tend to be widely dispersed throughout the day. This limits the opportunity to make transportation
planning decisions or policies which might affect those trip types. The trip patterns for work commute, school trips and recreational trips tend to be more predictable. Some opportunity exists for developing transportation plans or policies which might have an impact on transportation services provided within the Highway 22 corridor.

Work Commute Trips. Shifting commuters out of single occupancy automobiles into car or van pools can be promoted through the existing carpool matching program operated by the City of Salem.

The Salem Area Transit District is only chartered to provide service within the greater Salem-Keizer urban area. The transit district does not provide service to areas west of Salem. There may be opportunities to extend transit service into Monmouth or Dallas with park and ride or express bus service, capturing commuters and shoppers who would otherwise drive in single occupant automobiles. This would require an amendment to the charter and a substantial increase in operating capital.

It is likely, however, that the greatest benefit could be achieved by establishing express bus service, park and pool, or park and ride lots in West Salem. Any such facilities should be designed with pedestrian amenities and sheltered bike parking facilities to promote use of those modes as connections to the transit system. Such a facility will be constructed as part of the Salemtowne-Orchard Heights project on Highway 221 (Wallace Road).

There may be opportunities to develop park-and-ride, park-and-pool, and express bus service at major intersections with Highway 22 in areas both east and west of Salem. Facilities located near the Highway 51, 99W, or 223 intersections might prove feasible and could make an impact on reducing the number of vehicle trips on sections of Highway 22 during the weekday.

Non-work Trips. Non-work trips include travel to consumer trips to shopping centers and grocery stores, visits to doctors' offices, trips to schools for school functions or to transport children to after-school activities. They also include recreational trips to locations such as the Oregon Coast. These trips are more difficult to accommodate with transit systems or by increased vehicle occupancy. Ridesharing and busing patrons to the Native American gaming facilities in Grand Ronde and Lincoln City could reduce the total number of future recreational trips by private automobile.

2. Truck and Rail Freight

A. Findings and Issues

Trucks are used to transport a variety of products within and through the Highway 22 corridor. Products include logs and other wood products, agricultural products, and aggregate materials.
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Issues, Opportunities and Constraints

There is rail service within the corridor with railroads in Willamina, Dallas, and Salem. The rail systems serve as connections to areas outside of the Highway 22 corridor but generally do not provide service location to location within the corridor. Privately operated wood products reload facilities exist in Salem.

In situations where products are being shipped by truck and the routing involves using I-5, access to I-5 is slowed by congestion in downtown Salem and on Mission Street.

B. Opportunities and Constraints

Rail Shipments. Given the short length of the corridor, it is unlikely that products would be shipped within the corridor even if rail service was available throughout its length. The operation of the Westside Willamette Valley Branch Lines by the Willamette and Pacific Railroad substantially increases the opportunity for rail service by shippers. Increased service holds the opportunity for continuing shifts in freight shipments from truck to rail.

Trucking Connections to Interstate Highway 5. Connections to I-5 from the west are funneled through downtown Salem. Trucks connecting to points east and south remain on Highway 22 through Salem. Trucks connecting to points north typically leave Highway 22 in downtown Salem and use the Salem Parkway (Highway 72) for access to I-5. Construction of a new bridge across the Willamette with a controlled access route to I-5 would improve the movement of goods to and from areas served by Highway 22 to the west of Salem. There are, however, significant environmental, cost, land use, and logistical difficulties associated with siting and building a new bridge over the Willamette River, including developing approaches to the new bridge through the Salem/Keizer area.

Over the short term, there may be opportunities to improve travel through downtown Salem by improving the roadway geometry at various locations, and the use of advanced central traffic signal control systems that can be adjusted to improve traffic flow conditions.

3. Passenger Rail

A. Findings and Issues

Intercity passenger rail service is provided in Salem. The train station is located directly on the Highway 22 corridor but does not provide service (east-west) within the corridor. Service is limited to north-south travel within the Willamette Valley and connecting to areas outside the region. As part of the Oregon Rail Passenger Policy and Plan, special rail service between Portland and Eugene (with a stop in Salem) was operated in 1994 and 1995. Ridership far exceeded projections and expectations.
Chapter 5

Issues, Opportunities and Constraints

B. Opportunities and Constraints

Given that no railroad exists through the corridor, it is unlikely that passenger rail service through the corridor will be feasible in the planning period. Rail service issues relating to regional connectivity is included in that section of the Strategy.

4. Airports

A. Findings and Issues

Air service is available at two airports located along the corridor - in Salem at McNary Field, adjacent to Highway 22, and at the Independence State Airport located about 5 miles south of Highway 22 in Independence. The air service available at these airports connects to areas outside the corridor rather than within the corridor.

Passenger transportation service via a commercial bus connection to Portland International Airport is available from McNary Field. Aircraft charter, rentals, maintenance and flight instruction also are available. Cargo service is provided by Federal Express, which has an office located at the airport. Cargo pick-up is also available via other air cargo carriers with the cargo routed through Portland International Airport.

McNary Field is adjacent to a major rail line. It has long runways capable of accommodating business jets and small commercial airliners. Another feature is the availability of industrial land on airport. Several companies have large developments at the airport.

The Independence State Airport is a general aviation airport also offering aircraft rentals and flight instruction. A residential subdivision is adjacent to the airport and taxiways provide direct access from private homes to the runway. The integration of private residences with the airport has proven to be a popular concept with the number of homes continuing to increase.

B. Opportunities and Constraints

Development in Salem and in Independence could result in conflicts between community development and airport operations. This issue is particularly sensitive at the Salem Airport because it is capable of accommodating larger airplanes and a higher level of activity than it currently does. Replacing those airports would be extremely difficult.

The Federal Aviation Administration airspace clearances for the Salem airport constrain the ability to construct elevated structures or interchanges along the length of Highway 22 on its northern boundary. Construction of an elevated structure would not be
possible at Highway 22 and 25th Street, or at Highway 22 and Airport/Turner Road. It would be possible at Highway 22 and Hawthorne Boulevard.

Connection to commercial air service currently is provided via motor coach to the Portland Airport. It is possible that commercial passenger service will again be provided by aircraft from Salem. This may present an opportunity for an intermodal passenger facility near the airport providing for air, rail, public transit and intercity bus interconnections.

5. Public Transit

A. Findings and Issues

Transit service is available only within the Salem/Keizer urban area. The smaller communities located along the Highway 22 corridor to the west of Salem have no scheduled service.

B. Opportunities and Constraints

There may be an opportunity to initiate some type of express transit service from West Salem and from the outlying suburban communities. Express bus service from park and ride lots also might provide a benefit in reducing the peak travel demand on the Willamette River Bridges. Because of higher population densities, the development of such service from West Salem may provide the greatest opportunity for shifting people out of the private automobile onto transit.

The transit system tax base is also limited to the Salem-Keizer Area. Recent attempts by the transit system to pass operating levies to support the maintenance of existing service levels have failed, forcing cutbacks in service. The lack of a stable long-term financial operating base makes planning for service expansion difficult.

Another transit service opportunity may be to provide a connection from the areas west of Salem to services that connect to areas outside the corridor. Examples of those services include:

- Passenger Rail Service
- Intercity Bus Service
- Shuttle Bus Service from Salem's McNary Field to Portland International Airport
- Air service at the Salem Airport should such service be re-established
6. Intercity Bus

A. Findings and Issues

Intercity bus service is provided in Salem. The bus station is located in downtown Salem. The majority of service is north and south along the I-5 corridor. No service is provided west of Salem. Historic service between Salem and Bend via Highway 22 has been discontinued.

B. Opportunities and Constraints

As travel demand between cities along the Highway 22 corridor, and between the Willamette Valley and the Oregon Coast increases, intercity bus service along the Highway 22 corridor may be feasible. The development of the Spirit Mountain Casino in Grande Ronde could make intercity bus service at limited service levels feasible.

7. Transportation Services for the Transportation Disadvantaged

A. Findings and Issues

At the present time, transportation services for the transportation disadvantaged are limited along the Highway 22 corridor outside the urban areas of Salem and Keizer. Within the eastern section of the corridor, there are a greater variety of specialized services.

B. Opportunities and Constraints

The needs of the transportation disadvantaged are typically very specialized, with on-demand door-to-door service providing the highest level of service. The low population density and the travel distances in the rural sections of the corridor makes increased service levels by individual providers unlikely. However, service could benefit through greater coordination in the provision of services.

8. Bicycle Facilities

A. Findings and Issues

Bicycle use in the corridor can be divided into two types--urban cycling within the Salem area, and longer distance cycling in the rural sections. Bicycle facilities, including bicycle lanes in certain urban sections and shared shoulder/bikeways, are provided throughout most of the length of Highway 22.
Chapter 5
Issues, Opportunities and Constraints

Cyclists sometimes find that the roadway shoulders and bike lanes are littered with gravel and debris which can make them difficult to cycle on.

B. Opportunities and Constraints

Bike lanes and shoulder bikeways are provided throughout the Highway 22 corridor (except for a short section between 25th and Airport Road). Keeping facilities clean and maintained will encourage increased use by cyclists.

9. Pedestrians and Walkways

A. Findings and Issues

A general lack of pedestrian trip generators or destinations exist within the predominantly rural section of the corridor. This makes provision of walkways in the rural sections of Highway 22 unwarranted: pedestrians use the shoulders in those areas. Pedestrians traveling the corridor east of Highway 51 can use a walkway/bikeway facility along the highway’s north side, then use walkway facilities along Edgewater Drive in the West Salem area, and the walkway/bikeway facility across the river. Walkways are provided along of the urban arterial sections of Highway 22, but no walkways exist east of the Mill Creek Bridge near I-5.

Within Salem, barriers exist to pedestrian travel in the corridor. The section of Highway 22 between 17th Street and 23rd Street separates area residents from area retail commercial uses. Pedestrians attempt to cross this five-lane highway section between the traffic signals because of the distance between them, but high traffic volumes create unsafe conditions for pedestrians attempting to cross. Pedestrian crossing opportunities on Front Street also are impacted by high traffic volumes and long distances between signalized intersections. Pedestrians attempting to cross I-5 either must use the highway shoulders or use another crossing, such as State Street.

B. Opportunities and Constraints

The section of Highway 22 passing through downtown Salem adjacent to Willamette University and Tokyo International University has the highest volume of pedestrians within the corridor. High volumes of pedestrians crossing the highway directly conflict with vehicular traffic (both truck and automobile) moving along Highway 22. In other urban locations, pedestrian safety is of concern.

Opportunities to address pedestrian travel in the corridor include possible walkway extension across I-5 as part of any interchange reconstruction. Pedestrian islands at certain urban arterial sections also could be considered to increase pedestrian safety when crossing the highway.
There are occasional difficulties for pedestrian crossings of Highway 22 in the rural areas, however, the levels of pedestrian use (and crossings) and the highly dispersed nature of the crossings does not warrant special facilities.

10. Pipeline

A. Findings and Issues

Pipelines within the corridor are operated by and for the exclusive use of Northwest Natural Gas Company, to deliver natural gas to their customers in Salem and Dallas. There are no commercially available pipelines for shipping products through the corridor.

In absence of products or manufacturers requiring such service, it was concluded that pipeline service was not a need within the corridor.

C. REGIONAL CONNECTIVITY

Regional connectivity is a measure of how well the corridor connects various parts of the state and nation. This is usually quantified in terms of travel times, or described by reflecting the level of transportation services available. The issue of travel time overlaps with the congestion and transportation balance performance measures. Both of those measures can affect regional connectivity. Increased congestion may result in slowed travel times and discontinuity between regions. Congestion may be the result of a transportation system which is not in balance, i.e.: people or goods are moving via the wrong, or an inefficient mode.

1. Findings and Issues

Highway 22 provides an important link to the Oregon Coast from the Mid-Willamette Valley as well as an important link for employment and retailing and service opportunities between the cities west of Salem and Salem from the suburban residential populations west of Salem into Salem. Highway 22 east from Salem provides the same linkage for communities east of Salem as well as providing an important link to Central Oregon.

The average travel time from one end of the corridor to the other is forty-one minutes for automobiles and fifty-four minutes for trucks.

Connectivity is often negatively impacted by congestion caused by traffic peaks associated with morning and evening work trips and recreational travel demand peaks associated with people returning a weekend outing. As was noted under the transportation balance performance measure, congestion can potentially be reduced by
shifting commuters out of single occupant vehicles into shared ride arrangements with car pools, van pools, and transit.

Connections from the west and to the west from I-5 are impacted by the need to funnel through the Salem downtown in order to reach I-5. Movement is slowed regardless of the time of day. Vehicles on the Mission Street segment of Highway 22 also experience significant congestion and delay.

North-south passenger rail service is available in Salem daily. Connections to eastbound passenger rail service from Portland also can be made. This connection with the national Amtrak passenger rail system provides a link between users of the Highway 22 corridor and areas beyond the corridor throughout the nation. Additional regional service Eugene to Seattle is also provided.

The Oregon Transportation Plan (OTP) and the Willamette Valley Transportation Strategy envision increased cross-valley transit service linking outlying communities with a multi-modal transportation facility in Salem located at the Amtrak train station (on Highway 22). This would connect these communities to the future high-speed rail service planned for operation between Eugene, Oregon and Vancouver B.C., as well as the envisioned increase in intercity bus service linking Eugene, Salem, and Portland.

Rail freight service is available within the corridor with connections to state and national rail systems. This provides the opportunity to ship products via rail from within the corridor to regions outside of it.

Commercial bus service from McNary Field provides connections to passenger air service at Portland International Airport. While not providing transportation within the corridor, it provides important links to passenger air service outside of the corridor. Air cargo service is also available.

2. Opportunities and Constraints

Opportunities to bypass downtown Salem, the major congestion point on the corridor, are limited by the bridges crossing the Willamette River. All require passing through that part of the city. Over the years, discussions regarding possible locations for additional bridges have been held but no consensus has been reached and there are no current plans for additional crossings.

Passenger rail service levels vary based upon funding levels. Access to the train station is via public transit, the private auto, taxi, bicycle, or walking.
No scheduled passenger airplanes service Salem. With the exception of the transit service provided within the Salem/Keizer area, access to the Salem airport passenger terminal is via private auto, taxi, walking, or bicycle.

D. HIGHWAY CONGESTION

Congestion is defined as the level at which transportation system performance is no longer acceptable due to traffic interference. Congestion can result from an individual incident such as an accident, or can result from high travel demand during specific time periods such as typical commuting times.

1. Findings and Issues

The Highway 22 corridor experiences congestion through the urban areas in Salem and in the two-lane section of Highway 22 west of Dallas. Congestion west of Dallas most often peaks with recreational traffic demand. Increased congestion along the corridor will be most noticeable in the two lane segment west of Dallas.

The bridges over the Willamette River experience congestion and are nearing their capacity. Based upon forecast growth in traffic, the bridges will reach their design capacity around 2005. Congestion associated with the bridges and routing traffic through downtown Salem will impact travel times and congestion levels. The population increases expected in West Salem and the limited number of commercial and employment opportunities in West Salem will further increase travel demand over the Willamette River bridges.

Other significant areas of congestion include the stretch of Highway 22 from 25th Street to east of Cordon Road. This section of Highway 22, particularly the section between 25th Street and I-5, experiences significant recurring weekday congestion.

2. Opportunities and Constraints

Passing lanes located at regular intervals in the two lane sections of Highway 22 west of Dallas would reduce congestion by allowing slower moving vehicles to be passed by faster moving vehicles. This breaks up the traffic platoons and reduces driver frustration.

There are physical limitations to capacity expansions of Highway 22 to respond to projected traffic volumes. Congestion in built-up sections of Salem occurs where the financial and social cost of developed property limits the ability to add travel and turn lanes. As a result, the eastern section of Highway 22 is expected to operate at congestion levels greater than the western, rural section. The western section has
more opportunity for expansion and also is serving many fewer vehicles on a typical
day.

Some improvement may be possible using transportation system management
 techniques such as adding turn lanes at problem intersections or making other changes
to geometric design or signal timing.

In the section of Highway 22 near I-5 and Lancaster Drive, large scale solutions may be
necessary. This may include redesigned interchanges or new interchanges. It is likely
that construction of major new facilities will be needed to implement transportation
improvements in this section of Highway 22. A Major Transportation Investment Study
(MTIS) should be undertaken to evaluate a full range of options prior to a decision.

The greatest opportunity to lessen congestion in the corridor involves the downtown
Salem area. This could involve a new bridge and new connection to I-5 either north or
south of the existing bridges. Previous bridge studies have identified significant
constraints to construction of a new bridge, including its high cost, environmental, and
land use concerns.

Other methods need to be explored to reduce congestion. Increasing vehicle
occupancy at peak hours through car pools, van pools, and possibly expanded transit
service could provide relief to congestion. Other alternatives include shifting demand to
off peak hours when road capacity exists, or eliminating trips altogether through
telecommuting. Using these methods may delay the need for a new bridge.

An important management technique to preserve the function of the highway is through
good access management practices. These practices include limiting and regulating
the number, spacing, type, and location of driveways, intersections, and signals. The
1991 Oregon Highway Plan establishes six access management categories ranging
from full access control (freeways) to partial control (district level highways where safe
access to local properties is important). More information about these access
management categories is provided in Appendix H.

E. SAFETY

The improvement of transportation safety is a constant goal of all agencies involved in
the provision of transportation services. Improvements are sought through vehicle
design, operating systems, operating environment, training, enforcement, and
education.
1. Findings and Issues

Safety was most commonly identified as the number one issue by individuals participating in the public involvement process. The extent to which it dominated other issues was dramatic. Safety issues manifest themselves in a number of ways such as:

- Intersections with high accident rates;
- The number of unsignalized local streets intersecting Highway 22 in the West Salem area.

The accident location input received from the public involvement program tracked the results of the SPIS analysis but also identified other locations which were perceived to be unsafe or problem sites by the members of the public. The intersections of Highway 22 and the Kings Valley Highway, the Dallas-Rickreall Highway, Highway 99W, Highway 51 also were mentioned.

Highway 22 from the Willamette River bridges to the intersection with Highway 99W is a "Safety Corridor". This corridor has been implemented to heighten public awareness of the number and severity of accidents that have occurred. Actions have included increased traffic enforcement and a public awareness program.

2. Opportunities and Constraints

ODOT has an accident database that is used to analyze accident problem locations. The extensive input received from the members of the public provides additional information which should be used in analyzing problem locations.

One issue identified in the public involvement process is the lack of a means to summon emergency assistance. Access to public telephones along the corridor is a problem in some of the rural sections of the corridor.

The current ODOT Statewide Transportation Improvement Program (STIP) calls for resurfacing and making safety improvements on Highway 22. Improvements are planned for the western twelve miles from Wallace Bridge at the Highway 18 Interchange to Perrydale Road near Dallas. The project will include guardrail replacement, bridge rail retrofit, intersection improvements and a two-inch pavement preservation overlay.

There may be opportunities to improve safety by making changes to the local street network to reduce the number of intersections with Highway 22. It may be necessary to purchase access rights in order to effectively manage access over the long term.

Safety improvements are also planned for the Highway 22 and Highway 223 (Kings Valley Highway) intersection. Those improvements will include a left-turn lane.
F. ECONOMIC IMPACTS

Transportation systems can have a significant positive or negative economic impact. New transportation services can act as a catalyst of the siting of new businesses and the creation of jobs and for promoting access to recreational opportunities. Conversely, changes in the transportation system, such as the elimination of some type of modal choice, can have the opposite effect and result in the loss of businesses and jobs.

1. Findings and Issues

Several industrial developments exist along the Highway 22 corridor. Along Highway 22 in West Salem and the Fairview Industrial Park located adjacent to Highway 22 near the Salem airport are two notable examples.

East of I-5 on the Highway 22 corridor, there are vacant parcels with the potential for large scale industrial and commercial development. The Highway 22 corridor is an important route linking the Willamette Valley with the recreational opportunities located along the Oregon Coast and in the Cascades.

2. Opportunities and Constraints

Access along Highway 22 in West Salem is hampered by traffic volumes, roadway geometry, and travel speeds. These circumstances also create safety problems. Opportunities for improvements may take the form of service road development and street or driveway consolidation or closure.

The number of adequate roads serving the Fairview Industrial Park is limited. This area produces high commute-hour travel demands that result in congestion on Highway 22 in the 25th Street area. Efforts taken to improve the capacity and condition of other roads serving the area will relieve congestion on the highway.

There may be opportunities to create multi-modal connections for people to get to and from special events or recreational centers within and along the corridor, or to inform travelers of special events occurring within the corridor.

G. SOCIAL IMPACTS

Transportation systems can have far reaching but sometimes very subtle social impacts on a community. A highway by-pass can isolate one community but connect others. A street improvement can provide a benefit for persons traveling on the street but can have an adverse impact on an adjacent land use. Analysis is needed to understand
potential impacts both positive and negative when transportation system changes are planned.

1. Findings and Issues

The following issues were identified through the Highway 22 corridor strategy development process:

- **Traffic Impacts on Downtown Salem.** Highway 22 funnels all traffic through downtown Salem. Much of this traffic is destined for areas outside of downtown Salem. This results in congestion and transportation impacts on downtown.

- **Crossing Highway 22.** In the urban sections of Highway 22, particularly from Willamette University east to 25th Street, Highway 22 becomes a barrier difficult for pedestrians and bicyclists to cross. It also forms a barrier between residential neighborhoods and retail commercial businesses. I-5 also creates a barrier to east/west pedestrian and bicycle movements. Bicycle and pedestrian movements are not well accommodated in the vicinity of Highway 22 and I-5.

- **Farm Equipment Problems.** Through traffic volumes in rural sections of Highway 22 impact the movement of farm equipment across or along the highway.

2. Opportunities and Constraints

The problem of the traffic impact of through traffic on downtown Salem is also related to questions of transportation balance, highway congestion, and energy efficiency. Studies have been recommended to look at alternative routes to avoid funneling through traffic through downtown Salem.

The problem of pedestrian and bicyclists crossings of Highway 22 has also been noted in previous sections.

The low volume of farm equipment crossings and movement along Highway 22 and the dispersed nature of the activity make it difficult to develop cost effective solutions to conflicts between farm equipment and non-farm vehicles sharing Highway 22.

H. ENVIRONMENTAL IMPACTS

Transportation systems have an impact on the adjacent environment. This impact can be in the form of noise, water pollution, air pollution, or physical disruption of the environment caused by the construction of a facility. Through careful management of the operation or modification of a facility's design, it is possible to reduce the impacts to acceptable levels. Hazardous material spills are another source of environmental impact on the corridor.
1. Findings and Issues

Highway 22 crosses and is adjacent to significant natural resources. The highway crosses and is parallel to the Willamette River west of Salem. Further west, it goes through fertile farm and forest lands. It also is adjacent to the Baskett Slough Wildlife Refuge and passes elk and deer summer range. Sections of the corridor provide habitat for the following rare, threatened, or endangered plants and animals:

- Fender’s Blue Butterfly
- Kincaid’s Lupine
- Peacock Larkspur
- Nelson’s Checkermallow
- Willamette Daisy

The opportunities for accidental contamination of land, groundwater and surface water within the corridor increases as the number of vehicles using the corridor increases.

The Salem area is an air quality non-attainment area for carbon monoxide and ozone. In the past, air quality in Salem failed to meet the EPA standards for clean air. This impacts road capacity and intersection signalization projects because they must meet project air conformity requirements.

2. Opportunities and Constraints

Projects that propose to widen or otherwise improve Highway 22 will require careful environmental analysis. Significant environmental resources will constrain road improvement alternatives. Such analysis is required to respond to state and federal environmental laws and regulations.

The development of coordinated accident response plans between the jurisdictions along the corridor would provide means of minimizing the impact of hazardous material spills.

It is possible that Salem area air quality now complies with environmental standards. If demonstrated and accepted by the Environmental Protection Agency, this would substantially benefit efforts to manage area transportation facilities and provide road capacity.

I. ENERGY IMPACTS

Transportation systems and modal choices can have a significant impact on energy consumption. The lack of an appropriate mode may result in people, goods, or services moving in an inefficient manner. Transportation facility design may result in improved efficiency or diminished efficiency.
1. Findings and Issues

Throughout the corridor, several modes of transportation are available. The opportunity to select energy efficient modes is variable because a choice of modes does not exist throughout the corridor. Modes that are lacking and may provide opportunities for increased transportation efficiency are public transit and intercity bus service. As was identified in other sections, park-and-ride or express bus service from West Salem, and intercity bus service from outlying communities may be viable options that shift people out of single occupancy vehicles. Carpooling is also an important option for increasing energy efficiency within the corridor.

2. Opportunities and Constraints

As was noted in other sections, transit and car pooling opportunities exist. Expansion of these alternatives to single occupant vehicle usage warrant further study to determine their cost-effectiveness and acceptability.
Chapter 6

INTERIM STRATEGY
INTRODUCTION

The Interim Corridor Strategy consists of goals and objectives that, when taken as a whole, serve to guide the work of ODOT, cities, counties and the Salem-Keizer MPO related to transportation planning and development of future transportation facilities and services in the corridor. Additional analysis will occur during transportation system planning, refinement planning, and comprehensive plan periodic review, and through local plan amendment activities. These processes will allow ODOT, the local governments and the Salem-Keizer MPO to cooperatively work together to ensure that city and county comprehensive plans and land use regulations achieve the objectives stated in the final corridor plan. Additional analysis will further define transportation needs and solutions, and is expected to result in future modifications to the strategy. The final corridor plan will incorporate the results of additional analysis and provide a final strategy resulting from additional analysis. The final corridor plan will then be adopted by ODOT as an element of the state transportation system plan.

There are instances where some of the issues addressed by a particular strategy are also directly or indirectly applicable to other issues. As an example, a regional connectivity issue (the ability to move from one region of the state to another) may also be related to a transportation balance issue (the availability and use of various modes of travel). A single strategy may address both issues without its separate inclusion in both categories. The goals and objectives are categorized by transportation measures in order to demonstrate how they address the policies and objectives of the Oregon Transportation Plan.

Many of the Strategy Objectives apply to a specific portion of the corridor, or to the western segment or to the eastern segment. However, if an Objective does not state that it applies to a specific portion of the corridor, it should be assumed to apply to the entire corridor.

A. Transportation Balance Goal:

*Provide for a balanced mix of transportation modes within the corridor in order to provide a range of modal choice for urban and rural users of the transportation system.*

1. Commuter Travel Objectives

Steps should be taken to manage and reduce work commute trip impacts through the following objectives:
A.1 Ride Share. Promote increased vehicle occupancy by expanding Salem Rideshare program activities, or establish new programs in the communities west of Salem.

A.2 Transit Service. Evaluate the feasibility of express bus service into downtown Salem and the Capital Mall from West Salem. Evaluate the effectiveness of reducing congestion on the Willamette River Bridges and in downtown Salem through such service. Examine establishing similar services operating from the communities west and east of Salem. Evaluate an expanded "guaranteed ride home" program as a means to increase express bus ridership and carpooling from other corridor cities.

A.3 Park and Pool/Park and Ride Lots. Using an approach that considers the entire corridor, establish park and pool/park and ride lots and promote car pooling. Explore development of facilities at major intersections with Highway 22 such as Highway 223, Highway 99W, Highway 51, and Highway 221 (Wallace Road). Include facilities for parking and safe storage of bicycles. As a first step, develop a park-and-ride facility as part of the Salemtowne-Orchard Heights project on Highway 221 (Wallace Road). Evaluate program effectiveness on reducing congestion on the Willamette River Bridges and in downtown Salem.

A.4 Promote transportation demand management approaches as a means to reduce vehicle miles traveled and related impacts on the roadway system. Such approaches might include:

- Telecommunication and telecommuting to eliminate trips to work;
- Flexible work schedules to shift work trips to off peak times;
- Work weeks of four, ten-hour days to reduce the number of days worked;
- Preferential High Occupancy Vehicle (HOV) Lanes or Reverse Flow Lanes to accommodate high occupancy vehicles.

2. Truck and Rail Objectives

A.5 Provide additional climbing and passing lanes at appropriate locations west of Highway 99W. Such improvements would provide benefits to all Highway 22 users.

A.6 Improve truck movements through downtown Salem by making improvements to the roadway geometry, signal control systems, and congestion management programs. Such improvements would provide benefits to all Highway 22 users. Such improvements should be accomplished in a manner that does not unnecessarily impact the viability of the downtown commercial area or other users, notably pedestrians and bicyclists.

A.7 Expand railroad reload services to other commodity shippers.
3. Air Travel Objectives

A.8 Coordinate construction and improvements to the Mission Street section of the Corridor with the City Of Salem and ODOT Aeronautics.

A.9 Protect existing aviation resources along the corridor from incompatible land uses through implementation and enforcement of appropriate land use planning measures.

A.10 Ensure protection for the Salem and Independence Airports by using airport overlay zoning to prevent construction or growth of obstructions into the Federal Aviation Administration Part 77 Airspace (FAR Part 77) around both airports.

A.11 Dedicate avigation easements to the airport operators. No new development should be allowed within the FAR Part 77 Approach Surfaces.

A.12 Analyze the feasibility of developing a future, long-term multi-modal transportation hub that effectively links all modes (air passenger, air freight, truck, passenger rail, local transit, intercity bus, auto, bicycle, pedestrian).

4. Transit Objectives

A.13 Improve transit service connections to rail, intercity bus, and airline services connecting with areas outside the corridor. Improvements to the Salem Rail Station should be included.

A.14 Develop all transit, park-and-ride and park-and-pool facilities with pedestrian amenities and secure bicycle parking in order to promote connection between those modes and transit.

5. Intercity Bus Objectives

A.15 Examine the demand factors and opportunity for intercity bus service connecting Salem and other points on the corridor, particularly the Spirit Mountain Casino in Grand Ronde.

6. Transportation Disadvantaged Travel Objectives

A.16 Design passenger intermodal transportation hubs to comply with the Americans with Disabilities Act (ADA).

A.17 Work with all providers of specialized social and medical services to improve the mobility of the transportation disadvantaged population in the corridor through greater service coordination. Develop and implement a strategy that maintains the existing services.
7. Bicycle Travel Objectives

A.18 Continue to provide continuous bike facilities (bike lanes or bikeways) throughout the Highway 22 Corridor.

A.19 Clean roadway shoulders when debris accumulates, particularly in the peak summer cycling months.

A.20 Provide secure and sheltered bicycle parking facilities at park and ride lots, transit centers, airport terminals, bus terminals, and major public and private facilities. Equip buses with bicycle racks.

8. Pedestrian Travel Objectives

A.21 Continue to provide pedestrian facilities along Highway 22 where it functions as an urban arterial within the Salem Area.

A.22 Ensure that pedestrian facilities are replaced, added, or upgraded to desired conditions in conjunction with other highway construction and maintenance activities.

A.23 Geometric improvements made to increase mobility of other transportation modes should be undertaken in a manner that minimizes the impact of those improvements on pedestrian mobility.

A.24 Improve pedestrian crossing opportunities in the Salem area. Incorporate median islands in areas where pedestrian activity is high, such as between 17th Street and 23rd Street, to provide a comparatively safe refuge area for pedestrians. Consider pedestrian facilities between Hawthorne Boulevard and Lancaster Drive as part of any proposal to reconstruct the North Santiam Interchange.

B. Regional Connectivity Goal:

*Develop transportation facilities within the corridor to provide a high degree of regional connectivity for all corridor users, both internal to the corridor as well as those passing through the corridor.*

Regional Connectivity Objectives

B.1 Maintain existing travel times throughout the planning period.

B.2 Examine means to provide opportunities for modal choice in traveling between communities along the Highway 22 corridor. Improve access to existing rail, air, and bus facilities as well as access to the planned multi-modal hub in Salem.
B.3 Develop the Salem train station as a near-term intermodal connection between rail service and pedestrian, bicycle, automobile, and transit modes.

B.4 Conduct a Major Transportation Investment Study (MTIS) to analyze the purpose, need and potential location of an additional crossing of the Willamette River. Examine the potential for more direct connections for trucks from the western end of the Highway 22 corridor across the Willamette River to I-5.

B.5 Incorporate advances in signal coordination in the Salem urban area to improve traffic flow.

B.6 West of the Willamette River, avoid installation of additional traffic signals.

B.7 West of the Willamette River, intersections with the highway may need to be replaced with interchanges. Where interchanges are constructed, land use controls should be implemented to protect the integrity of the interchange operations for transportation purposes.

C. Highway Congestion Goal:

*Operate all transportation facilities within the corridor at a level of service that is cost-effective and appropriate for the area served.*

**Congestion Objectives**

C.1 Manage Transportation Demand. Develop programs to manage transportation demand (reduce demand or slow its growth) to extend the service life and capacity of existing facilities throughout the Highway 22 corridor. Techniques could include:

- Increasing average vehicle occupancy through carpools and vanpools;
- Increasing the use of transit within the Salem urban area with particular emphasis on new service to West Salem;
- Establishing transit service, including park-and-ride and express bus service between Salem and areas outside the Salem-Keizer Urban Area, and on the urban fringe of Salem;
- Examining ways to shift demand to off-peak hours;
- Evaluating transportation system management options such as signalization improvements;
- Studying the suitability of employer trip reduction ordinances and transportation demand management programs for large businesses;
- Investigating the opportunity, cost-effectiveness and acceptability of congestion pricing when linked to effective alternative transportation opportunities; and
Chapter 6

Interim Corridor Strategy

- Promoting increased use of telecommunication technologies to reduce the need to travel to a work site.

C.2 Reduce Travel Demand. Analyze the effect alternative land use patterns would have on reducing travel across the Willamette River Bridges, with a focus on West Salem development opportunities.

C.3 Major Transportation Investment Study (MTIS), Willamette River Crossing. This MTIS is essential to understanding the range of options available to manage or reduce congestion within this section of the corridor and to develop a plan for improving that highway section’s ability to accommodate commute hour travel demand. Such a study should include:

- An analysis of “no-build” alternatives, such as the programs recommended under Objective C.1.
- An analysis of trip patterns to determine whether a bridge would provide greater utility if located to the north of the existing bridges or to the south.
- An identification of the specific location, alignment, and road connection for an additional bridge across the Willamette River.

C.4 Major Transportation Investment Study, 25th Street to east of Cordon Road. This MTIS is essential to understanding the options available to manage or reduce congestion within this section of the corridor and to develop a plan for improving that highway section’s ability to accommodate commute hour travel demand. The MTIS would include:

- An analysis of “no-build” alternatives such as the programs recommended under Objective C.1.
- An evaluation of various combinations of construction alternatives including:
  - Park-and-ride and park-and-pool lots;
  - Interchange construction at Cordon Road and Hawthorne Avenue;
  - Reconstruction of the North Santiam Interchange at Interstate 5;
  - Reconfiguration of turn and through lanes; and
  - Adding new turn and through lanes.

C.5 Congestion Management Plan. Develop a plan to reduce or manage recurring congestion within the corridor. Target capacity improvements where the benefit/cost ratio is greatest. Techniques to be examined in the Congestion Management Plan should include:

- Improved signal timing or inter-connect systems;
- Addition of left and right turn lanes at major intersections;
- Access management involving the closure of some streets or driveways that contribute to congestion.
C.6 Access Management. Manage highway facilities in a manner that does not result in conditions that are less than the following for highway traffic. Consider identifying downtown Salem as a pedestrian oriented environment where few alternatives exist to avoid conflicts between vehicles and pedestrians, and where a lower level of service can be accepted.

<table>
<thead>
<tr>
<th>Location</th>
<th>Level of Service¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>West of Highway 51</td>
<td>LOS C</td>
</tr>
<tr>
<td>Highway 51 to Willamette River Bridges</td>
<td>LOS C</td>
</tr>
<tr>
<td>Through downtown Salem</td>
<td>LOS D</td>
</tr>
<tr>
<td>Mission Street to I-5</td>
<td>LOS D</td>
</tr>
<tr>
<td>East of I-5</td>
<td>LOS C</td>
</tr>
</tbody>
</table>

¹: Level of Service (LOS) operating characteristics are described in Appendix G.

D. Safety Goal:

*Continually improve all facets of transportation safety within the corridor.*

Safety Objectives

D.1 Target safety improvement projects to sections of the corridor with the highest accident rates. Analyze the accident types at sites that fall within the top 10% of all accident index sites. Develop solutions that reduce accident rates, including:

- Operational changes such as increased traffic enforcement and consideration of appropriate speed zones;
- Minor design modifications such as change in striping, geometric layout, or illumination; and
- Major redesign including intersection replacement with interchanges, street alignment changes, and passing lanes.

D.2 Review citizen input on other accident or problem locations and identify what action might be taken to improve safety at those locations.

D.3 Evaluate solutions to the safety concerns at the intersections of Highway 22 and Highway 99W, and Highway 22 and Highway 223 near Rickreall.

D.4 Evaluate the safety needs of alternative access routes to Dallas, including the Kings Valley Highway.

D.5 Analyze alternatives to reduce accident risk near the intersections with a high number of turning vehicles, including Highway 223, Highway 99W and Highway 51.
D.6 Examine alternatives to provide public telephones at five-mile intervals throughout the length of the corridor. Phones can be located at grocery stores or gas stations, or may be needed as stand alone phone booths where no development is available.

D.7 Examine changes to the local street network that improves the operation of the transportation system and public safety.

D.8 Coordinate with efforts by the Oregon State Police and other agencies to reduce vehicle speeding in the corridor. Coordinate with emergency service providers with the responsibility to respond to accidents in the corridor.

E. Economic Impact Goal:

Promote economic health and diversity through the efficient and effective movement of goods, services, and passengers in a safe, energy-efficient and environmentally sound manner.

Economic Impact Objectives

E.1 Improve access to industrial and commercial users by making street network improvements such as systems of service roads, selected street or intersection improvements, or as appropriate, street and driveway closures.

E.2 Enhance development of planned industrial and commercial sites through improvements to road facilities and transportation services.

E.3 Provide opportunities for the use of alternative modes of transportation in conjunction with special events on or near the corridor.

F. Social Impacts Goal:

Provide a transportation corridor that has positive social impacts by providing for the safe movement of goods and people while reducing the negative impacts caused by transportation/land use conflicts.

Social Impacts Objectives

F.1 Examine methods to reduce the impact of vehicular traffic, particularly truck traffic, in downtown Salem.
F.2 Improve pedestrian crossing opportunities, particularly in the urban sections of Highway 22, to reduce the "barrier" effect of the roadway and to foster good pedestrian connections between both sides of the road.

F.3 Address pedestrian and bicyclist safety and connectivity issues in the I-5 area when the North Santiam Interchange is reconstructed.

F.4 Examine methods to reduce the negative impacts and increase the positive impacts of Highway 22 corridor transportation systems on neighborhoods, parks, and community facilities.

G. Environmental Impacts Goal:

Provide a transportation system throughout the Highway 22 corridor that is environmentally responsible and encourages protection of natural resources.

Environmental Impacts Objectives

G.1 Avoid highway improvements near Baskett Slough National Wildlife Refuge that have significant adverse impacts to the refuge. If impacts are unavoidable, strive to minimize those impacts.

G.2 Consider enhancements or management techniques that maintain or enhance the visual quality of the corridor, particularly in the scenic rural sections west of Dallas.

G.3 Develop a coordinated accident response plan with the jurisdictions along the corridor to reduce the impact of hazardous material spills.

G.4 Evaluate the impact of transportation improvements on air quality in the Salem airshed consistent with the requirements of the federal Clean Air Act Amendments. Coordinate with the Salem-Keizer Metropolitan Planning Organization's regional air emissions studies. Analyze projects to ensure that "hot-spot" air quality locations are not created by road projects.

G.5 Evaluate and mitigate, as needed, the impact of Highway 22 corridor transportation improvements on water quality for adjacent streams and rivers such as Mill Creek, Salt Creek, Rickreall Creek and the Willamette River.

G.6 Prepare an inventory of sensitive environmental and cultural resources in the corridor that identifies resources that should be avoided when transportation improvement projects are proposed. The inventory should include:

- Rare, threatened, and endangered plants and animals or their known habitats;
• Wetland resources;
• Creeks, streams, and rivers;
• Wildlife refuges or significant wildlife habitat;
• Archaeological or cultural resources.

G.7 Prepare an inventory of hazardous material sites on the corridor that should be avoided when transportation improvement projects are proposed.

H. Energy Impacts Goal:

*Provide a transportation system that minimizes transportation-related energy consumption by using energy-efficient and appropriate modes of transportation for the movement of people and goods.*

Energy Impacts Objectives

H.1 Give priority to those projects that reduce energy consumption and vehicle miles traveled.

H.2 Examine methods to reduce energy consumption through the following:

• Carpooling;
• Increased use of public transit;
• Increased use of intercity transit;
• Reduction of trips through strategies such as telecommuting;
• Reduction of trips through strategies such as 4 day, 10 hour work schedule.
• Increased bicycling and walking.
APPENDICES
Appendix A
Summary Of The Public Involvement Program
A. PURPOSE

The purpose of the Public Involvement Program is to work with local communities and stakeholders to identify the public issues and values regarding the Highway 22 transportation corridor. The process included providing information and opportunities for involvement, as well as developing a structure through which ODOT and the local jurisdictions could begin to build lasting partnerships around transportation issues. This "collaborative planning" approach has proven to be beneficial in gathering information from the community and ensuring that local jurisdictions and ODOT are working together at each step.

B. PARTICIPANTS

There were several different groups of participants identified in the process, each needing a different level of involvement.

The General Public. This group includes all residents, property owners, businesses and users along the Highway 22 transportation corridor and adjacent areas. Broad carrier route mailings of newsletters, and the use of newspaper display advertisements and articles, and Open Houses were the primary tools used to inform and gather information from the general public. Copies of the newspaper display advertisements can be found at the end of this appendix.

Local Jurisdictions and Agencies. There are two groups within the local jurisdictions category; those jurisdictions and agencies who are impacted and have implementation responsibility and those jurisdictions and agencies who are impacted and need to be kept informed and involved.

Jurisdictions and agencies with implementation responsibility (i.e.: responsible for construction or maintenance of the road or for land use planning along the corridor) were members of a Corridor Planning Management Team (CPMT). The CPMT met six times to provide input on corridor planning issues as well as the organization and structure of the planning process. A list of the members of the CPMT can be found in Chapter 1, Overview of Corridor Planning.

Organizations with a high interest in this corridor, active local citizens, jurisdictions which were served by Highway 22 but not directly abutting, and other key interest groups were invited to participate on a Corridor Advisory Group (CAG). The CAG met twice to ensure that public issues and values are addressed and reflected in the strategy document. A list of the members of the CAG can be found in Appendix B.
Statewide Participants. In addition to the localized interest groups, jurisdictions, agencies and citizens, there are also interest groups with statewide interests which would include the Highway 22 transportation corridor. Participation in all corridor planning efforts across the state poses a hardship for statewide agencies and interest groups. As a result, a Statewide Agency Committee and a Statewide Stakeholder Committee were developed to regularly bring together those with an interest in multiple corridors. These groups have had several opportunities for information and input on the development of the Highway 22 Strategy.

C. ELEMENTS OF THE PUBLIC INVOLVEMENT PROGRAM

Stakeholder Survey. A detailed Stakeholder Survey was distributed early in the planning process to individuals, agencies, jurisdictions and various interest groups. This survey included questions regarding specific issues, challenges, and opportunities for the corridor. The information received from the survey was used as background information within the planning process and to begin to develop a list of issues.

Open Houses. Eight Open Houses were held in February and May 1995 at locations along the corridor. The Open Houses were held in the evening over a several hour period. Participants were invited to drop in any time, see the display boards and maps, talk with staff, and get information about other related transportation activities in the area, and most importantly, provide their input on issues, problems, and opportunities within the corridor.

The Open Houses in the rural areas were very successful with a large number of people visiting the open house and providing input. The Open Houses in the urban area were less well attended. This prompted the placement of newspaper display ads in newspapers along the corridor to solicit additional input. As a result of the ad, additional input was received. Copies of advertisements are provided at the end of this appendix.

Newsletters. Two one page newsletters were developed and distributed through a one mile wide carrier route mailing the length of the corridor (reduced size copies of the newsletters are provided at the end of this Appendix). The newsletters contained basic information describing the planning process and were used to announce the Open Houses. A response form was also included to allow the recipient to provide input. The newsletters proved to be very effective in the rural areas to announce the Open Houses. In the urban areas of the corridor, the newsletters resulted in a number of returned response forms. Copies of the project newsletters are provided at the conclusion of this appendix chapter.

Media. Ongoing coordination with the media was another important means for informing the general public of the planning process and opportunities for involvement. Press releases were distributed to all of the newspapers and radio stations covering the
study area and articles appeared in several of the papers. In addition to articles written by the papers, display ads were placed in several of the newspapers encouraging further comment from the public. Information distributed and received as a result of placement of the display ad helped to fill a small void in the collection of issues effecting the urban sections of the corridor.
Do you use Highway 22 between Willamina and Salem?

If yes, then we need to hear from you!

The Oregon Department of Transportation and communities affected by Highway 22 are looking to citizens and businesses to help them determine how the highway should be used now and in the future. This is part of a planning process called "Corridor Planning."

What modes (or types) of transportation are using this corridor? What is important to the communities along this highway? What improvements does this highway corridor need? This is the kind of information we would like to hear from you.

Tell us your thoughts! Fill out the section below and mail it before March 7th to: John deTar, ODOT Region 2, P.O. Box 14030, Salem, Oregon 97310, or call 986-2653.

1. Most of the time I travel from _____________________________ to _____________________________

2. Most of the time I: (circle one) Drive (car, truck, bus, RV, other) Bike Walk Other

3. I am most concerned about:

4. I would like to be kept informed about this process:

Name: _____________________________
Address: _____________________________
Phone: _____________________________

---

UNCLAIMED OR

Necchi educational model sew & serger

★ Designed for easy instruction and operation
★ Designed for heavy duty! Made of metal with metal hardware.

The Necchi Company ordered the production of a large Sew & Serge sewing machine, projecting future home industry and institutional sales. Current economics proved these projections inaccurate and the orders were cancelled.

THEY MUST BE SOLD

Machines are new in factory cartons with 25 year warranty.

What is a Sew & Serge sewing machine?

A technical achievement in quality:

FIRST, IT IS A SEWING MACHINE: That does buttonholes, invisible blind hems, ladder stitching, monograms, decorative slits, double seams, zippers, sews on buttons, rolled hems, darning, zigzag, basting, top stitching, blanket stitch, pin tuck, quilting, an old-fashioned came or programmer's just turn the color coded pin.

SECOND, IT HAS TWO PROFESSIONAL SERGING STITCH the seam and serge the edge of the material at the same time. To trim the excess material as you sew. A special serging stitch for stretch materials. It has a serger to match with: All fabrics: canvas, upholstery, nylon, stretch material, silk, percale, organdy.

Friday, February

NOW ONLY $5

One day only! 10am
Sale conducted by Marv Helb

DALLAS ALTERATION

194 SE Mill • Dallas

623-2283
¿Usted usa la carretera 22 entre Salem y Willamina?

¿Si es así, entonces necesitamos escuchar de usted!

El Departamento de Transporte de Oregón y las comunidades afectadas por la carretera 22 están buscando ciudadanos y negociantes que puedan ayudar a determinar cómo la carretera 22 debería usarse ahora y en el futuro. Esto es parte de un proceso de planificación llamado "Planificación Corridor".

¿Qué modos (o tipos) de transporte está usando este corredor? ¿Qué es lo más importante para las comunidades a lo largo de esta carretera? ¿Qué arreglo necesita esta carretera Corridor? Esta es la clase de información que nos gustaría escuchar de usted?

¡Díganos acerca de lo que piensa! Complete la sección que continúa y envíela por correo antes del 7 de Marzo a: John deTar, ODOT Región 2, P.O. Box 14030, Salem, Oregon 97310, o llamar al 986-2653.

1. Yo casi siempre viajo desde __________________________ hasta __________________________

2. Yo casi siempre (redondear una) Manejo (auto, camioneta, bus, casa rodante, otro) Bicicleta, Caminar, Otro.

3. Yo estoy más preocupado acerca de:

4. Me gustaría mantenerme informado acerca de este proceso:

   Nombre:

   Dirección:

   Teléfono:
Highway 22 Corridor Planning

Open Houses Scheduled: We are coming to see you again!

In February of this year, the Oregon Department of Transportation and communities affected by Highway 22 held a series of Open Houses to hear your thoughts, issues, and concerns about the Highway 22 Transportation Corridor.

You spoke and we listened!

We now have a Draft Strategy ready for you to review at the upcoming Open Houses. The meetings will include: a 15 minute presentation every hour (at 45 minutes past the hour); “stations” of information for you to review and comment; staff available to discuss issues and answer questions; and a children’s play area.

Open House Schedule

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Time</th>
<th>Location Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rickreall</td>
<td>5/15</td>
<td>4:30-7:30pm</td>
<td>Polk County Fair Grounds, 520 South Pacific Highway</td>
</tr>
<tr>
<td>West Salem</td>
<td>5/16</td>
<td>11:30-1:00pm</td>
<td>Region 2 District Office Conference Room, 1st Floor, 2060 East State St.</td>
</tr>
<tr>
<td>Salem</td>
<td>5/16</td>
<td>4:30-7:30pm</td>
<td>Walker School Cafeteria, 1075 8th St. NW</td>
</tr>
<tr>
<td>West Salem</td>
<td>5/16</td>
<td>4:30-7:30pm</td>
<td>Walker School Cafeteria, 1075 8th St. NW</td>
</tr>
<tr>
<td>Willamina</td>
<td>5/17</td>
<td>4:30-7:30pm</td>
<td>Willamina Middle School Cafeteria, 1100 Oak Hill Drive</td>
</tr>
</tbody>
</table>

Questions?
Call John deTar, ODOT Region 2, 986-2653

We look forward to seeing you again!
Do You Use Highway 22 Between Willamina and Salem?
If yes, then we need to hear from you!

The Oregon Department of Transportation and communities affected by Highway 22 are looking to citizens and businesses to help them determine how the highway should be used now and in the future. This is part of a planning process called "Corridor Planning."

What modes (or types) of transportation are using this corridor? What is important to the communities along this highway? What improvements does this highway corridor need? This is the kind of information we would like to hear from you.

Tell us your thoughts! Fill out the section below and mail it before March 7 to: John deTar, ODOT Region 2, P.O. Box 14030, Salem, Oregon 97309, or call 986-2653.

1. Most of the time I travel from __________________________ to __________________________.

2. Most of the time I: (circle one) Drive (car, truck, bus, RV, other) Bike Walk Other

3. I am most concerned about:

4. I would like to be kept informed about this process:
   Name: __________________________ Phone: __________________________
   Address: __________________________

Highway Corridor 22

How do you use Highway 22? Many of the different kinds of transportation mentioned above are present on this highway corridor. As communities along this corridor grow, industry develops, and recreational opportunities increase, we are going to have to make some choices about how we want to use this highway.

- How can we improve transportation safety?
- Do we want more lanes, wider roads, passing lanes, and climbing lanes?
- How can we encourage other transportation options (biking, walking, buses, etc.)?
- Do we need interchanges and overpasses?

**Corridor Planning: A New Approach**

The Oregon Department of Transportation, and communities affected by the highway, are sponsoring a series of Open Houses. We would like to hear from you about how Highway 22 should be used now and in the future as part of a new approach to transportation planning called “Corridor Planning.” Corridor Planning is an opportunity to work together to identify what is important and unique about this corridor.

**A Corridor Plan Can Address:**

- What modes (or types) of transportation are using this corridor?
- What is important to the communities along this highway?
- What improvements does this highway corridor need?

Corridor Plans will provide a framework for long-term planning and development. Corridors connect our communities and link us with the rest of the state. It’s important that we identify how we want corridors used now and in the future. Come to one of the Open Houses listed on the back of this page. Together we can ensure that the Highway 22 transportation corridor will work well for all of us.

---

**Can't come to one of the Open Houses?**

Call: John deTar at 986-2653 and tell us your thoughts.

OR

Write; fill out the short form below and mail it to: John deTar, ODOT, Region 2, P.O. Box 4030, Salem, Oregon 97301

1) Most of the time I travel from _________ to _________

2) Most of the time I (circle one): Drive (car, truck, bus, RV, other) Bike Walk Other

3) I am most concerned about: ____________________________

4) I would like to be kept informed about this process:

Name: ____________________________ Phone: ____________________________

Address: ____________________________
Open Houses

Rickreall  5/15  4:30-7:30pm
Polk County Fair Grounds, 520 South Pacific Highway West

Salem      5/16  11:30-1:00pm
Region 2 District Office Conference Room,
1st Floor, 2960 East State Street

West Salem 5/16  4:30-7:30pm
Walker School Cafeteria,
1075 8th Street, NW

Willamina  5/17  4:30-7:30pm
Willamina Middle School Cafeteria,
1100 Oakin Hill Drive

→ Drop in any time
→ Come see the displays and talk with staff.
→ Bring the Kids!
→ Presentations made at:
  4:45, 5:45, 6:45pm
  11:45am at Salem Open House

The Next Step: Review of the Draft Strategy
You Spoke - We Listened!

Over 250 people have given their thoughts, issues, and concerns regarding the future of the Highway 22 transportation corridor. Participants have: attended the January/February Open Houses; sent in Response Cards from the January newsletter and from newspaper ads; participated on the Corridor Planning Management Team (and the upcoming Corridor Advisory Group); completed surveys; and called and wrote us.

All of this activity has been part of a new approach to transportation planning called "Corridor Planning." The Oregon Department of Transportation along with communities affected by the highway are working together to develop a Strategy and Corridor Plan for the Highway 22 transportation corridor. The first step in this process is to identify the corridor characteristics, issues, and needs in order to develop a strategy that will guide the Highway 22 transportation corridor into the future. All of your participation to date has provided valuable information to develop a draft Strategy that balances technical information with community issues.

What Did We Hear?

Safety, safety, safety. Of course we heard more than this; however, safety was the number one concern of participants. Safety issues included: speeding; intersections with no signals; and other dangerous intersections (Highway 22, Kings Valley Highway, Independence Highway, and the Highway 22 Dallas-Rickreall Highway intersection). Balancing local, commuter, and tourist traffic, was another issue raised by many people. The connection of Highway 22 with I-5 and the difficulty of getting through downtown Salem was also brought up many times.

A Draft "Strategy" For The Corridor

Balancing technical information with community issues has resulted in a Draft Strategy document that is ready for your review. The Strategy is composed of information from local, regional, and statewide transportation plans; Federal transportation policies; and goals and objectives developed from technical data, statewide and local interests, and community issues. The Strategy will serve as the foundation for the development of a Corridor Plan that will guide project identification and development for the Highway 22 transportation corridor.

It's Time for You to Review: Open Houses Scheduled May 15, 16, 17

We are coming to see you again! We invite and encourage you to attend one of the four Open Houses listed on the back of this newsletter. This is an opportunity for you to see how your thoughts and issues have been turned into a strategy. Now is the time to come and ensure that what is important for the future of the Highway 22 transportation corridor is addressed. The Open Houses will include: a 15 minute presentation every hour; "stations" of information for you to review and comment; staff available to discuss issues and answer questions; and a children's play area.

We look forward to seeing you again.
Appendix B
Corridor Planning Management Team Membership Roster

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Appendix C

Summary of Comments and Issues From The Public Involvement Program
This appendix includes the issues identified by the public categorized by ODOT's performance objectives. These objectives are listed with bold, underline and large type. In some instances, the objectives are further categorized, with sub-categories listed in bold type. Each asterisk (*) indicates that the statement was made by more than one person. These issues were compiled from: the Statewide Stakeholder Interviews; Highway 22 Stakeholder Surveys; 70 Newsletter Response Cards; 9 letters; 4 Open Houses; Corridor Planning Management Team Meetings; ODOT Internal Review Team Meetings; 21 Corridor Advisory Group response forms; and 45 response forms located in the newspapers: *The Statesman Journal, Goal Latino, and Polk County Itemizer Observer.*

Please note: the issues presented in this document are not listed in priority.

### Safety

**Safety**

********** General safety concerns.

* Just west of Junction 18/22 -- "Strawberry Patch" there are safety problems.
* School buses load and unload.
* School buses load and unload around the Stayton area.
* Looks like a freeway but lacks safety.
* Designate Church Road to Star Road as a safety corridor.
* A bumper sticker was designed with the words "Pray for me, I drive Highway 22."
* Entering the highway safely at peak times.
* No emergency vehicle alternative from Salem into West Salem in the event that the Marion Street Bridge is closed; or from West Salem into Salem in the event
the Center Street Bridge is closed. Could possibly modify the railroad bridge for this purpose.

- Incident management problems on the bridge severely limit emergency vehicle access into West Salem.
- Safety between West Salem bridges and 99W.

**Speed**

*General:*

*************** Enforce the speed limit!
******* Speeding vehicles.
*** Slow traffic down on Route 22.
- Continuing disregard for the 50 mph zone.
- Higher speed in areas that could be 45 mph.
- Use "speed reader boards" as a deterrent to speeding.
- Large trucks speed on Highway 22.
- School buses and trucks take more time to gain speed for Highway 22.
- This is not a freeway or limited access -- the speeds are too high.
- People need to slow down when making left turn lanes.
- If speed limits were observed, other problems would be reduced.
- Introduce two speed corridors and two local corridors -- it is dangerous traveling 60 mph and coming across a farm vehicle traveling 15 mph.
- Drivers do not observe the 50 mph limit between West Salem and Eola.
- The 50 mph speed limit at edge of West Salem is a joke.
- Speeding log and other trucks.

*Specific:*

High speeds on Marion Street Bridge.
Keep the 50 mph speed limit from the beginning of this limit all the way to the Bridge.
High speeds from Marion Bridge to Dallas.
Speed from Rosemont to the Bridge.
People drive the highway between the 99W intersection and Salem at very high speeds.
Travel speeds east of the Eola Inn are too high.
Those who abide by speed limits near the West Salem stretch in particular, fall victim to accidents, hand gestures, tailgating, and dangerous passing in non-passing lanes. Posting this a "Safety Corridor" has little affect on speeders.
On Highway 223, is the speed too high?
Reduce speed on Highway 22 to beyond Highway 51.
Lower speed prior to the 55th intersection.
Post two traffic police between Capital Manor and 99W.
Appendix C

Public Involvement Comments And Issues

- Need an OSP officer near Willamina intersection to reduce speeds and accidents.
- Lower speed (i.e., 40 plus signal) at 22 and Doaks Ferry Road.
- 45 mph speed limit between Oak Grove Road and Marion Street Bridge.
- Trucks entering 22 from the concrete pipe company and the steel plant have heavy loads and make slow entrances.
- The area between 51 and Capitol Manor. Almost every trip to Salem, some unknowing person turns out in front of me or other drivers who are going 50-55 mph. It is frightening.

Lighting

** All of 22 needs street lights.
* Poor lighting.
- Street lights are needed at the corner of Highway 22 and 223.
- Need light at Hwy 22 Park n’ Ride.
- Area between 51 and River needs lighting. Visibility is poor which leads to congestion and safety issues.
- Need street lights on Highway 22 from West Salem to Highway 51.
- Overhead lights on Highway 22 between Salt Creek and Salem are needed.
- Lighting needed from 223 to 22. Visibility is poor at night, especially in the rain.

Left Turn Lanes

General:

****** Left turns needed from Highway 22 onto streets or businesses.
** Left turn lanes needed from side streets onto Highway 22.
* Left turn lanes are limited.
- People are using the right turn lane to get around cars trying to turn left.
- Left turn lanes would improve safety.

Specific:

****** Left turn lane on Hwy 22 for Kings Valley 223 turn off.
***** Left turn lane needed from Highway 22 to Brown Road.
**** Continue 52nd to Aspen as a left turn access (to Salem) onto 22 (could eliminate left turn at 55).
*** Need a good turning lane onto Red Prairie from 22 west.
*** Left turn lane on Hwy 22 for Independence Road (Hwy 51).
** Reinstate left turn capability at 18 and Sawtell Road.
* Exit and entrance to Highway 51.
* Turning lane at the Salt Creek Store.
* Left turn refuges needed from Salt Creek to Brown Road.
* Turning left onto Enterprise Road is a concern.
Appendix C
Public Involvement Comments And Issues

Dangerous to enter or exit Highway 22 from streets such as Rosewood without a left-turn lanes.
Improve turn off at Dallas, it is a continued hazard.
Left turn at Mill Creek Park turnoff.
Hard to "clear" coming in and out at Brown Road.
Eliminate left turns from Independence Hwy onto 22.
Need third lane for left turn westbound from Highway 22 to 51 (Independence) and 223 (Dallas).
Hwy 22 and 223 (west) needs at least turn lanes on 22, lighting, stripping, 223 realigned for 90 degree and visual clearance improved to the north (see map on flip chart).
Turn lane at Cooper Hollow Road and 223.
Turning on and off Highway 22 in the area just past Capitol Manor and the Independence intersection.
Lack of a turning lane on Haven.
Turning from 55th Avenue onto Highway 22 SAFELY.
Left turn lane at Kings Valley Road.
Cannot make left turn onto 22 with a truck because the traffic is too fast.
The turning lanes are plenty ample if people would actually get into them before they stop (i.e., Independence turnoff).
Left turn needed at Stoneway.
People trying to get onto Lancaster creates a backup on Highway 22.
Unoccupied left turn lanes are often used as a refuge lane.
Turning lane west of Rickreall at the busy intersection would be useful as traffic increases.
Turn lane needed in front of the Chateau Bianca Winery. Many cars have been nearly rear-ended due to the speed they incur in trying to make it up Butler Hill.
Left turn from highway at Sawtell Road near Willamina is very unsafe.
Left turns from the West Salem hills stretch needs improving.
Turning lanes, heavy traffic, we have trouble getting on and off Hwys at Rowell Creek Road. Needs turning lane.

General Right Turn Lanes:
- Cars slowing down to turn right is an issue.

Specific Right Turn Lanes:
- Right-hand turn lanes in the westbound lanes of 22.

Intersections/Crossings

General
- Better protection or lights for traffic crossing all lanes of Highway 22.
- Having to cross four lanes of traffic presents accident potential.
- Getting on and off the highway is dangerous.
- Eliminate cross overs (not popular or practical) or have limited cross overs or more lights "holding" spaces that are not tiny, are well-lighted or safe.
- California and Washington drivers hang in 1 lane and probably would continue to do so even if another lane was made.

Specific

*******Help us at 55th and 22!!!
* Junction of 51, 55th Avenue and 22 needs help, it has become a very dangerous intersection.
* Brown road needs a 90 degree entrance.
* The intersection at Highway 51 is dangerous.
* Greenwood intersection and farm machinery crossing.
* Independence Highway intersection.
* 22 and 223 intersection.
- The number of cars getting on and off Highway 22 is increasing at Doaks Ferry Road and Independence Highway.
- 99W connection is of concern.
- West Salem intersection heading west.
- Dangerous crossings are Independence Junction (55th) and leaving the Pentacle Theater Road to cross the highway traveling toward Salem.
- From Brown road (in one third of a mile) there are four intersections.
- Improve Highway 22 and 55th Avenue intersection with: lower speed limits from the bridge to 55th Ave.; with a "dangerous intersection ahead" sign; a traffic light
- Crossing highway at base of Butler Hill (to get mail) - wider shoulders are needed - more traffic means more dangerous.
- Oak Grove connection - as an alternate to the 55 intersection.
- Willamina intersection.
- At-grade crossings.
- Concerns regarding Greenwood Road, Highway 99, Dallas cutoff, Saw Tell Road, Beck Road, Perrydale Road, and M.P. 15.
- Perrydale Road and Highway 22 intersection (variety of vehicles use this intersection).
- Exiting 22 at Rosewood or Stoneway requires cars to cross traffic that is trying to enter 22 from Edgewater.
- Perrydale intersection is skewed, causing traffic entering from the south to have difficulty seeing traffic from Salem.
- Dallas-Rickreall Highway intersection with 22 is very dangerous. Need low technical solutions, such as better lane paint, warning mechanisms to alert drivers of oncoming cars.
- Intersection at Smithfield Road has many accidents and near misses.
- All intersections along 22.
Appendix C
Public Involvement Comments And Issues

- Intersection of 22 and College Drive.
- Intersection of 18B and 22 at the Wallace Bridge.

**Acceleration/Deceleration Lanes**

- Butler Hill Road entrance is too narrow (plenty of state land available to make a longer approach - 20 to 40 ft stretch).
- Right turn deceleration lane turning right from 22 onto Perrydale Road is over 90 degrees right.
- Climbing lanes needed.
- On-ramp from Sublimity to Salem is difficult to use.
- Getting hit by cars entering Highway 22 in front of me

**Interchanges**

- Hazardous interchange at 223 intersection.
- Need interchange at the Airport Rd /Turner Road intersection. Combined with building a Hawthorne Ave. overpass this would eliminate existing signals.
- Interchange is needed at Cordon Road/Kuebler Blvd, especially if a South Salem Bridge is built connecting Kuebler Blvd to Highway 22 in West Salem.
- The left lane on-ramp of the Rosemont Avenue interchange is unsafe.
- Need an interchange at the intersection of 99W and Highway 22.
- Cloverleaf at 99W.
- The Highway 18 interchange with 22 needs to be improved, especially where 22 crosses the Wallace Bridge and intersects with the road to Willamina.
- Interchange needed badly at Independence intersection (for which land is set aside).
- Rosemont interchange entrance is a problem -- remove some landscaping and extend the acceleration lane.

**Overpasses and Underpasses**

- 51 and 22 intersection needs overpass or bypass or light or something.
- Overpass at Hwy 51 on already dedicated state property.
- Overpass at 22 and 99.
- Overpass needed on Greenwood (not necessarily access to 22).
- Overpasses or underpasses at intersections. If not overpasses than turning lanes.
- Hwy 22 and 223 (east) - long term with overpass interchange with interim left turn and signal intersection improvement.
- Overpass with ramps would be a good alternative to a traffic signal neat Independence cutoff.
- Build an undercrossing at Hwy 22/18 (22 under 18).
- Highway crossings needed near Rickreall - farm equipment (underpass?).
Appendix C
Public Involvement Comments And Issues

- Overpass with ramps are needed at the Independence intersection -- not a traffic signal.
- Underpass at College Road to the proposed frontage road on the south side of 22 at the planned motel complex.
- Overpass over (Rickreall Road and Oak Grove Road area) Highway 22 to facilitate slow moving farm traffic and school buses.
- There should be overpasses for the Independence Highway and Greewood Road and 99W.
- Putting a bypass for us commuters.

Traffic Lights and Signals

** Junction 18/22 to Hebo needs a light.
* Stop lights at Highway 22 intersections may be needed to slow down traffic.
* Need a light at the intersection of Highway 22 and College Drive.
* Traffic signal at the 55th intersection (with countdown timer).
* Need a light at Highway 51.
* Reinstate flashing light at intersection of 22 and Perrydale - intersection design is a problem.
* Put in more lights somewhere on Route 22.
- The intersections on 55th, Highway 22 and 51 should have a stop signal and a through-speed zone.
Install a traffic signal at College Drive to slow traffic and allow traffic to enter and exit the highway safely.
Problems at the Fort Hill Road intersection -- needs lights?
Kings Valley Highway and 22 intersection needs caution light.
Need a traffic signal somewhere between Salem and 51.
Stop light junction "51, 55, 22".
Remove the signal at Rickreall and the intersection with the Dallas cut-off (223)
Traffic signals at Airport Road, Hawthorne Avenue and at the I-5 interchange are causing excessive delays.
A light could bottleneck construction traffic.
Concerned about entering Highway 22 from 55th Avenue NW without aid from an intersection light.
Stop light needed where the West Salem residents turn onto 22, heading east.
Traffic light needed at College Drive NW.

Passing lanes (based on safety issues)

* No passing zone on Hwy. 22 near 223.
* Unsafe passing occurs so passing lanes are needed.
* There are people who willing to pass leisurely drivers with disregard to the lives of others.
Appendix C
Public Involvement Comments And Issues

- Passing lane is essential from Church Road to Star Road to Brown Road. This is dangerous, especially due to the Coast and Highway 22 traffic traveling down Butler Hill.
- Establish a no passing zone area (as well have a left turn lane) from east of the Salt Creek Store west to the base of Butler Hill.
- On hills just east of Willamina, people may pass without sufficient view
- Careful attention to passing lanes and four lane sections is a must.
- Cars pass without regard to cars entering the highway from driveways.
- Passing lanes seem to increase danger.
- Hay trucks, motorhomes and trailers are difficult to pass safely.

Signs

Coming from Lincoln City at the Junction with 22 there are no signs telling drivers there is a road on the right.
Lack of signs.
Signage on 22 near West Salem for City Center-Albany and City center-Portland is confusing. Perhaps a visual map would clarify.
Better signage needed.
Signage to Willamina is needed, such as prior to Valley Junction (maybe 4 miles prior?).
Increase safety corridor signage, such as farm vehicle signs, west of Hwy 51 (Greenwood, Oak Grove Road).
Better signage needed through Salem for Highway 22 from east to west.
Signage on Highway 22 eastbound needs to be improved including guidance to areas such as the State Fairgrounds.
Need better signage when approaching the Highway 18 and 22 junction, especially pertaining to signs directing the way to Willamina. Suggest using a similar Business 18 loop sign used on Highway 18 just before Sheridan and Willamina Junctions.
Better signage needed for Basket Slough.
Signage and information kiosks would help wineries and specialty shops in towns off the corridor.
A larger "Perrydale Road" sign is needed for people who turn south (i.e., toward Dallas) onto Perrydale Road from 22.
Salem needs better directional signs to direct people through the City to I-5.
Signage needed on 22 eastbound before the curve at Rosemont to warn that oncoming traffic from Rosemont enters directly into the left traffic lane.
Signs for exit from 22 onto Lancaster are inadequate.

Accidents

- Increased accidents.
Appendix C
Public Involvement Comments And Issues

- Accidents at 55th Ave NW intersection, Salt Creek Church Road/Store intersection.
- High frequency of accidents.
- Numerous accidents in the area of the Salt Creek Store to the base of Butler Hill.
- A serious accident will occur at 55th and 22 within next 12 months.
- Large number of accidents in the Highway 99W and the Highway 223 intersection areas, which justifies the need for an interchange.
- Accidents on Highway 22 -- more high priority sites than state average.
- Less total accidents that state average.
- Of the ten fatalities since 1/1/91, six were on Highway 22.
- Accidents occur because people get frustrated with the long lines of cars and no place to pass.

Road Conditions based on Weather or Time of Day

* Poor lane visibility during rain or night.
  Slick surfaces.
  Fog or bright sun makes slowing down to exit dangerous.
  Potholes after a heavy rain are an issue.
  Icy conditions on Butler Hill. Need a sensor at the top of the hill indicating freezing conditions to motorists at the bottom.
- Care of road in winter/sanding - icy conditions.
- Highway 22 and 18 junction is a trouble spot -- especially in wet and icy weather.
- Water running across the highway when its freezing.
- Springs seep up through the highway and freeze during the winter.
- Highway Department answered almost immediately when the snow plow plowed down our mailbox.
  Fog lines and lane markers are hard to see at night or due to standing water (need to improve drainage).
  On rainy days, water puddles collect on the Marion Street Bridge off ramp onto 22 (just past the Edgewater turnoff) -- water spray from traffic is blinding and lanes are indistinguishable.
  Puddle, ice and grooves are in many places.
  Few people turn on lights.
  The Eola curve area is leaking again and could get icy.
  At the edge of West Salem the 50 mph is to fast if there is ice or snow and then it isn't enforced.

Highway Maintenance

***** Paint all lines on the road! The lines need to show up better at night and during fog.
** The concrete divider in West Salem (Capital Manor) are misaligned - need reflectors on them.
** Every road needs reflectors.
* Guard rails are needed east of Red Prairie Road (Butler Hill).
* Pavement needs to be re-done, there are ruts.
  Need to delineate traffic lanes.
  Outlaw studded tires.
  Put "reflective bumps" in road prior to dangerous intersections to slow people down (18/22) (22/223).
  Condition of road.
  Road improvement on Highway 18 Junction to Salem. Bad surface in places.
  Road from Highway 18 junction to Hebo needs work on surface.
  Deteriorating condition of the highway west of Rickreall (ruts).
  White bump reflectors and lane strips are needed on the Marion and center Street bridges. Visibility in the rain is virtually nil.
  Keep Highway 22 maintained not widened.
  Driving in the dark from Dallas-Salem, no reflectors are visual and lines on roadway are also diminished.
  It's very dangerous at night, in the rain and fog poor centerline marking, Salt Creek to Willamina. Poor emergency pull off for trucks and RV.

Other

- See large trucks daily.
- Hard to see up Butler Hill from Brown.
- Enabling more through traffic will increase danger of collisions with farmer's equipment.

Regional Connectivity

* Access to Coast.
* Our only route to Salem, our seat of government.
- Access to Polk County.
- Need a connection between Tillamook Road and the road over the ridge by Fort Hill Lumber (thinking specifically in case of emergencies).
- Need more routes to the coast.
- Hwy 22 access to I-5 north bound - improve fewer signals or direct route.
- Importance of including 99W Corridor Study - Soon.
- Coast traffic travels through Dallas to bypass Lincoln City.
- Moving traffic to and from I-5 should be a top priority -- even if access to Lancaster Drive and Hawthorne Avenue is sacrificed
- Would like to not have to drive through Salem to get to Highway 22.
- The most important link to the coast and should be at least 4 lane divided highway. To grow we must have a modern highway system. With the casino openings soon this highway will be a zoo.
Congestion (travel time/access management)

Congestion areas

General:

***** Congestion
* Weekend traffic is a major problem when getting on and off the road.
* Road becomes congested as communities grow.
  Four lanes needed along the corridor.
  High average daily travel time.
  Rush hour traffic.
  Rush on hills.
  Almost all of the two lane sections slow down to a crawl during peak usage times.
  Capability to moving traffic along is questioned
  Weekend traffic peaks - Friday PM/Sunday PM - difficult to access highway.
  Congestion increases yearly with mire trucks and RVs.
  No consideration given to the increased traffic (South County is growing by leaps and bounds).
  More people are traveling to the coast in all months of the year.
  It is of major importance to increase Highway 22 and Highway 18 to four lanes in the interest of safety and to accommodate the increase volume of traffic
  Congestion on the hill
  Two lane highway with excessive traffic.

Specific:

* Cars trying to switch lanes on the west bound bridge.
- Traffic on Marion Street Bridge.
- Build an elevated freeway through the populated areas (at least to the Dallas cutoff).
- Travel this route because Center or State Streets aren't any better.
- Bottle neck between Grand Ronde and Valley Junction.
- Congestion at 99W and 22.
- Too much traffic on Wallace Road.
- Highway 22 from the 223 intersection to the Four Corners intersection has a lot of congestion.
- Congestion at 22 and 55th Ave, NW. and the Independence Highway.
Access Issues

*** Reroute intersection of 55th Avenue and Hwy 22 (Gas station; fruit stand; Hwy 51; 22 onto 51; 55 turning left or right) -- too many things are happening.

** Too many access points.

* Just west of Junction 18/22 at "Strawberry Patch" there are access problems.

* Look into redesigning 223 and 22. Would like to see the intersections with Highway 22 at Rosewood and Stoneway eliminated.

Close 55th at Highway 22 and relocate 55th along the south line of Filbert Orchard to Brunk House (see map on flip chart).

Reduce the number of intersecting approaches (particularly between Salem bridges and Highway 51).

Limit access from business on 22 between 51 and city limits.

Access needs to be reduced between Brunks Corner and West Salem through the use of frontage roads. Adding traffic signals should not be an option as they would only add to the accident potential.

Frontage roads for businesses.

Less direct access to Highway 22 from Salem City limits to 55th Avenue.

The frontage road that extends to the east of Rosewood should be extended west to College Drive.

Access onto Highway 22 from 52nd and 55th toward Salem.

Difficult access due to high traffic

Merging east onto Highway 22 from 55th Avenue NW.

Would like to see access plan similar to Mercer Island's in Washington -- using a local access only lane during peak traffic times.

Easy access on and off the highway from farm fields with farm equipment

Risking our lives from Forest Heights subdivision trying to access Highway 22.

The 60 mph exit with no off ramp at night (Forest Heights subdivision) with water backed up with no storm drains at 50th.

Access to Highway 22 at 55th and elsewhere is becoming unsafe.

Safe access from 55th Avenue NW to Highway 22.

Safe access to roadside business.

Want the proposed golf course at milepoint 9 on Highway 22 be made to use an access from Perrydale Road.

Bridge over or tunnel under west end Sawtell Road for Lincoln City traffic.

18 - Business access to (from highway).

Access on/off 22 - private drives.

Area east of 51 intersection - frontage road needed.

Eliminate Hart Road - access to 22.

Easy access needed to get off highway into Dallas.

West Salem - consolidate access points

- difficult to exit side streets to go east into town.

Total re-design of access from Edgewater to 22 (going east).
Public Involvement Comments And Issues

55th to 22 - access and approach to highway ("fill" at 55th Street approach for drainage).
Side street access onto Highway 22 creates safety problems.
51 to Doaks Ferry -- right turn only.
Access is difficult to enter or exit 22 from West Salem and other more outlying towns.
Eliminate most entrances and exits from West Salem side streets onto 22 with more underpasses.
Eliminate cars crossing westbound lanes to get into eastbound lanes of 22 -- especially ones directly across from the eastbound lane's exits into West Salem.
Wondering if Gordon Road will have access.
Keep the Lancaster interchange open, this will be a great concern to businesses.
Concerned about increasing business access and future traffic signals.
Frontage road needed to serve businesses.
County road access.
Close Rosewood and Stoneway at 22 and reroute via College.
Vegetated medians.
Chronic problems at Rosewood, Rosemont Stoneway and College.
Rosewood options are needed that are functional connections to the rest of Salem.
Elimination of business access (not politically popular) or else build frontage roads.
A different access needed into West Salem.
Amount of cars and trucks using 22 between Rickreall and Salem - I believe there should be access roads parallel to 22 so people could get on and off when they want to stop at business' along 22.
- Access to highway at times very difficult.
- The lack of controlled access to Hwy 22. There should be frontage roads and a central access point in West Salem and by the gas station and fruit stand just east of Independence Hwy.
The area between 51 and Capitol Manor. There is limited access on this part of the Hwy, it needs on and off ramps. Almost every trip to Salem, some unknowing person turns out in front of me or other drivers who are going 50-55 mph. It is frightening.

Passing Lanes (based on capacity issues)

General

****** Passing lanes are needed.
** Put 4 lanes in some areas or passing lanes.
- Highway is generally narrow with limited passing lanes
- Bus and trucks on hills -- turnouts are needed on some of the west hills.
- Passing lanes needed every two miles (or slower vehicles could use turnoffs).
Appendix C

Public Involvement Comments And Issues

- Passing lanes needed in the westbound lanes.
- Maintain at least the current number of passing lanes or increase them. Do not eliminate passing lanes.

Specific

- Valley Junction to Dolph could use some straightening or a passing lane here and there
- No passing zone vicinity of Brown Road and Butler Hill.
- No passing zone (Brown Road to Salt Creek Church Road).
- Passing lanes near Basket Slough and Salt Creek.
- Because of congestion, passing lane section and four lane sections are seen as almost a race track for those drivers trying to get in front of the pack.
- Passing west of 99W by impatient drivers
- Farm traffic makes passing difficult and dangerous, especially from Buell to Willamina (three lanes on the hills would be ideal)

Widen Road

*** 52nd - widened, provides better access onto 22. Gets us further from the 55th intersection - also provides better visibility.
*** Widen Highway 22 (West Salem to Willamina).
** Need 4 lanes from top of Butler Hill through to Rickreall.
* Four lanes from Rickreall to Wallace Bridge.
  Improve the road to handle current and additional traffic.
Widen Highway 22 entirely to Mill City.
  Turn 22 into a freeway.
Widen the road from a 2-lane to 4-lane from Hwy 18 to Rickreall.
  Need to extend the four lanes to Salt Creek.
  With more and more traffic, more lanes are needed all the way to Lincoln City Road from Highway 18 to Hebo needs to be wider in many places.
  Make the west side of Butler Hill wider so the passing lane merges after Mill Creek Bridge.
Lack of shoulders - all of 22.
Widen 53rd to Aster to access 22.
Highway 22 should be widened at Edgewater to allow people to pull off to turn right.
Widen Highway 22 from Four Corners to 223.
Highway 18 should be widened (more with four lanes and passing lanes).
  4 lane highway would promote a slower right lane inviting drivers to enjoy the vista without commercial development! Have the right hand lane allow speeds as slow as 45 mph.
We need a wider highway to the cost, it takes along time to get to the coast because of traffic backup and Lincoln City traffic.
Appendix C
Public Involvement Comments And Issues

Improve Road Alignment

- Section from Agency to Dolph needs to be straightened out.
- Realign Kings Valley Highway (just south of Liberty Road to deal with dangerous curves
- Only slowing area is just west of Willamina where it is two lanes east to west but only one lane west to east.
- Consider realigning the 55th Street connection to Highway 22 and installing a west-bound off ramp to Highway 51.
- Ramps and curves are a problem for trucks.
- Extend the highway at the railroad overcrossing on 12th Street, straight across the river and hook back up to 22.

Other Capacity Improvements

- Parallel corridor might be Kuebler Road from Salem connecting with Airlie Road to Route 223 at Barns Corner
- Ability to function as a thoroughfare must be preserved -- should not have to be responsible for providing capacity for local traffic.
- Pull offs needed, especially near the Salt Creek Flats.
- Slow moving recreational vehicles prompt the need for a couple of mandatory turnouts or extensions of a passing lane at the top of the two big hills along that route.

Transportation Balance (alternative modes)

Bikes/Pedestrians

* There are not enough bike paths on Highway 22.
* Problems with bicycles on 107.
* Bikeways should be separate from roads and highways.
* Bike and pedestrian facilities are not adequate.
* Highway 22 will not safely support bike or foot traffic.
* No bike path.
* Would be nice to walk and bike on this road but there are no shoulders to do so.
  would like to see Highway 22 become more bicycle friendly.
* Bike lane.
* Bicycles using shoulder instead of bike lane.
* River Road bicycle lanes from Independence into Salem via River Road S.
* Bicycle safety on River Road is an issue.
* Shoulders are wide enough for bike/ped uses but there may not be enough shoulders to support this.
* More or better pedestrian facilities in the urban and rural areas could be beneficial.
- Roads should have pathways for joggers and walkers that are away from traffic.
- Fast through traffic, though common, hinders bicycle and pedestrian use and vitality of street life.
- The bikepath ends at the golf course, leaving a lot of bikes to contend with road some don't even use the path at all.
- The survey results regarding bikeways: three feel bikeways are needed in urban areas and two feel so in the rural areas; four feel it could be beneficial in urban areas and three feel this way for the rural areas; four are neutral for the urban area and one is neutral for the rural area; four believe there is not much need in the rural areas.
- Survey results measuring the need for more or better pedestrian facilities: One feels pedestrian facilities are needed in the urban areas and two feel the same but in the rural areas; eight feel it could be beneficial in urban areas while one feels it could be beneficial in rural areas; one person is neutral for the urban area and three are for the rural area; one feel that there is not much need in the urban areas while three feels it is not needed in the rural areas; one believes it is wasteful in the rural areas.
- More frequently swept shoulders for bike usage.
- Bike lanes on King Valley Road.
- Continuity at the Dallas cut-off is a bad place.
- Entering and exiting the bridge in West Salem is awkward.
- There is the bike path not being used very much. From my observation over half of the bikes are using the parking lane instead of the bike path.
- Safety of bicyclists - accidents.

**Bus**

- A bus from Dallas to Salem three times daily might decrease traffic.
- Use "safety improvement" money for a free bus line on 22 - to get the cars off the road (or transit system).
- Have bus only streets around area serving downtown Salem bus transit center.
- No Sunday bus service in the Salem area
- A seven minute drive to work takes two buses and over one hour to accomplish by bus. A three minute drive from Edgewater and Rosemont to the post office on Glen Creek takes two buses and over 40 minutes. This is a particular hardship for seniors.
- Bus service needs to be regular, frequent, convenient and comfortable, including hourly bus service to the coast. Bus should operate as a shuttle. Would want to be able to flag a bus down even if it is not scheduled to stop. Develop stops at trailheads, state parks and cities. Put bike racks on them too.

**Other Public Transportation**

- Public transportation to Salem/Portland.
- What about the future of water transportation?
Appendix C

Public Involvement Comments And Issues

- Increased commuter transportation options (train, bus, etc.) up/down/cross valley.
- Statewide, 23% of adults do not have a driver’s licenses. We need to provide mobility/accessibility for all segments of the population.
- Based on survey results: two respondents feel that increasing public transit is very needed; four feel that it could be beneficial; one feels neutral; two others believe it there is not much need; while one feels that it is wasteful.
- The survey results for air service: one feels it could be beneficial; three feels neutral; one feels that there is not much need; and five feel it is wasteful.
- Effort in these areas seem wasteful of tax dollars.
- Use alternative modes to relieve congestion rather than additional travel lanes. Make traffic conditions miserable enough to make drivers want to take the bus.

Light Rail/Transit

* Public transit is needed.
- Light rail - Salem to Lincoln City.
- Need public/rapid transit to major cities.
- Survey results for the need for more elderly/disadvantaged transit: one feels is very needed; two feel that it could be beneficial; four are neutral; three believe that there is not much of a need for such transit: and one feels it is wasteful.

Connection to Alternative Modes

- Need a Park n’ Ride at the intersection of Kings Valley Highway with scheduled bus service into Salem.
- Suggest a Park n’ Ride in Rickreall.
- Multi-modal public transit use of Salem Amtrak station.
- Amtrak/intermodal system.
- The survey results on the need for intermodal hubs: two feel this is very needed; three feel that is could be beneficial; two are neutral; and two feel there is not much need.

Economic Impact

Business

- Need more commercial zoning in West Salem to attract more businesses such as Target and Fred Meyer. West Salemites have to go across the bridge for most of their shopping.
- Hold down shopping centers and commercial uglies.
- Concern about business access along the route -- with the Produce Stand coming to mind. Sees head on conflicts with the median lane.
Appendix C

Public Involvement Comments And Issues

- Downtown truck parking.
- High freight corridor.
- Commuters.
- **Congestion will hinder** further plant sightings or major expansion of existing businesses.
- Congestion has greatly changed freight delivery and business methods.
- Maintaining continues commercial use by trucks and double trailers.

Recreation

** Tourism (Coast/winery).**
- Recreation traffic on west end near Salt Creek.
- Impact from 36-hole golf course.
- Mill Creek Reservoir: recreation impact.
- Casino.
- Polk County Fairgrounds.
- RV Camp potential.
- Grande Ronde Gaming Facility -- when built.
- Polk County needs timely access to I-5 and also inhibits business development.

Agriculture

* Needs improvements for agricultural uses.
- Agricultural access.

Environmental Impact

Concern about impact to wildlife (deer kill).
Bird refuge.
Basket Slough.
The large diesel and transport trucks throw out the ugly black smoke.
Retain the forest environment in the corridor.
Cut trees along railroad track on Highway 18 to open up view.
Game migration.
Easement should be purchased to protect the scenic resources and also have turnoffs like I-5.
Basket Slough should be protected by noise and sight.
As the Oregon and California Trail develops, information, sites, and turnoffs should be incorporated.
Maintain a scenic corridor.
Too much concern over environmental issues. The birds at Basket Slough will do fine if the road is widened.
Public Involvement Comments And Issues

- Where streams or drainage passes under the freeway, an open passageway with natural substrate should be provided to allow wildlife to pass (and fish) under the highway during natural migration.
- Land application of sludge from dairy pond at Rickreall often spatters automobiles. Intolerable smell could be mitigated by better pond practices.
- Retain scenic conditions along the road. Trees should be retained along the roadside.
- Impacts on EFU land from proposals.
- Preserve the beautiful, rolling farmlands along this route.
- The gosh awful stinking pond at Rickreall - with Oregon's pride in environment, I'm appalled this was allowed to be built on land beside a busy highway. We have to hold our breath to pass the place. They could cover the pond and do the irrigating late at night. This would effect far less people.

Social Impact

* Sprawl around Salem will add to congestion problems.
* Land use changes (sprawl).
- Stench from Rickreall Dairy is distracting.
- Livability is an issue.
- Reroute trucks - noise (Jake brakes just before Salt Creek Store).
- Growth.
- Commercial and industrial land needed.
- Increased population growth in existing urban areas and small amounts in rural community centers.
- Any transportation issues should be responsive to (not independent of) an acceptable plan. The goal should be to improve the quality of life and that means improving facilities and limiting population growth.
- Future congestion on River Road N. (the only north-south major street in Keizer) because of more development in North Keizer.

Energy Use

No issues to date in this performance objective.

Specific Concern Areas

Bridges

**** Reopen the Steel bridge (18 into Willamina).
** Build a new bridge across the Willamette River.
Appendix C

Public Involvement Comments And Issues

** Bridges in Salem area are a problem.
* A bridge from West Salem to 22 (to connect Mission).
* Wallace Bridge area - improve the grade; better signs.
  Need new bridge off the end of Mission Street.
  Bridge over Willamina Road - eliminate flashing light.
  Alternate route needed if the Steel Bridge is not reopened.
  Erosion problem downstream from Millcreek Bridge - caused by bridge widening?
  A bridge from West Salem to 22 would increase traffic on 22!
  Bridge at Keizer/North Salem area
  Possible Bridge 22 - Minto-Brown - Center City.
  A bridge connecting West Salem and South Salem is needed to improve access and relieve congestion in downtown Salem.
  Rebuild the Steel Bridge in Willamina to make it easier to get to Highway 22 from Sheridan to Willamina. This would also bring more people into Willamina from both Highway 18 and 22.
  Portland exit after crossing the Center Street Bridge.
  would like to have a bridge that crosses the river somewhere south of Minto-Brown Park (maybe to hook up with Kuebler Blvd. to lessen the traffic through Salem.

Other Issues

The Farm Bureau has wanted something done with 22 for years. many Bureau members have family in the valley or go the valley to shop
  Drainage problems.
  Highway 22 past the park going east, water on the highway.
  Rest area.
  Just spend the money right!!
  Need a public phone at Buell.
  Emergency phones on 22!
  Large trucks are on local streets.
  Better parking for viewing birds during migration.
  Cooperate with locals to possibly redesign, realign, close, and/or construct parallel routes for local traffic.
  Give priority to auto/truck traffic (i.e., four lanes between Salem and Highway 18 with under and overpasses.
  Appreciate refreshment stops to break the monotony and keep alert.
  The City of Salem seem unable to deal with the increasing traffic problem.
  Growth in surrounding areas, especially in West Salem is going to have an enormous detrimental impact on Highway 22.
  Oregon needs to change their tailgating policy to judge distance behind another vehicle (change from counting to one-thousand-two to one-thousand-five). Your driver's manuals need to reflect this change.
Consider using an ad in the Sublimity and Stayton newspapers.
Need to hold off a decision on Gordon and Lancaster until the east segment of
the Corridor is completed.
O/D Study questioners wanted to have respondents indicate a City as their
destination. Responses may be skewed given that postal address areas are
oddly configured and large.
Do we know the percentage of drivers are tourists? It will be tough getting them
out of their cars.
What is the methodology for determining the ultimate destination of the 5 -
10,000 vehicles/day.
Truck traffic should be limited to the right lane.
Everyone should take a course in courtesy like "55 and alive" -- young women
are the worst offenders.
A law is needed to have headlights adjusted so they don't blind you.
Drinking drivers in the summer months.
Truck traffic is very heavy and excessive use of jake brakes is very noisy.

**Competing Uses**

** Farm vehicles vs. through traffic.
* Local vs. regional.
* Bike/ped vs. auto.
* Through traffic vs. farm traffic.
* RV's/trucks on hills; cars need passing lanes.

**Grade separations**
Transportation and tourism have a significant impact on this route requiring
continued access.
Competing traffic.
A casino will soon be built at Grand Ronde.

**Public Involvement Issues**

* Thank you for the input process.
- Thank you for taking the poll and thank you for listening.
- Thank you for giving me the chance to express my opinion.
- Look forward to future contact with regard to your corridor planning.
- Thank you for asking local residents and users of Highway 22 for their concerns.
Appendix C
Public Involvement Comments And Issues

Addendum to Transportation Corridor 22: Issues Identified
Citizen Responses to Newspaper Response Card Questions 1 and 2
March 10, 1995

Question 1) Most of the time, I travel from: _______ to _______

****** Independence to Salem
Independence to Lincoln City
**Salem to Dallas or Lincoln City
Salem to 99W
*Salem to Newport
*Salem to Tillamook
Salem to Detroit
*Salem to the coast
South Salem to Dallas
West Salem to Monmouth, Salem or Sublimity
*West Salem to Salem
West Salem to Newberg
6 miles west of Salem to Salem
******** Dallas to Salem
Dallas to Depoe Bay
*Dallas to the coast
**Dallas to Buell and Salem
North of Dallas to Dallas and Salem
Grande Ronde to Salem
Willamina to Salem
Sheridan to Lincoln City/Tillamook
Sheridan to Salem
Sheridan to Lincoln City
50th to Salem
50th Avenue, NW to Oak Knoll Golf Course
53rd Ave. to West Salem
55th Avenue, N.W. to Salem
53rd N.W. to Salem and Dallas
Oak Knoll Golf Course to Salem
**Brown Road to Dallas and Salem
Enterprise Road to Red Prairie Road
Polk County to Salem
*Eola Area to Salem
Willamina to Polk County
*Willamina to Salem
**Salt Creek to Dallas and Salem
Red Prairie Road to Dallas
Commercial to Lancaster
**Rickreall to Lincoln City or Salem**
Capital Manor to Silverton and Lancaster
*Kings Valley Highway to Salem*
College Drive to Front Street
Milepost 10 to Salem
Falls City to Dallas, Salem and Portland
Brown Road to Salem
Grand Ronde to Salem, Dallas, Pacific City, and Hebo
Tillamook to Salem, Corvallis, Eugene
Butler Hill to Dallas
Sheridan to Pacific City
Monmouth to 51st Street
College Drive to Downtown Salem
*Valley Junction to Salem*
Salem to Highway 101
Salem to Independence
Lincoln City of Salem
Wallace Bridge to Salem
Salem to Rickreall Junction
Mill Creek Road to Dallas, Salem

**Question 2)**  
*Most of the time I: Drive, Bike, Walk, Other*
Drive a car  70 citizens
Drive  6 citizens
Drive truck  15 citizens
Drive van 1 citizen
Bike  4 citizens
RV  2 citizens

*Also see Attachment*
Appendix D
Overview of Oregon Highway Monitoring System
Willamina Junction - Salem

Transportation Facilities and Services

Highways

This corridor includes Oregon Route 22 from the junction with Oregon Route 18 at Willamina Junction to Interstate 5 in Salem.

Rail Lines

A Willamette and Pacific branch line crosses the corridor near Rickreall and provides service to communities in the vicinity of Oregon Route 99W. The City of Dallas is served by this rail line. OR 22 crosses the Southern Pacific main line in Salem and Burlington Northern's Oregon Electric line as well.

Airports and Air Passenger Service

The Salem Municipal airport is located adjacent to OR 22 in Salem. (Level 1) No scheduled commercial air passenger service is currently being provided at this airport although the airport is capable of accommodating it. An airport limousine service provides transportation to Portland International Airport.

Note: The level number shown in parentheses identifies the state importance level of the airport.

The following general aviation airports are located in the vicinity of the corridor:
Sheridan Airport located several miles to the north of the corridor in Sheridan.
Independence State Airport located several miles to the south of the corridor in Independence.

Ports

No ports are present in this corridor.

Intercity Surface Public Transportation

No intercity bus service is provided along this corridor. An Amtrak terminal is located in Salem. Salem is also the location of a Greyhound bus terminal. Bus service is provided in the I-5 corridor.

Oil and Gas Pipelines

The Northwest Natural Gas provides natural gas service along this corridor between Salem and Dallas.
Willamina Junction - Salem

**Travel In The Corridor**

**1992 Highway Traffic Volumes* in the Corridor**

<table>
<thead>
<tr>
<th>Traffic Volume</th>
<th>Corridor Mileage (miles)</th>
<th>Corridor Mileage (percent)</th>
<th>Statewide Average (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 1,999</td>
<td>-</td>
<td>-</td>
<td>37</td>
</tr>
<tr>
<td>2,000 - 4,999</td>
<td>-</td>
<td>-</td>
<td>36</td>
</tr>
<tr>
<td>5,000 - 9,999</td>
<td>15.8</td>
<td>64</td>
<td>16</td>
</tr>
<tr>
<td>10,000 - 19,999</td>
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<td>1</td>
<td>6</td>
</tr>
<tr>
<td>20,000 - 29,999</td>
<td>9.6</td>
<td>32</td>
<td>3</td>
</tr>
<tr>
<td>30,000 - 49,999</td>
<td>3.4</td>
<td>12</td>
<td>2</td>
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<tr>
<td>&gt;50,000</td>
<td>0.4</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

*Includes all motorized traffic

**1992 Highway Truck Traffic Volumes in the Corridor**

<table>
<thead>
<tr>
<th>Truck Volume (ADT)</th>
<th>Corridor Mileage (miles)</th>
<th>Corridor Mileage (percent)</th>
<th>Statewide Average (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 499</td>
<td>-</td>
<td>-</td>
<td>52</td>
</tr>
<tr>
<td>500 - 1,499</td>
<td>26.7</td>
<td>87</td>
<td>41</td>
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<td>1,500 - 2,999</td>
<td>3.8</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>&gt;3,000</td>
<td>-</td>
<td>-</td>
<td>1</td>
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</tbody>
</table>

**1972 - 1992 Annual Highway Traffic Growth Rates**

<table>
<thead>
<tr>
<th>Growth Rate (percent)</th>
<th>Corridor Mileage (miles)</th>
<th>Corridor Mileage (percent)</th>
<th>Statewide Average (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 1.99</td>
<td>22.1</td>
<td>75</td>
<td>38</td>
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<tr>
<td>2.00 - 2.99</td>
<td>7.4</td>
<td>25</td>
<td>46</td>
</tr>
<tr>
<td>3.00 - 4.00</td>
<td>-</td>
<td>-</td>
<td>16</td>
</tr>
</tbody>
</table>

**1992 Freight Movement in the Corridor**

<table>
<thead>
<tr>
<th>Travel Mode</th>
<th>Freight Moved (thousands net tons)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Truck</td>
<td>5,500</td>
<td>ATR 24-014 Willamette River</td>
</tr>
<tr>
<td>Water</td>
<td>-</td>
<td>-</td>
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</table>
Willamina Junction - Salem

Analysis of Highway Travel Time

Travel Times of Cars and Trucks

<table>
<thead>
<tr>
<th>Year/Scenario*</th>
<th>Travel Time</th>
<th>Average Travel Time</th>
<th>Statewide Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minutes/Trip (car/truck)</td>
<td>Minutes/Mile (car/truck)</td>
<td>Minutes/Mile (car/truck)</td>
</tr>
<tr>
<td>1996</td>
<td>41 / 54</td>
<td>1.33 / 1.80</td>
<td>1.36 / 1.80</td>
</tr>
<tr>
<td>2016 Improvements</td>
<td>44 / 56</td>
<td>1.44 / 1.86</td>
<td>1.47 / 1.87</td>
</tr>
<tr>
<td>2016 Improvements</td>
<td>39 / 51</td>
<td>1.31 / 1.73</td>
<td>1.23 / 1.66</td>
</tr>
</tbody>
</table>

*All Scenarios Assume High Management

Changes in Travel Times

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Time Change Minutes/Trip (car/truck)</th>
<th>Time Change Percent (car/truck)</th>
<th>Statewide Average Percent (car/truck)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996 to 2016 No Improvements</td>
<td>3 / 2</td>
<td>7 / 4</td>
<td>9.2 / 4.4</td>
</tr>
<tr>
<td>1996 to 2016 Improvements</td>
<td>-2 / -3</td>
<td>-5 / -6</td>
<td>-8.8 / -7.1</td>
</tr>
</tbody>
</table>

Comparison of the Effects of Management and Improvements on Time Travel

<table>
<thead>
<tr>
<th>2016 Scenario</th>
<th>Travel Time Minutes/Trip Average All Vehicles</th>
<th>Travel Time Reduction* Minutes/Trip</th>
<th>Travel Time Percentage of Maximum Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Improvements/Low Management</td>
<td>47</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No Improvements/High Management</td>
<td>45</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>Improvements/Low Management</td>
<td>42</td>
<td>5</td>
<td>71</td>
</tr>
<tr>
<td>Improvements/High Management</td>
<td>40</td>
<td>7</td>
<td>100</td>
</tr>
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*Reduction from Worst Case Scenario of No Improvements/Low Management

Time Savings* at Various Capacity Improvement Investment Levels

<table>
<thead>
<tr>
<th>Improvement Costs (thousands)</th>
<th>Time Saved* Minutes Per Trip</th>
<th>Time Saved* 1000 Vehicles Hours Per Year</th>
<th>Statewide Average 1000 Vehicles Hours Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,000</td>
<td>1</td>
<td>140</td>
<td>108</td>
</tr>
<tr>
<td>$5,000</td>
<td>1</td>
<td>347</td>
<td>415</td>
</tr>
<tr>
<td>$10,000</td>
<td>2</td>
<td>389</td>
<td>688</td>
</tr>
<tr>
<td>$25,000</td>
<td>4</td>
<td>487</td>
<td>1159</td>
</tr>
<tr>
<td>$50,000</td>
<td>4</td>
<td>487</td>
<td>1581</td>
</tr>
<tr>
<td>$100,000</td>
<td>4</td>
<td>487</td>
<td>2037</td>
</tr>
</tbody>
</table>

*2016 improvements vs. 2016 No Improvements

Average Cost of Capacity Improvements that Compensate for Low Management: $12.5 Million*

*2016 No Improvement/Low Management vs. 2016 No Improvement/High Management: (25,000/4) x 2.
Willamina Junction - Salem

Analysis of Highway Congestion, Safety and Operating Costs

Proportion of Corridor Subject to Congestion in 1996 and 2019 (percent)

<table>
<thead>
<tr>
<th>Congestion Level</th>
<th>1996</th>
<th>2016 No Improvements</th>
<th>Statewide Average 2016 No Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Congestion</td>
<td>9</td>
<td>28</td>
<td>17</td>
</tr>
<tr>
<td>Moderate Congestion</td>
<td>46</td>
<td>36</td>
<td>21</td>
</tr>
<tr>
<td>Low Congestion</td>
<td>45</td>
<td>36</td>
<td>62</td>
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Congestion Reduction at Various Capacity Improvement Investment Levels

<table>
<thead>
<tr>
<th>Improvement Costs (thousands)</th>
<th>Reduction in Percent Of Corridor With High Congestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,000</td>
<td>7</td>
</tr>
<tr>
<td>$5,000</td>
<td>18</td>
</tr>
<tr>
<td>$10,000</td>
<td>21</td>
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<td>$25,000</td>
<td>28</td>
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<tr>
<td>$50,000</td>
<td>28</td>
</tr>
<tr>
<td>$100,000</td>
<td>28</td>
</tr>
</tbody>
</table>

Number of High Accident Locations

<table>
<thead>
<tr>
<th>Corridor (locations/mile)</th>
<th>Statewide Average (locations/mile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.17</td>
<td>0.54</td>
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</table>

Comparison of Accidents and Accident Rates

<table>
<thead>
<tr>
<th>Year/Scenario</th>
<th>Accidents (per year)</th>
<th>Accident Rate*</th>
<th>Statewide Average Accident Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>130</td>
<td>0.64</td>
<td>0.83</td>
</tr>
<tr>
<td>2016 No Improvements</td>
<td>138</td>
<td>0.64</td>
<td>0.83</td>
</tr>
<tr>
<td>2016 Improvements**</td>
<td>137</td>
<td>0.64</td>
<td>0.75</td>
</tr>
</tbody>
</table>

*Accidents Per Million Vehicle Miles of Travel

**All sharp curves realigned

Comparison of Car and Truck Total Yearly Operating Costs

<table>
<thead>
<tr>
<th>Year/Scenario*</th>
<th>Total Operating Costs (thousands) (car/truck)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>56,891 / 14,700</td>
</tr>
<tr>
<td>2016 No Improvements</td>
<td>85,434 / 20,995</td>
</tr>
<tr>
<td>2016 Improvements</td>
<td>82,883 / 20,072</td>
</tr>
</tbody>
</table>

*All Scenarios Assume High Management
Willamina Junction - Salem

Motorist Survey Results

Reason for Using Corridor

Frequency of Corridor Use

What Users Like Most About Corridor

Allocation of Discretionary Funds
Willamina Junction - Salem

Traffic Volume Trends

All Traffic

Trucks

Automatic Recorder 24-014
Hwy #30
M.P. 25.72
(Willamette River bridges)
Willamina Junction - Salem

Automobile and Truck Travel Times

**Car**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (Minutes)</td>
<td>41</td>
<td>44</td>
<td>44</td>
<td>39</td>
<td>39</td>
</tr>
</tbody>
</table>

**Truck**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (Minutes)</td>
<td>54</td>
<td>56</td>
<td>56</td>
<td>51</td>
<td>51</td>
</tr>
</tbody>
</table>
Willamina Junction - Salem

Effects of Management on Travel Time

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel Time (Min.)</td>
<td>42</td>
<td>47</td>
<td>45</td>
<td>42</td>
<td>40</td>
</tr>
</tbody>
</table>

Legend:
- LOW MGMT.
- HIGH MGMT.
Appendix E
Applicable Statewide Plans
Policy 1C - Accessibility

It is the policy of the State of Oregon to promote a transportation system that is reliable and accessible to all potential users, including the transportation disadvantaged, measured by availability of modal choices, ease of use, relative cost, proximity to service and frequency of service.

ACTION 1C.1
Cooperatively define acceptable levels of accessibility through the establishment of standards in transportation system plans for minimum levels of service and system design for passengers and freight for all modes.

ACTION 1C.4
Develop public transit, bicycle and pedestrian systems in urban and rural areas.

Policy 1D - Environmental Responsibility

It is the policy of the State of Oregon to provide a transportation system that is environmentally responsible and encourages conservation of natural resources.

ACTION 1D.3
positively affect both the natural and built environments in the design, construction and operation of the transportation system. However, where adverse impacts cannot be avoided, minimize or mitigate their effects on the environment.

ACTION 1D.6
Assure the safe, efficient transport of hazardous materials within Oregon. For the purposes of this action, the definition of hazardous materials includes radioactive materials.

Work with federal agencies, the Public Utility Commission, the Oregon Department of Energy and local governments to assure consistent laws and regulations for the transport of hazardous materials, including the development of standards for containment and crash-proofing such transport and the development of requirements for the visible signing of contents of carriers.

Participate in the work of the state Interagency Hazard Communication Council.

Require that local, regional and state transportation systems plans provide for safe routing of hazardous materials consistent with federal guidelines, and provide for public involvement in the process.

Develop hazardous materials accident and spill management skills to deal with potential accidents.
ACTION 1D.7
Minimize transportation-related noise impacts through improved enforcement of noise regulations, facility design and compatible land use; and cooperate with regulatory agencies.

Policy 1E - Connectivity among Places

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

ACTION 1E.1
Identify a multimodal network of facilities to meet requirements for the movement of people, goods and services throughout Oregon and develop a plan to implement that system.

ACTION 1E.3
Develop and promote service in statewide transportation corridors by the most appropriate mode including intercity bus, truck, rail, airplane, passenger vehicle and bicycle.

Policy 1F - Connectivity among Modes and Carriers

It is the policy of the State of Oregon to provide a transportation system with connectivity among modes within and between urban areas, with ease of transfer among modes and between local and state transportation systems.

ACTION 1F.2
Encourage development of a system of open access passenger facilities throughout the State to expedite transfers between modes, routes and carriers.

ACTION 1F.3
Encourage development of efficient intermodal freight facilities, open to access to all where feasible, to encourage effective shifts among modes.

Policy 1G - Safety

It is the policy of the State of Oregon to improve continually the safety of all facets of statewide transportation for system users including operators, passengers, pedestrians, recipients of goods and services, and property owners.
ACTION 1G.4
Improve the safety in design, construction and maintenance of new and existing systems and facilities for the users and benefactors including the use of techniques to reduce conflicts between modes using the same facility or corridor. Target resources to dangerous routes and locations in cooperation with local and other state agencies.

ACTION 1G.10
Promote high safety standards for trucks and truck operators.

Work with national transportation organizations to accurately determine the safety implications of alternative truck sizes, weights and configurations.

Expand the truck inspection program and have strong sanctions for consistent violators of trucking regulations. Continue to develop and institute a mobile enforcement plan to provide more effective size and weight enforcement utilizing weigh-in-motion, automatic vehicle identification and other Intelligent Vehicle Highway System technologies.

Take action to minimize conflicts between trucks, automobiles and recreational vehicles.

Policy 2A - Land Use

It is the policy of the State of Oregon to develop transportation plans and policies that implement Oregon's Statewide Planning Goals, as adopted by the Land Conservation and Development Commission.

ACTION 2A.3
Coordinate state transportation planning with local and regional land use plans as described in the certified ODOT/LCDC State Agency Coordination Agreement.

ACTION 2A.6
Restrict access from state facilities for incompatible activities and development where land use plans call for rural or resource developments.

Policy 2B - Urban Accessibility

It is the policy of the State of Oregon to define minimum levels of service and assure balanced, multimodal accessibility to existing and new development within urban areas to achieve the state goal of compact, highly livable urban areas.
ACTION 2B.1
Cooperate with local governments and metropolitan planning organizations to develop integrated transportation plans for urban areas that meet the needs for urban mobility, and intercity, interstate and international travel within and near each urban area.

ACTION 2B.3
Increase the availability and use of transit, walking, bicycling and ridesharing. Promote the design and development of infrastructure and land use patterns which encourage alternatives to the single occupant automobile.

Policy 2C - Relationship of Interurban and Urban Mobility

It is the policy of the State of Oregon to provide interurban mobility through and near urban areas in a manner which minimizes adverse effects on land use and urban travel patterns.

ACTION 2C.1
Plan and design interurban corridors in and near urban areas to preserve their utility for interurban travel. Appropriate means to manage highways might include ramp metering, limited interchanges, high occupancy vehicle lanes, access control, separated express lanes for through traffic and tolls. Appropriate means for other modes might include station and stop locations. The State of Oregon shall avoid highway capacity improvements which primarily serve commuters from outside of urban growth and urban containment boundaries.

ACTION 2C.2
Promote alternative modes and preservation and improvement of parallel arterials so that local trips have alternatives to the use of intercity routes.

ACTION 2C.3
Encourage regional and local transportation system plans and land use plans to avoid dependence on the state highway system for direct access to commercial, residential or industrial development adjacent to the state highway.

ACTION 2C.4
Promote the development of interurban bus and rail passenger service to improve urban accessibility and achieve land use goals.

Policy 2D - Facilities for Pedestrians and Bicyclists

It is the policy of the State of Oregon to promote safe, comfortable travel for pedestrians and bicyclists along travel corridors and within existing communities and new developments.
Policy 2F - Rural Mobility

It is the policy of the State of Oregon to facilitate the movement of goods and services and to improve access in rural areas.

ACTION 2F.1
Improve rural highways, minimizing the interaction of passenger vehicles, bicycles, recreational vehicles and freight vehicles by providing passing lanes and paved shoulders, wherever practical.

Policy 2H - Aesthetic Values

It is the policy of the State of Oregon to protect and enhance the aesthetic value of transportation corridors in order to support economic development and preserve quality of life.

ACTION 2H.1
Include aesthetic considerations in the design, maintenance and improvement of corridors and rights-of-way for all modes.

Policy 3B - Linkages to Markets

It is the policy of the State of Oregon to assure effective transportation linkages for goods and passengers to attract a larger share of international and interstate trade to the state.

ACTION 3B.3
Maintain, preserve and improve the highway system in order to provide infrastructure for the efficient movement of goods by truck and bus.

Policy 3E - Tourism

It is the policy of the State of Oregon to develop a transportation system that supports intrastate, interstate and international tourism and improves access to recreational destinations.

ACTION 3E.2
Identify certain transportation corridors as scenic routes and consider scenic values in corridor planning, improvements and maintenance.
Policy 4G - Management Practices

It is the policy of the State of Oregon to manage effectively existing transportation infrastructure and services before adding new facilities.

ACTION 4G.1
Place priority on preserving, maintaining and improving the transportation infrastructure and services that are of statewide significance.

ACTION 4G.2
Manage such factors as the number, spacing, type and location of accesses, intersections and signals in order to operate the transportation system at reasonable levels of service and in a cost-effective manner.

ACTION 4G.3
Use demand management and other transportation systems operation techniques that reduce peak period single occupant automobile travel, that spread traffic volumes away from the peak period, and that improve traffic flow. Such techniques include HOV (high occupancy vehicle) lanes with express transit service, carpools, parking management programs, peak period pricing, ramp metering, motorist information systems, route diversion strategies, incident management, and enhancement of alternative modes of transportation including bicycling and walking.

ACTION 4G.4
Protect the integrity of statewide transportation corridors and facilities from encroachment by such means as controlling access to state highways, minimizing rail crossings and controlling incompatible land use around airports.

Other policies and action statements concerning programmatic, system level and statewide function will also be addressed as needed during the corridor planning process. The policies and actions featured in this section are those that give the most specific guidance for corridor planning.

B. OREGON BICYCLE AND PEDESTRIAN PLAN

An update to the 1992 Oregon Bicycle Plan was adopted by the Oregon Transportation Commission in June 1995. The updated plan adds consideration of pedestrian needs, updates and expands information on bicycling needs, and discusses both intermodal and land use aspects of bicycle and pedestrian transportation.

Goals and strategies are discussed in terms of OTP Policy 2D "to promote safe, comfortable travel for pedestrians and bicyclists along travel corridors and within existing communities and new developments". Pursuant to this policy goals, actions
and strategies are defined. The strategies providing the most explicit advice for corridor planning are:

STRATEGY 1A
Integrate bicycle and pedestrian facility needs into all planning, design, construction and maintenance activities of the Oregon Department of Transportation, local units of government and other transportation providers.

STRATEGY 1B
Retrofit existing roadways with paved shoulders or bike lanes to accommodate bicyclists, and with sidewalks and safe crossings to accommodate pedestrians, where needed.

Rural highways are discussed in the updated plan. Access Oregon Highways are anticipated to meet standards that accommodate touring cyclists as they are upgraded with paved shoulders of adequate width. Under corridor planning, it is further noted that planning for adequate shoulders will generally accommodate bicycle travel and the occasional pedestrian traffic found in rural areas. Within communities along the corridor, sidewalks and safe pedestrian crossings will also need to be provided.

C. OREGON HIGHWAY PLAN

The Access Oregon Highways Program was adopted in March 1988 by the Oregon Transportation Commission. The Oregon Highway Plan was adopted in May 1991; the Plan included an Access Oregon Highways policy. The Oregon Highway Plan is a modal plan that ties the OTP to more detailed plans including corridor plans, regional plans, and local plans. One of the designated Access Oregon Highways is Highway 22 from Salem to the Santiam Junction. Accordingly, approximately two miles of that portion of Highway 22 which is the subject of this corridor strategy development effort is part of this Access Oregon Highway designation. The core program of the statewide strategy includes:

Preservation work to 90 percent "fair or better" pavement condition.
No reductions in maintenance and operations that sacrifice user safety.
Increased bridge work to cover critical needs and seismic retrofits.

Acceleration of modernization and completion of the AOH program by 2003 were dependent on increased funding (which was not approved by the 1993 legislative assembly). For a highway of statewide level of importance and more than 2000 AADT such as Highway 22, the Oregon Highway Plan defines Minimum Tolerable Conditions (MTC's) as follows:
APPLICABLE STATEWIDE PLANS

Level of service=C  Average speed=55 mph  Alignment=no reduced speed
Lane width=12 feet  Shoulders=6 feet (paved)

These are target levels below which ODOT considers a need exists. Both operating standards and design standards would be expected to be at a higher level.

D. INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT (ISTEA)

The 1991 Federal Intermodal Surface Transportation Efficiency Act establishes the requirement for all states to develop integrated statewide transportation plans. Oregon's plan to meet the ISTEA requirements will include the OTP and the corridor strategies.

The federal rules adopted to carry out ISTEA includes a list of items that must be considered in the development of state transportation plans. They are as follows:

The transportation needs (strategies and other results) identified through the management systems required by 23 U.S.C. 303;

Any Federal, State, or local energy use goals, objectives, programs, or requirements;

Strategies for incorporating bicycle transportation facilities and pedestrian walkways in projects where appropriate throughout the State;

International border crossings and access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation and scenic areas, monuments and historic sites, and military installations;

The transportation needs of non-metropolitan areas (areas outside of MPO planning boundaries) through a process that includes consultation with local elected officials with jurisdiction over transportation;

Any metropolitan area plan developed pursuant to 23 U.S.C. 134 and section 8 of the Federal Transit Act 49 U.S.C. app. 1607;

Connectivity between metropolitan areas with the State and with metropolitan areas in other States;

Recreational travel and tourism;

Any State plan developed pursuant to the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq. (and in addition to plans pursuant to the Coastal Zone Management Act);
Transportation system management and investment strategies designed to make the most efficient use of existing transportation facilities (including consideration of all transportation modes);

The overall social, economic, energy, and environmental effects of transportation decisions (including housing and community development effects and effects on the human, natural and manmade environments);
Methods to reduce traffic congestion and to prevent traffic congestion from developing in areas where it does not yet occur, including methods which reduce motor vehicle travel, particularly single-occupant motor vehicle travel;

Methods to expand and enhance appropriate transit services and to increase the use of such services (including commuter rail);

The effect of transportation decisions on land use and land development, including the need for consistency between transportation decisionmaking and the provisions of all applicable short-range and long-range land use and development plans (analyses should include projections of economic, demographic, environmental protection, growth management and land use activities consistent with development goals and transportation demand projections);

Strategies for identifying and implementing transportation enhancements where appropriate throughout the State;

The use of innovative mechanisms for financing projects, including value capture pricing, tolls and congestion pricing;

Preservation of rights-of-way for construction of future transportation projects, including identification of unused rights-of-way which may be needed for future transportation corridors, identification of those corridors for which action is most needed to prevent destruction or loss (including strategies for preventing loss of rights-of-way);

Long-range needs of the State transportation system for movement of persons and goods;

Methods to enhance the efficient movement of commercial motor vehicles;

The use of life-cycle costs in the design and engineering of bridges, tunnels or pavement;

The coordination of transportation plans and programs developed for metropolitan planning areas of the State under 23 U.S.C. 134 and section 8 of the Federal Transit Act with the statewide transportation plans and programs developed under this subpart, and the reconciliation of such plans and programs as necessary to ensure connectivity within transportation systems;
Investment strategies to improve adjoining State and local roads that support rural economic growth and tourism development, Federal agency renewable resources management, and multipurpose land management practices, including recreation development; and

The concerns of Indian tribal governments having jurisdiction over lands within the boundaries of the State.

E. OREGON ADMINISTRATIVE RULE ON TRANSPORTATION PLANNING (TPR)

The Transportation Planning Rule (TPR) is a rule adopted by the Land Conservation and Development Commission to describe how transportation planning is to be done to be consistent with the statewide planning goals. This rule establishes the range of alternatives to be looked at in developing a transportation plan including:

Improvements to existing facilities or services;

New facilities and services, including different modes or combinations of modes that could reasonably meet identified transportation needs;

Transportation system management measures;

Demand management measures; and

A no-build system alternative required by the National Environment Policy Act of 1969 or other laws.

The TPR also establishes several plan evaluation standards that are most relevant to the development of a corridor strategy. These standards are as follows:

The transportation system shall support urban and rural development by providing types and levels of transportation facilities and services appropriate to serve the land uses identified in the acknowledged comprehensive plan.

The transportation system shall be consistent with state and federal standards for protection of air, land and water quality including the State Implementation Plan under the Federal Clean Air Act and the State Water Quality Management Plan;

The transportation system shall minimize conflicts and facilitate connections between modes of transportation.
The transportation system shall avoid principal reliance on any one mode of transportation and shall reduce principal reliance on the automobile. In MPO areas, this shall be accomplished by selecting transportation alternatives which meet the requirements in 660-12-035(4).
Policy 1C - Accessibility

It is the policy of the State of Oregon to promote a transportation system that is reliable and accessible to all potential users, including the transportation disadvantaged, measured by availability of modal choices, ease of use, relative cost, proximity to service and frequency of service.

ACTION 1C.1
Cooperatively define acceptable levels of accessibility through the establishment of standards in transportation system plans for minimum levels of service and system design for passengers and freight for all modes.

ACTION 1C.4
Develop public transit, bicycle and pedestrian systems in urban and rural areas.

Policy 1D - Environmental Responsibility

It is the policy of the State of Oregon to provide a transportation system that is environmentally responsible and encourages conservation of natural resources.

ACTION 1D.3
Positively affect both the natural and built environments in the design, construction and operation of the transportation system. However, where adverse impacts cannot be avoided, minimize or mitigate their effects on the environment.

ACTION 1D.6
Assure the safe, efficient transport of hazardous materials within Oregon. For the purposes of this action, the definition of hazardous materials includes radioactive materials.

Work with federal agencies, the Public Utility Commission, the Oregon Department of Energy and local governments to assure consistent laws and regulations for the transport of hazardous materials, including the development of standards for containment and crash-proofing such transport and the development of requirements for the visible signing of contents of carriers.

Participate in the work of the state Interagency Hazard Communication Council.

Require that local, regional and state transportation systems plans provide for safe routing of hazardous materials consistent with federal guidelines, and provide for public involvement in the process.

Develop hazardous materials accident and spill management skills to deal with potential accidents.
ACTION 1D.7
Minimize transportation-related noise impacts through improved enforcement of noise regulations, facility design and compatible land use; and cooperate with regulatory agencies.

Policy 1E - Connectivity among Places

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

ACTION 1E.1
Identify a multimodal network of facilities to meet requirements for the movement of people, goods and services throughout Oregon and develop a plan to implement that system.

ACTION 1E.3
Develop and promote service in statewide transportation corridors by the most appropriate mode including intercity bus, truck, rail, airplane, passenger vehicle and bicycle.

Policy 1F - Connectivity among Modes and Carriers

It is the policy of the State of Oregon to provide a transportation system with connectivity among modes within and between urban areas, with ease of transfer among modes and between local and state transportation systems.

ACTION 1F.2
Encourage development of a system of open access passenger facilities throughout the State to expedite transfers between modes, routes and carriers.

ACTION 1F.3
Encourage development of efficient intermodal freight facilities, open to access to all where feasible, to encourage effective shifts among modes.

Policy 1G - Safety

It is the policy of the State of Oregon to improve continually the safety of all facets of statewide transportation for system users including operators, passengers, pedestrians, recipients of goods and services, and property owners.
ACTION 1G.4
Improve the safety in design, construction and maintenance of new and existing systems and facilities for the users and benefactors including the use of techniques to reduce conflicts between modes using the same facility or corridor. Target resources to dangerous routes and locations in cooperation with local and other state agencies.

ACTION 1G.10
Promote high safety standards for trucks and truck operators.

Work with national transportation organizations to accurately determine the safety implications of alternative truck sizes, weights and configurations.

Expand the truck inspection program and have strong sanctions for consistent violators of trucking regulations. Continue to develop and institute a mobile enforcement plan to provide more effective size and weight enforcement utilizing weigh-in-motion, automatic vehicle identification and other Intelligent Vehicle Highway System technologies.

Take action to minimize conflicts between trucks, automobiles and recreational vehicles.

Policy 2A - Land Use

It is the policy of the State of Oregon to develop transportation plans and policies that implement Oregon's Statewide Planning Goals, as adopted by the Land Conservation and Development Commission.

ACTION 2A.3
Coordinate state transportation planning with local and regional land use plans as described in the certified ODOT/LCDC State Agency Coordination Agreement.

ACTION 2A.6
Restrict access from state facilities for incompatible activities and development where land use plans call for rural or resource developments.

Policy 2B - Urban Accessibility

It is the policy of the State of Oregon to define minimum levels of service and assure balanced, multimodal accessibility to existing and new development within urban areas to achieve the state goal of compact, highly livable urban areas.
APPLICABLE STATEWIDE PLANS

ACTION 2B.1
Cooperate with local governments and metropolitan planning organizations to develop integrated transportation plans for urban areas that meet the needs for urban mobility, and intercity, interstate and international travel within and near each urban area.

ACTION 2B.3
Increase the availability and use of transit, walking, bicycling and ridesharing. Promote the design and development of infrastructure and land use patterns which encourage alternatives to the single occupant automobile.

Policy 2C - Relationship of Interurban and Urban Mobility

It is the policy of the State of Oregon to provide interurban mobility through and near urban areas in a manner which minimizes adverse effects on land use and urban travel patterns.

ACTION 2C.1
Plan and design interurban corridors in and near urban areas to preserve their utility for interurban travel. Appropriate means to manage highways might include ramp metering, limited interchanges, high occupancy vehicle lanes, access control, separated express lanes for through traffic and tolls. Appropriate means for other modes might include station and stop locations. The State of Oregon shall avoid highway capacity improvements which primarily serve commuters from outside of urban growth and urban containment boundaries.

ACTION 2C.2
Promote alternative modes and preservation and improvement of parallel arterials so that local trips have alternatives to the use of intercity routes.

ACTION 2C.3
Encourage regional and local transportation system plans and land use plans to avoid dependence on the state highway system for direct access to commercial, residential or industrial development adjacent to the state highway.

ACTION 2C.4
Promote the development of interurban bus and rail passenger service to improve urban accessibility and achieve land use goals.

Policy 2D - Facilities for Pedestrians and Bicyclists

It is the policy of the State of Oregon to promote safe, comfortable travel for pedestrians and bicyclists along travel corridors and within existing communities and new developments.
Policy 2F - Rural Mobility

It is the policy of the State of Oregon to facilitate the movement of goods and services and to improve access in rural areas.

ACTION 2F.1
Improve rural highways, minimizing the interaction of passenger vehicles, bicycles, recreational vehicles and freight vehicles by providing passing lanes and paved shoulders, wherever practical.

Policy 2H - Aesthetic Values

It is the policy of the State of Oregon to protect and enhance the aesthetic value of transportation corridors in order to support economic development and preserve quality of life.

ACTION 2H.1
Include aesthetic considerations in the design, maintenance and improvement of corridors and rights-of-way for all modes.

Policy 3B - Linkages to Markets

It is the policy of the State of Oregon to assure effective transportation linkages for goods and passengers to attract a larger share of international and interstate trade to the state.

ACTION 3B.3
Maintain, preserve and improve the highway system in order to provide infrastructure for the efficient movement of goods by truck and bus.

Policy 3E - Tourism

It is the policy of the State of Oregon to develop a transportation system that supports intrastate, interstate and international tourism and improves access to recreational destinations.

ACTION 3E.2
Identify certain transportation corridors as scenic routes and consider scenic values in corridor planning, improvements and maintenance.
Policy 4G - Management Practices

It is the policy of the State of Oregon to manage effectively existing transportation infrastructure and services before adding new facilities.

ACTION 4G.1
Place priority on preserving, maintaining and improving the transportation infrastructure and services that are of statewide significance.

ACTION 4G.2
Manage such factors as the number, spacing, type and location of accesses, intersections and signals in order to operate the transportation system at reasonable levels of service and in a cost-effective manner.

ACTION 4G.3
Use demand management and other transportation systems operation techniques that reduce peak period single occupant automobile travel, that spread traffic volumes away from the peak period, and that improve traffic flow. Such techniques include HOV (high occupancy vehicle) lanes with express transit service, carpools, parking management programs, peak period pricing, ramp metering, motorist information systems, route diversion strategies, incident management, and enhancement of alternative modes of transportation including bicycling and walking.

ACTION 4G.4
Protect the integrity of statewide transportation corridors and facilities from encroachment by such means as controlling access to state highways, minimizing rail crossings and controlling incompatible land use around airports.

Other policies and action statements concerning programmatic, system level and statewide function will also be addressed as needed during the corridor planning process. The policies and actions featured in this section are those that give the most specific guidance for corridor planning.

B. OREGON BICYCLE AND PEDESTRIAN PLAN

An update to the 1992 Oregon Bicycle Plan was adopted by the Oregon Transportation Commission in June 1995. The updated plan adds consideration of pedestrian needs, updates and expands information on bicycling needs, and discusses both intermodal and land use aspects of bicycle and pedestrian transportation.

Goals and strategies are discussed in terms of OTP Policy 2D "to promote safe, comfortable travel for pedestrians and bicyclists along travel corridors and within existing communities and new developments". Pursuant to this policy goals, actions
and strategies are defined. The strategies providing the most explicit advice for corridor planning are:

**STRATEGY 1A**
Integrate bicycle and pedestrian facility needs into all planning, design, construction and maintenance activities of the Oregon Department of Transportation, local units of government and other transportation providers.

**STRATEGY 1B**
Retrofit existing roadways with paved shoulders or bike lanes to accommodate bicyclists, and with sidewalks and safe crossings to accommodate pedestrians, where needed.

Rural highways are discussed in the updated plan. Access Oregon Highways are anticipated to meet standards that accommodate touring cyclists as they are upgraded with paved shoulders of adequate width. Under corridor planning, it is further noted that planning for adequate shoulders will generally accommodate bicycle travel and the occasional pedestrian traffic found in rural areas. Within communities along the corridor, sidewalks and safe pedestrian crossings will also need to be provided.

**C. OREGON HIGHWAY PLAN**

The Access Oregon Highways Program was adopted in March 1988 by the Oregon Transportation Commission. The Oregon Highway Plan was adopted in May 1991; the Plan included an Access Oregon Highways policy. The Oregon Highway Plan is a modal plan that ties the OTP to more detailed plans including corridor plans, regional plans, and local plans. One of the designated Access Oregon Highways is Highway 22 from Salem to the Santiam Junction. Accordingly, approximately two miles of that portion of Highway 22 which is the subject of this corridor strategy development effort is part of this Access Oregon Highway designation. The core program of the statewide strategy includes:

- Preservation work to 90 percent "fair or better" pavement condition.
- No reductions in maintenance and operations that sacrifice user safety.
- Increased bridge work to cover critical needs and seismic retrofits.

Acceleration of modernization and completion of the AOH program by 2003 were dependent on increased funding (which was not approved by the 1993 legislative assembly). For a highway of statewide level of importance and more than 2000 AADT such as Highway 22, the Oregon Highway Plan defines Minimum Tolerable Conditions (MTC's) as follows:
APPLICABLE STATEWIDE PLANS

<table>
<thead>
<tr>
<th>Level of service</th>
<th>Average speed</th>
<th>Alignment</th>
<th>Lane width</th>
<th>Shoulders</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>55 mph</td>
<td>no reduced speed</td>
<td>12 feet</td>
<td>6 feet (paved)</td>
</tr>
</tbody>
</table>

These are target levels below which ODOT considers a need exists. Both operating standards and design standards would be expected to be at a higher level.

D. INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT (ISTEA)

The 1991 Federal Intermodal Surface Transportation Efficiency Act establishes the requirement for all states to develop integrated statewide transportation plans. Oregon's plan to meet the ISTEA requirements will include the OTP and the corridor strategies.

The federal rules adopted to carry out ISTEA includes a list of items that must be considered in the development of state transportation plans. They are as follows:

- The transportation needs (strategies and other results) identified through the management systems required by 23 U.S.C. 303;
- Any Federal, State, or local energy use goals, objectives, programs, or requirements;
- Strategies for incorporating bicycle transportation facilities and pedestrian walkways in projects where appropriate throughout the State;
- International border crossings and access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation and scenic areas, monuments and historic sites, and military installations;
- The transportation needs of non-metropolitan areas (areas outside of MPO planning boundaries) through a process that includes consultation with local elected officials with jurisdiction over transportation;
- Any metropolitan area plan developed pursuant to 23 U.S.C. 134 and section 8 of the Federal Transit Act 49 U.S.C. app. 1607;
- Connectivity between metropolitan areas with the State and with metropolitan areas in other States;
- Recreational travel and tourism;
- Any State plan developed pursuant to the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq. (and in addition to plans pursuant to the Coastal Zone Management Act);
APPLICABLE STATEWIDE PLANS

Transportation system management and investment strategies designed to make the most efficient use of existing transportation facilities (including consideration of all transportation modes);

The overall social, economic, energy, and environmental effects of transportation decisions (including housing and community development effects and effects on the human, natural and manmade environments);
Methods to reduce traffic congestion and to prevent traffic congestion from developing in areas where it does not yet occur, including methods which reduce motor vehicle travel, particularly single-occupant motor vehicle travel;

Methods to expand and enhance appropriate transit services and to increase the use of such services (including commuter rail);

The effect of transportation decisions on land use and land development, including the need for consistency between transportation decisionmaking and the provisions of all applicable short-range and long-range land use and development plans (analyses should include projections of economic, demographic, environmental protection, growth management and land use activities consistent with development goals and transportation demand projections);

Strategies for identifying and implementing transportation enhancements where appropriate throughout the State;

The use of innovative mechanisms for financing projects, including value capture pricing, tolls and congestion pricing;

Preservation of rights-of-way for construction of future transportation projects, including identification of unused rights-of-way which may be needed for future transportation corridors, identification of those corridors for which action is most needed to prevent destruction or loss (including strategies for preventing loss of rights-of-way);

Long-range needs of the State transportation system for movement of persons and goods;

Methods to enhance the efficient movement of commercial motor vehicles;

The use of life-cycle costs in the design and engineering of bridges, tunnels or pavement;

The coordination of transportation plans and programs developed for metropolitan planning areas of the State under 23 U.S.C. 134 and section 8 of the Federal Transit Act with the statewide transportation plans and programs developed under this subpart, and the reconciliation of such plans and programs as necessary to ensure connectivity within transportation systems;
Investment strategies to improve adjoining State and local roads that support rural economic growth and tourism development, Federal agency renewable resources management, and multipurpose land management practices, including recreation development; and

The concerns of Indian tribal governments having jurisdiction over lands within the boundaries of the State.

E. OREGON ADMINISTRATIVE RULE ON TRANSPORTATION PLANNING (TPR)

The Transportation Planning Rule (TPR) is a rule adopted by the Land Conservation and Development Commission to describe how transportation planning is to be done to be consistent with the statewide planning goals. This rule establishes the range of alternatives to be looked at in developing a transportation plan including:

- Improvements to existing facilities or services;
- New facilities and services, including different modes or combinations of modes that could reasonably meet identified transportation needs;
- Transportation system management measures;
- Demand management measures; and
- A no-build system alternative required by the National Environment Policy Act of 1969 or other laws.

The TPR also establishes several plan evaluation standards that are most relevant to the development of a corridor strategy. These standards are as follows:

- The transportation system shall support urban and rural development by providing types and levels of transportation facilities and services appropriate to serve the land uses identified in the acknowledged comprehensive plan.
- The transportation system shall be consistent with state and federal standards for protection of air, land and water quality including the State Implementation Plan under the Federal Clean Air Act and the State Water Quality Management Plan;
- The transportation system shall minimize conflicts and facilitate connections between modes of transportation.
The transportation system shall avoid principal reliance on any one mode of transportation and shall reduce principal reliance on the automobile. In MPO areas, this shall be accomplished by selecting transportation alternatives which meet the requirements in 660-12-035(4).
A. OREGON TRANSPORTATION PLAN

PLAN OVERVIEW

The OTP was adopted by the Oregon Transportation Commission (OTC) on September 15, 1992. The OTP has three sections: a Goals and Policy Element, a Systems Element, and a section on Implementation. The OTP meets the statutory requirement that the Oregon Transportation Commission develop and maintain a plan for a multimodal transportation system for Oregon.

The OTP also carries out the Federal Intermodal Surface Transportation Efficiency Act (ISTEA) requirements for a state transportation plan. Finally, the OTP meets land use planning requirements for state agency coordination and the Goal 12 Transportation Planning Rule.

The OTP defines these four goals for Oregon Transportation in the 21st Century:

GOAL 1: CHARACTERISTICS OF THE SYSTEM

To enhance Oregon's quality of life and comparative economic advantage by the provision of a transportation system with the following characteristics:

- Balance
- Efficiency
- Accessibility
- Environmental Responsibility
- Connectivity Among Places
- Connectivity Among Modes and Carriers
- Safety
- Financial Stability

GOAL 2: LIVABILITY

To develop a multimodal transportation system that provides access to the entire state, supports acknowledged comprehensive land use plans, is sensitive to regional differences and supports livability in urban and rural areas.

GOAL 3: ECONOMIC DEVELOPMENT

To promote the expansion and diversity of Oregon's economy through the efficient and effective movement of goods, services and passengers in a safe, energy efficient and environmentally sound manner.
GOAL 4: IMPLEMENTATION

To implement the Transportation Plan by creating a stable but flexible financing system, by using good management practices, by supporting transportation research and technology, and by working cooperatively with federal, regional and local governments, Indian tribal governments, the private sector and citizens.

OTP POLICIES

There are several specific policy statements and specific action statements to implement the goals of the OTP. Policies with specific action relevant to corridor planning are:

Policy 1A - Balance

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

ACTION 1A.1
Design systems and facilities that accommodate multiple modes within corridors, where appropriate, and encourage their integrated use in order to provide users with cost-effective choices of travel and shipping within corridors.

Policy 1B - Efficiency

It is the policy of the State of Oregon to assure provisions of an efficient transportation system. The system is efficient when (1) it is fast and economic for the user; (2) users face prices that reflect the full costs of their transportation choices; and (3) transportation investment decisions maximize the net full benefits of the system. (Full benefits and costs include social and environmental impacts, as well as the benefits of mobility to users, and construction, operations and maintenance costs).

ACTION 1B.1
Employ economic, social, energy, and environmental impacts as part of the transportation planning and project design process. This should be done on a total system basis rather than optimizing the cost effectiveness of one mode at the expense of another.
Appendix F
Applicable Regional and Local Plans
A. POLK COUNTY COMPREHENSIVE PLAN

Forest Land Policy on page 24 states: "Polk County will discourage the construction of new roads within areas designated as forest lands, with the exception of secondary roads necessary for harvesting purposes."

Natural Resources Policy on page 27 indicates "Polk County will cooperate with governmental agencies to conserve and protect identified fish and wildlife habitat", which would include Basket Slough Refuge.

Transportation Policy on page 61 states: "Polk County will require that minimum setbacks of 75 feet from the public right-of-way of principal arterials (such as Highway No. 22 and No. 99) be observed when considering the development of commercial and industrial uses along such facilities." Furthermore it states: "Polk County will resist the abandonment of railroad lines which contribute to the economic viability of the County and will preserve and protect rail rights-of-way where needed for future public use."

Energy Conservation Policy on page 65 indicates "Polk County will encourage the development and/or maintenance of energy efficient modes of transportation."


B. MARION COUNTY COMPREHENSIVE PLAN

Rural Development Policy on page 34 states: "There is a legitimate need for development of commercial facilities at interchanges along I-5 and State Highway 22 (North Santiam Highway) in Marion County to serve the traveling public. Primary uses would be gasoline service stations, truck stops, restaurants, and motels."

Highway 22 is classified as a non-interstate principal arterial by Marion County.


C. SALEM AREA COMPREHENSIVE PLAN

The Transportation Goal on page 39 states: "To insure that the coordination and provision of transportation facilities and services that reflect desired development patterns are timed to coincide with community needs and to minimize the adverse impacts of traffic." To satisfy this goal, the following policies are included: "Transportation facilities and services shall be integrated with existing regional travel needs, available fiscal resources, functional plans such as police and fire, an the
planned regional and statewide transportation system. Transportation plans shall include alternatives to conventional passenger car transportation. The transportation systems shall be designed to provide adequate access for fire and police protection, public transit, pedestrian walkways and bikeways with the least negative effect on developed areas."

Also, "A system of bikeways connecting public areas and major activity and residential centers of the metropolitan area should be developed. Exclusive bicycle paths shall be encouraged where there is heavy vehicular and pedestrian traffic."

In addition, "transportation facilities shall be designed and constructed to minimize noise, energy consumption, neighborhood disruption, economic losses to the private or public economy and social, environmental and institutional disruptions, and to encourage the use of public transit, bikeways, and walkways. Traffic movement on arterial streets should be facilitated by limiting or controlling access wherever possible."

The Airport Compatibility Policy states: "Land uses around McNary Airport shall be required to provide an environment compatible with the airport and its operations and which will not be adversely affected by noise and safety problems. Appropriate development regulations shall be adopted as the City of Salem identifies suitable technical and procedural measures. Because of potential hazards to airborne aircraft, land uses beneath designated approach surfaces within 10,000 feet of the end of McNary field runways shall not create water impoundments accessible by waterfowl. Commercial uses and other uses that result in concentrations of people shall be prohibited within the clear zones of the runways at McNary Field to avoid danger to the public safety by potential aircraft accidents."


D. SALEM TRANSPORTATION PLAN (STP)

Transportation Policy on page 81 states: "Transportation facilities and services shall be integrated with existing regional travel needs, available fiscal resources, functional plans such as police and fire, and the planned regional and statewide transportation system."

To help achieve this policy, the following objectives are provided: "Alternative Modes and traffic management shall be pursued as the first choice for accommodating traffic demand and relieving congestion before widening projects are constructed. The needs of transit vehicles, pedestrians, and bicyclists shall be considered when designing the street system. Major gateway points into the city are the city's front door, and shall be designed in light of the impression they give to those passing through them. Specific plans will be developed to enhance these areas."
According to the STP, the existing Willamette River bridges will exceed capacity by the year 2005. The STP deferred specifically addressing the location of an additional Willamette River bridge or bridges until a future refinement study could be conducted.


E. SKATS 2005 AREAWIDE TRANSPORTATION PLAN

The Goals listed on page 29 include: "Implement the type and level of transportation services to different parts of the urban area that are compatible with adopted local and regional comprehensive land use plans."

In addition, "Provide for the safe and efficient movement of people and goods throughout the metropolitan area."

Furthermore, "Develop a transportation system that avoids or reduces an undesirable reliance upon any one form of transportation."

Finally, "To minimize the undesirable environmental, social, aesthetic, and economic impacts produced by transportation facilities."

The Plan identifies the need for additional Willamette River bridges to divert traffic from the downtown area of Salem. In addition, future projects include constructing an interchange with Cordon Road/Kuebler Blvd. and reconstructing the Highway 22/Interstate 5 interchange in conjunction with the widening of Interstate 5.

The Plan characterizes Highway 22 as a major arterial.


F. SKATS REGIONAL TRANSPORTATION SYSTEM PLAN: BICYCLE ELEMENT

The Vision Statement on page 5 describes: "An environment in which the bicycle is a viable transportation option which is increasingly used for meeting the mobility needs to the residents and businesses in the SKATS region." The Goals outlined in the plan are summarized as follows: Develop an identified, safe, continuous, direct, constructed, and coordinated system of regional bicycle facilities in the Salem/Keizer urban area that adequately responds to the transportation needs and desires of bicyclists.

Highway 22 currently has adequate bicycle lanes throughout the Salem/Keizer area. As a result, there are not any future bicycle improvement projects proposed.

G. PLANNING WORK PROGRAM (PWP)

The PWP describes the Highway 22 Corridor Study currently underway. The objective for FY 1995 is: "Develop and identify the planning and public involvement processes and responsibilities associated with the deferred issues related to the overall function and deficient operations of the urban portion of Highway 22 and the Willamette River Bridge Crossings."

Once the corridor study is completed, the regional travel demand model will need to be recalibrated to reflect new data collected through this and other studies.


H. TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

The TIP identifies the transportation projects expected to utilize federal funds during the next four years. Those projects which impact the Highway 22 corridor include:

* OR 22 - Airport Rd. to Joseph St. - 5 miles of overlay
* OR 22 - Rickreall Rd. to Rosewood Dr. - 4.7 miles of overlay (completed 1995)
* Downtown Transfer Facility

Appendix G
Level of Service
Level of service (LOS) is a qualitative estimate of the performance efficiency of transportation facilities. These standards can be based on many measures, including traffic congestion. Traffic congestion LOS standards have been developed and revised over the years by the Transportation Research Board (TRB). One of the TRB systems uses volume on a road and the capacity of that road to define a ratio, called the volume/capacity (V/C) ratio, which can be classified by degree of congestion. The classifications range from A (the best) to F (the worst).

**LOS A** - Low volume, high speeds, no delay. High freedom to select desired speed and maneuver within traffic stream. Outside the Salem urban area, LOS A is comparable to a V/C of ≤ 0.49; Inside the Salem urban area, V/C ≤ 0.53.

**LOS B** - Stable flow with reasonable freedom to select speed. V/C exceeds LOS A range, but outside the Salem urban area, V/C is ≤ 0.60; inside urban area, V/C is ≤ 0.65.

**LOS C** - Stable flow, but speed and maneuverability is affected by the presence of others and requires care on the part of the driver. V/C exceeds LOS B range, but outside the Salem urban area, V/C is ≤ 0.74; inside urban area, V/C is ≤ 0.78.

**LOS D** - Approaches unstable flow. Speed and maneuverability are severely restricted. Small additions to traffic flow will generally cause operational problems at this LOS. V/C exceeds the LOS C range, but outside the Salem urban area, V/C is ≤ 0.88; inside urban area, V/C is ≤ 0.90.

**LOS E** - Represents operating conditions at or near the capacity of the highway. Low speeds. Freedom to maneuver is extremely difficult. Any incident can cause extensive queuing. V/C exceeds the LOS D range, but outside the Salem urban area, V/C is ≤ 1.0; inside urban area, V/C is ≤ 1.0.

**LOS F** - Represents forced flow operation at very low speeds. Operations are characterized by stop-and-go traffic. Vehicles may progress at reasonable speeds for several hundred feet or more then be required to stop. V/C is > 1.0.

Similar LOS classifications have been developed for intersections, and use volume, capacity and signal phasing to determine average delay at the intersection, and thus a level of service. Level of service formulas for pedestrian and transit service have also been developed, however there is debate as to how effective they are in assessing situations in smaller cities and suburban settings.

LOS is the basis for determining whether there is sufficient capacity for development and for analyzing the operating efficiency of transportation facilities. The TPR requires that land use and transportation planning be coordinated so that transportation capacity exists at the time development occurs.
Appendix H
ODOT Highway
Access Management
Background and Purpose

The people of Oregon have an enormous investment in their state highway system. At one time highways could link the state's activity centers to each other and serve as "Main Streets" for communities, facilitating roadside development. This is no longer the case. Highways are costing more to construct, and poor access management in the past has made it necessary to build new bypasses when old bypasses have become congested because of new development along the route. This presents a sizable challenge to protecting the system and maintaining reasonable levels of service for users. The Oregon Transportation Commission is looking for more cost-effective ways to respond to this challenge.

Several factors, including the number, spacing, type and location of accesses, intersections, and traffic signals have a significant effect on the capacity, speed, safety and general operational efficiency of the highway. These factors need to be effectively managed in order to operate the highway system safely, at reasonable levels of service and in a cost-effective manner. Collectively these factors comprise access management.

This policy also provides a framework for making access decisions which will be consistent with the function and operating levels of service identified in the Level of Importance Policy. It will be used by the OSHD to carry out its responsibilities for managing access under statutes and administrative rules. It will also be used by the division to guide the design of highways and coordination with local comprehensive planning.

Policy

The Oregon Transportation Commission recognizes the importance of an effective access policy in managing and protecting the system of state highways. The access management categories listed in Table 1 were developed to assist the OSHD in achieving effective access management. They are to be applied to all sections of the state highway system in accordance with procedures that appear below.

Standards were developed for each category to ensure that all state highways will continue to function safely and efficiently consistent with the Level of Importance Policy. These standards, covered in Table 2, will be applied to OSHD's access management, operation, design and local planning coordination actions in accordance with the following:

1. The existing connections, median openings and traffic signal spacings of a highway segment are not required to meet the spacing standards of the assigned category at the time of assignment. The assigned category provides a mechanism for improving a highway to its eventual functional purpose. The use of existing permitted connections, not conforming to the standards, will continue to be allowed, unless a traffic problem develops. However, such features shall be modified or removed as changes to the property use or roadway design allow.

2. The access management category standards represent minimums for each access. More stringent levels of access management will
be retained where they already exist. For engineering design reasons, the minimum distances for spacings may have to be greater than those specified in Table 2. Examples include the need for auxiliary lanes and additional storage. Traffic signals may be spaced at intervals that vary from the specific standards to optimize capacity and safety.

3. The OSHD, in cooperation with the appropriate local governmental entity, may enact different standards to meet the requirements of the Level of Importance policy and this policy through the adoption of individual corridor access management plans. Local government agencies affected by these access management plans will be notified and their input requested.

4. Although this policy focuses on new and emerging areas, it is meant also to encourage "retrofitting" problem areas with better access management plans in cooperation with local governments.

5. A permit may be issued for a single connection to a property that cannot be accessed consistent with the highway access spacing standards and either has no reasonable access or cannot obtain reasonable alternative access to the public road system. In such cases the design of the access should be done so as to be consistent with the level of service standards in the Level of Importance Policy. The permit should also carry a condition that the access be closed at such time that reasonable access becomes available to a local public street.

6. Single ownership properties with frontage exceeding the minimum spacing standards shall not be permitted the total number of connections, median openings or traffic signals possible based on the spacing standards. The total number of connections permitted shall be the minimum necessary to provide reasonable access based on operational, safety and functional integrity considerations for the highway.

7. Connections permitted in accordance with this policy shall be designed and managed to be consistent with the function and purpose of the state highways as presented in this and other policies, and to operate safely, efficiently and cost effectively.

8. In conjunction with major improvements to interstate, statewide or regional highways in rural areas, access will be managed to be consistent with the requirements of Statewide Planning Goals 11 and 14 and administrative rules adopted by the Land Conservation and Development Commission to carry out those goals. Major improvements include major realignments, the addition of travel lanes and new interchanges and intersections.

9. Spacing at less than distances shown will only be considered where safety and operational effectiveness can be retained or improved based on clear traffic analysis evidence. Such situations must be assessed for long-term future performance and cannot create a precedent which will lessen the effect of the general spacing standard. Generally, consideration will only be given where there is median control.

Assignment of Access Management Categories

Access management categories will be assigned to all sections of the state highway system to ensure that the Level of Importance Policy and this policy are effectively carried out. The assignments will be based on this policy (including descriptions in Table 1 and Table 2), be consistent with the classification of the highway, and be adequate to meet the operating level of service standard which applies to the highway section. These determinations shall be based on projected cumulative effects of highway access considering projected future traffic volumes and the amounts of development authorized by comprehensive plans.
of affected local governments. The following factors will also be considered when making assignments:

- Existing and proposed roadside development patterns;
- Regional and local transportation system plans and comprehensive plans;
- The potential for increasing the use of local roads to provide property access and local circulation;
- Topography, drainage or other land characteristics;
- Existing access agreements between OSHD and local jurisdictions;
- Other operational aspects of access.

Access management categories will ordinarily be applied in conjunction with the development of highway corridor plans. They may also be applied for shorter segments of highway corridors in coordination with affected local governments. The division will follow the procedures in the department's State Agency Coordination Program for coordinating facility planning to assure that access management categories are assigned in a manner compatible with comprehensive plans of affected local governments.

Prior to the assignment of access management categories, the department will apply the policy to the review of road approach permits, project design, and local land use planning actions. The respective coordination procedures contained in the department's State Agency Coordination Program will be followed.
TABLE 1
HIGHWAY ACCESS MANAGEMENT CATEGORIES

Category 1:
These highway segments provide for efficient and safe high speed and high volume traffic movements, on interstate, interregional, intercity, and some intracity routes in the largest urbanized areas. The segments do not provide direct land access. Access control and other methods will be used on nearby cross streets in the area of interchanges to protect the operation of those interchanges. This category will apply to all interstate highways and other highways that function like freeways.

Category 2:
These highway segments provide for efficient and safe high speed and high volume traffic movements, on interstate, interregional, intercity and longer distance intracity routes. They should not provide direct land access. This category is distinguished by highly controlled connections, and medians. Traffic signals should be avoided and where they must be installed, their effect on mainline traffic flow should be minimized. Grade separations should be considered for high volume cross streets or other cases where signals are not appropriate. Some category 2 facilities may be developed into category 1 facilities over time. This category includes many of the statewide facilities.

Category 3:
These highway segments provide for efficient and safe medium to high speed and medium to high volume traffic movements, on interregional, intercity and longer distance intracity routes. The segments are appropriate for areas which have some dependence on the highway to serve land access and where financial and social costs of attaining full access control would substantially exceed benefits. This category includes some of the statewide facilities.

Category 4:
These highway segments provide for efficient and safe medium to high speed and medium to high volume traffic movements, on higher function interregional and intercity highway segments. They also may carry significant volumes of longer distance intracity trips. They are appropriate for routes passing through areas which have moderate dependence on the highway to serve land access and where the financial and social costs of attaining full access control would substantially exceed benefits. This category includes a small part of the statewide facilities and most regional facilities.

Category 5:
These highway segments provide for efficient and safe medium speed and medium to high-volume traffic movements, on intercity, intracity and intercommunity routes. There is a reasonable balance between direct access and mobility needs within this category.

Category 6:
These highway segments provide for efficient and safe slower to medium speed and low to high-volume traffic movements, on intracity and intercommunity routes. This category will be assigned only where there is little value in providing for high speed travel. Providing for reasonable and safe access to abutting property is a major purpose of this access category.
ACCESS MANAGEMENT CLASSIFICATION SYSTEM

<table>
<thead>
<tr>
<th>Category</th>
<th>Access Treatment</th>
<th>LOI (1)</th>
<th>Type (2)</th>
<th>Spacing (3)</th>
<th>Type Spacing (4)</th>
<th>Median Control</th>
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<tr>
<td></td>
<td></td>
<td>U</td>
<td>Public Road</td>
<td>None</td>
<td>NA</td>
<td>Full</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R</td>
<td>Private Drive</td>
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<td>NA</td>
<td>Full</td>
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<tr>
<td>1</td>
<td>Full Control (Freeway)</td>
<td></td>
<td>Interchange</td>
<td>2-3 Mi.</td>
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<tr>
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<td></td>
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</tr>
<tr>
<td>2</td>
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<td>1-5 Mi.</td>
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<tr>
<td>3</td>
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<td></td>
<td>At grade/Intch</td>
<td>1-3 Mi.</td>
<td>Rt. Turns</td>
<td>800'</td>
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<tr>
<td></td>
<td>Statewide</td>
<td></td>
<td>At grade/Intch</td>
<td>1/2-1 Mi.</td>
<td>Rt. Turns</td>
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</tr>
<tr>
<td>4</td>
<td>Limited Control (Regional)</td>
<td></td>
<td>At grade/Intch</td>
<td>1/4 Mi.</td>
<td>Lt./Rt. Turns</td>
<td>500'</td>
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<td>5</td>
<td>Partial Control (District)</td>
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<td>At grade/Intch</td>
<td>1/2 Mi.</td>
<td>Lt./Rt. Turns</td>
<td>500'</td>
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<tr>
<td>6</td>
<td>Partial Control (District)</td>
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<td>At grade/Intch</td>
<td>1/4 Mi.</td>
<td>Lt./Rt. Turns</td>
<td>500'</td>
</tr>
</tbody>
</table>

Notes:

1) The Level of Importance (LOI) to which the Access Category will generally correspond. In cases where the access category is higher than the Level of Importance calls for, existing levels of access control will not be reduced.

2) The basic intersection design options are as listed. Special treatments may be considered in other than category 1. These include partial interchanges, jughandles, etc. The decision on design should be based on function of the highway, traffic engineering, cost-effectiveness and need to protect the highway. Interchanges must conform to the interchange policy.

3) Generally, no signals will be allowed at private access points on statewide and regional highways. If warrants are met, alternatives to signals should be investigated, including median closing. Spacing between private access points is to be determined by acceleration needs to achieve 70 percent of facility operating speed. Allowed moves and spacing requirements may be more restrictive than those shown to optimize capacity and safety.

4) Generally, signals should be spaced to minimize delay and disruptions to through traffic. Signals may be spaced at intervals closer than those shown to optimize capacity and safety.

5) In some instances, signals may need to be installed. Prior to deciding on a signal, other alternatives should be examined. The design should minimize the effect of the signal on through traffic by establishing spacing to optimize progression. Long-range plans for the facility should be directed at ways to eliminate the need for the signal in the future.

6) Partial median control will allow some well-defined and channelized breaks in the physical median barrier. These can be allowed between intersections if no deterioration of highway operation will result.

7) Use of physical median barrier can be interspersed with segments of continuous left-turn lane or, if demand is light, no median at all.

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