Final Draft



Interchange Area Management Plan

Interstate 5 (Pacific Highway) @ Oregon 214/219

Oregon Department of Transportation

November 2005

Contents

Se	ction	Page
1	Background	1-1
	Introduction	1-1
	Purpose and Reasons for Preparing the IAMP	1-2
	Description of Planning Area	1-2
	Other Work Products	
	Interchange Classification and Function	1-4
2	Problem Statement, Project Purpose and Need, and Project Goals	
	Problem Statement	
	Purpose and Need of the Project	
	Project Goals and Objectives	2-3
3	Existing Plans and Policies Review and Findings of Compliance	
	Overview	
	Federal and State Plans, Policies, and Regulations	
	Local Plans, Policies, and Ordinances	3-17
4	Land Use and Environmental Analysis	
	Land Use	
	Environmental	4-4
5	Existing Conditions and Forecast Deficiencies Analysis	
	Existing Geometric Conditions	
	Safety Analysis	
	Traffic Operations Analysis	
	Summary of Existing and Future Deficiencies	5-6
6	Alternatives Analysis	
	Introduction	
	Process Overview	
	EA Management Structure and Decision Process	
	Definition of Transportation Problem	
	Development of Evaluation Framework	
	Formulation of Alternatives	
	Threshold Screening of Alternatives	
	Evaluation of Feasible Alternatives	
	Selection of Alternatives for Detailed Evaluation	
	NEPA Evaluation	6-26

7	Plan Recommendations7-1
	Proposed Project7-1
	Traffic Operations Analysis7-2
	Access Management7-3
	Land Use Management and Findings7-4
8	Public Involvement Summary 8-1
9	Plan Implementation Responsibilities9-1
	Implementing Actions9-1
	Local Adoption Process9-2
	State Adoption Process
	Cooperative Plan Implementation
	Investment Requirements9-3
10	References
Α	
A	ppendixes
A	Land Use Planning Maps
В	Existing and Forecast Traffic Volumes, Proposed Lane Configurations, and Queuing
_	Lengths of Alternatives (2025)
C	Standards Deviation Approval
D	Woodburn Development Ordinance 2.116
E F	Intergovernmental Agreements Public and Agency Coordination
г G	Technical Ratings Methods and Measures
Ta	bles
3-1	
3-2	
4-1	
5-1	
5-2	
5-3	, , , , , , , , , , , , , , , , , , ,
-	SPIS Segments 5-4
5-4	
6-2 6-2	
6-3	
6-4	0 1
6-5	
6-6	•
6-7	* *
	U U

6-8 6-9 6-10 7-1	Local Access and Circulation Options	6-21 6-23
	widen equal) Design Hour V/C Ratios	.7-2
Figure	s	
1	Planning Area and Functional Classifications	1-5
2	Proposed Interchange Improvements (west)	7-5
3	Proposed Interchange Improvements (east)	7-7
4	Interchange Management Area Overlay District	7-9

Background

Introduction

The Oregon Department of Transportation, the City of Woodburn, Marion County and the Federal Highway Administration have been monitoring land use development and transportation issues in the vicinity of Interstate 5 and Oregon 214/219 in Woodburn for more than a decade. In the early 1990s, the City, County, and ODOT began discussing problems of the existing interchange. Growing car and truck traffic has resulted in congestion and safety issues on Oregon 214 and on the I-5 interchange. The population in the area has more than tripled since design of the interchange in the late 1960s. **Annual community** events in the vicinity draw thousands of people from other parts of **the state and** through the interchange. Today, Woodburn is a more urban community, with large industrial, commercial, and residential developments, and regional travel services near the interchange.

Work begun by ODOT in the early 1990s to identify possible solutions was interrupted due to limited statewide money for transportation projects. The City of Woodburn in 1999 finished a study of Oregon 214 that looked at options to widen Oregon 214 but which did not look at interchange improvements. Shortly thereafter ODOT, with local agency and public involvement, led development of a Refinement Plan for the interchange, which identified improvement options and the need for an environmental assessment (EA). The alternative analysis conducted for the Refinement Plan, and subsequently updated and validated as part of an EA developed in 2004 and 2005, confirms that replacing the existing diamond interchange with a partial cloverleaf interchange would improve safety and provide operational performance that meets Oregon Highway Plan (OHP) and Highway Design Manual (HDM) standards through 2025 and accommodates the 2005 Woodburn Comprehensive Plan growth assumptions. A new interchange in north Marion County continues to be of interest in the community. However, the problems at the Woodburn interchange and on Oregon 214 need to be fixed even if a new I-5 interchange were to be constructed in the future. A new interchange would not solve problems at the existing Woodburn interchange.

Efforts over the last 3 years by the City and the Oregon Department of Transportation (ODOT), with extensive stakeholder and public involvement, have now advanced project development to the point of pending approval of an EA of alternatives, a revised city Transportation System Plan and Comprehensive Plan that implement an updated land use plan and development code, and this Interchange Area Management Plan (IAMP), which draws from the previous work.

This IAMP documents interchange management measures agreed to by the City and ODOT and summarizes information on the Woodburn Interchange Project's background, purpose and need, relevant plans and policies, land use and environmental issues, transportation conditions and deficiencies, alternatives development and analysis, plan recommendations,

public involvement, and implementation strategies. The action elements that constitute the substance of the IAMP are provided in Section 9, Plan Implementation Responsibilities. Appendixes include land use planning maps, project issues and traffic operations diagrams, standards deviation authorization, development code revisions, intergovernmental agreement, public and agency coordination, and technical ratings methods and measures of alternatives. The draft Woodburn EA (July 2005) is available at http://www.oregon.gov/ODOT/HWY/REGION2/Woodburn_Interchange.shtml/shtml or from ODOT Region 2 Planning.

Purpose and Reasons for Preparing the IAMP

ODOT is required by Oregon Administrative Rule (OAR) 734-051, which addresses highway approaches, access control, spacing standards, and medians, to prepare an IAMP for the I-5/Woodburn interchange. The IAMP will help ensure that when the interchange is reconstructed it will function safely and efficiently through the 2025 planning horizon.

ODOT and local governmental agencies are also required by Oregon's Transportation Planning Rule (OAR 660-012) to collaborate in addressing development and transportation issues in the vicinity of interchanges. The development of IAMPs (per OAR 734-051-0155) is one way to address these issues. This IAMP for the Woodburn Interchange Project has been developed in cooperation with the City of Woodburn. When reconstructed as described in the Woodburn Interchange Project EA, the interchange is forecast to meet ODOT mobility standards and improve highway safety through the 2025 planning horizon. The chief purpose of the IAMP is to:

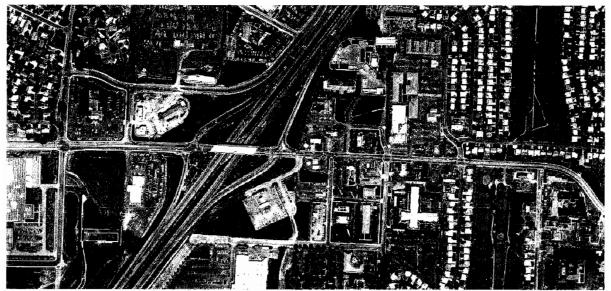
- Protect the function of the reconstructed interchange to serve statewide and regional travel through the 2025 planning horizon
- Minimize the probability of needing additional major improvements to the reconstructed interchange through the 2025 planning horizon

The IAMP will achieve this purpose by:

- Helping to ensure that the land uses in the vicinity of the interchange around I-5 and Oregon highways 214 and 219 develop as forecast in the 2005 Woodburn Comprehensive Plan and Transportation System Plan updates
- Providing for safe and efficient operations along Oregon 214 and 219 and on connecting roadways by establishing access management and local connectivity objectives.

Description of Planning Area

The Woodburn Interchange is located on I-5 at milepost (MP) 271.85. The crossing roadway is Oregon Highway 214 east of the interchange and Oregon 219 west of the interchange. The proposed interchange reconstruction project limits along I-5 include proposed ramp connections ending at MP 272.25 north of the interchange crossroad and at MP 271.43 south of the crossroad. The eastern limit of the proposed reconstruction project on Oregon 214 is at MP 37.51. The western limit of the proposed reconstruction project on Oregon 219 is at MP 36.40.



I-5 generally runs north-south through the Willamette Valley and intersects with Oregon 214/219 at Woodburn.

This interchange is the only I-5 connection within the City of Woodburn. This interchange also provides access to northern Marion County, one of the state's most agriculturally productive regions. The next closest interchanges to the Woodburn interchange are the Brooks interchange at MP 263 and the Aurora/Donald interchange at MP 278.

In establishing an Interchange Management Area (IMA) for this interchange, existing land use patterns, proposed land use patterns, and the existing and proposed roadway network were all taken into account. Most of the land surrounding the Woodburn interchange was fully committed to urban development with the adoption of the 1981 Woodburn Comprehensive Plan. Recently adopted changes to Woodburn's land use plan have added industrial lands south and west of the interchange within an expanded urban growth boundary (UGB). Based on the existing and proposed roadway network, all of this new land will produce or attract vehicle trips that directly impact the interchange's operations. Additionally, much of the land around the interchange that has been in the UGB since 1971 remains undeveloped.

The IMA was defined to encompass these areas of most direct transportation impact. Existing residential areas, because they are very stable land uses from a trip generation standpoint, were not specifically targeted for inclusion in the IMA and long-term monitoring like the commercial or industrial lands. They are only included incidentally for the purpose of IMA boundary continuity. The IMA area is shown in Figure 1.

Other Work Products

The City and the State of Oregon have been coordinating efforts to update Woodburn's Comprehensive Plan and Transportation System Plan (TSP), along with an EA, to determine how best to address identified problems at the I-5/Woodburn interchange. The Woodburn TSP is based on the proposed 20-year Woodburn population and employment projections (from a year 2000 baseline) and proposed land uses found in the adopted 2005 Woodburn Comprehensive Plan. ODOT's Woodburn Interchange EA was developed for the 2025

planning horizon and 5-year population and employment extrapolations from the adopted Woodburn Comprehensive Plan and TSP. These documents provide the technical basis for this IAMP. The Comprehensive Plan and TSP were adopted by the Woodburn City Council in September 2005.

A brief timeline of previous studies of how to improve the interchange includes:

1983 – ODOT prepared an analysis showing that Oregon 214 needs to expand to five lanes by 1988 to accommodate traffic.

1984 – ODOT prepared two interchange layouts for the 1985 Statewide Transportation Improvement Program (STIP). The project failed to receive funding.

1987 – ODOT updated an interchange layout with a recommendation to build it before 2015.

1989 – ODOT prepared alternatives for the Pacific Highway (I-5) to Park Street EA project on Oregon 214. The project was not funded for construction.

1991 – ODOT responded to a federal mandate for a balanced transportation program (revenues to equal estimated construction costs) by canceling the Pacific Highway to Park Street EA project.

1993 – City completed an interchange study to evaluate four interchange concepts.

1996 – City Transportation System Plan identified three interchange alternatives and recommended a refinement plan.

1998 – City completed a study of widening alternatives for Oregon 214 east of I-5.

1999 – ODOT started interchange refinement plan that concluded in 2000 with two interchange alternatives for study in the environmental phase.

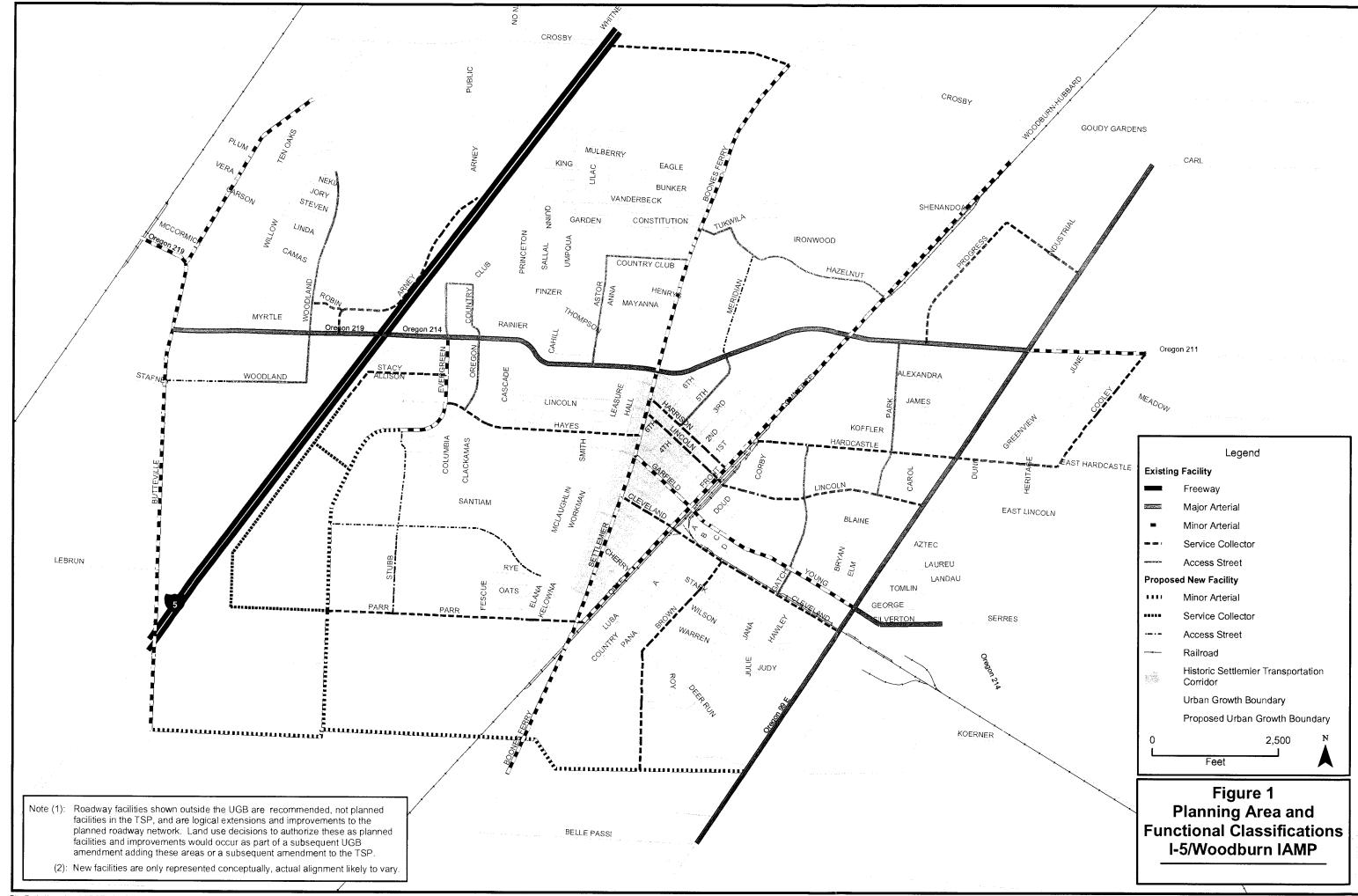
2003 – ODOT started an environmental assessment of the proposed interchange improvement alternatives, and completed a public review draft in 2005.

2005 – City completed update of its TSP, which includes I-5/Oregon 214/219 interchange protection measures and a proposed development ordinance for an Interchange Management Area Overlay District.

2005 – ODOT prepared Interchange Area Management Plan for approval by Oregon Transportation Commission.

Interchange Classification and Function

I-5 is an interstate freeway, part of the National Highway System, part of the Strategic National Defense Highway Network (STRAHNET), an International Trade Corridor, and is designated as a highway of statewide importance and Statewide Freight Route in the OHP. It is the highest order highway in ODOT's functional classification. Oregon 214/219 (the Hillsboro/Silverton Highway) is a district-level highway on ODOT's system and a major arterial within the City of Woodburn's TSP. Functional classifications of roadways (existing and proposed) are shown in Figure 1. The posted speed along I-5 is 65 miles per hour (mph) and is 35 mph along Oregon 214/219.



The surrounding communities of Silverton, Mt. Angel, Gervais, Hubbard, and Molalla access I-5 primarily from the east by using Oregon 214 in Woodburn. The communities of Newberg and St. Paul access I-5 from the west by using Oregon 219.

The function of the Woodburn interchange is to serve statewide travel through the Woodburn area, and regional travel; that is, travel with one trip end in Woodburn and one somewhere outside of Woodburn. An operationally functional Woodburn interchange is also vital to Woodburn's economic development and future growth. To that end, the City has identified industrial development in the IMA within defined economic sectors as a key element in the City's future growth and development. Serving this industrial development is another primary function of this interchange. Provision of services for I-5 travelers is a secondary function of this interchange. While a certain number of intra-local trips will also use this interchange, it is not a primary function of this interchange to serve these trips. To this end, development of a well-connected local transportation system is essential for reducing local travel demand on state highways in the interchange area.

The function of Oregon 214/219 is to serve regional travel and provide access between the local transportation system and the higher order state highway facilities, including I-5.

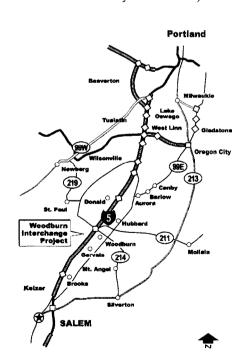
Problem Statement, Project Purpose and Need, and Project Goals

Problem Statement

Interstate 5 is a critical link for moving commerce and people along the West Coast from Mexico to Canada. I-5 is the third most heavily traveled truck corridor in the United States One-fourth of the nation's exports and imports pass through the corridor annually. I-5 is a federal Trade Corridor in recognition of its critical role in the nation's commerce.

In Oregon, I-5 spans 308 miles from California to Washington. I-5 passes through nine Oregon counties with a population of 2.25 million people. During the next 20 years the population will grow to 3 million. Traffic volumes along the length of the corridor vary from a high of 150,000 Average Daily Traffic (ADT) in the Portland metropolitan area to a low of 12,000 ADT on rural segments in southwest Oregon.

Woodburn is located in ODOT's Region 2, a nine-county area in northwest Oregon. Woodburn is between the Portland and Salem-Keizer metro areas, in the heart of Oregon's Willamette Valley. Lands adjacent to I-5 are a mixture of urban, rural, and agricultural uses.



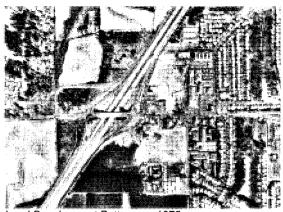
Woodburn Interchange Project Vicinity

The population of Region 2 is about 670,000. Forecasts show that population will grow to 900,000 during the next 20 years. Current traffic volumes on I-5 vary from over 80,000 ADT at the Clackamas/Marion County border to about 60,000 ADT just south of Oregon 22 in Salem.

The surrounding communities of Silverton, Mt. Angel, and Molalla access I-5 by using Oregon 214 in Woodburn. The surrounding communities of St. Paul and Newberg access I-5 by using Oregon 219. In 1975, when upgrades to the interchange were completed, roadside development near the interchange was minimal (see photo). Woodburn was more oriented around Oregon 99E.

Since the 1970s, Woodburn has grown and developed west toward I-5. The population of Woodburn has grown more than 60 percent since the early 1970s. The interchange vicinity is now a mixture of residential, industrial, regional retail/commercial, and traveler services/commercial land uses (see photo).

The population and land uses create more traffic than the interchange can serve. It is likely that Woodburn will keep growing. Congestion in the interchange area is a common experience today and will also keep growing.





Land Development Pattern, ca 2003

Land Development Pattern, ca 1975

The existing interchange is a standard diamond design. The interchange was last updated when I-5 was widened from four to six lanes from Woodburn to Salem. When the project was completed in 1975, traffic volumes were 28,600 ADT on I-5 and 2,900 ADT west of the interchange on Oregon 219 and 5,600 ADT east of the interchange on Oregon 214.

The interchange design is typical of low-volume, rural interchanges designed and built in the mid-1960s to early 1970s. There are no other interchanges in the Woodburn UGB. There are grade separated crossings at Butteville Road (MP 270.46) and Crosby Road (MP 273.21) that provide some circulation east and west of I-5.

Without improvements to the interchange, traffic growth and safety concerns on Oregon 214 and I-5 (see Section 5) will continue to grow.

The Woodburn I-5 interchange is a gateway to Woodburn and much of northern Marion County. Development in the interchange area has occurred on one property at a time, with piecemeal modifications to existing highways and the street system over the last 30 years. The streetscape of the interchange lacks coordination of signage. The visual impact of utility poles, landscaping, and drainage features in the interchange area do not present the image of Woodburn that area residents would like to present. Little about the interchange is inviting as a gateway to Woodburn visitors.

The interchange links regional communities of north Marion County with Woodburn commercial, retail, and industrial centers. Resolving traffic congestion and safety issues on Oregon 214 at the interchange is critical in sustaining business, agriculture, and commercial activity in the area, thereby sustaining jobs for the community.

Congestion in the interchange area hampers getting to and from the interstate and has a significant detrimental affect on residents and businesses throughout the region. Travel to local and regional attractions is critical to local economies. Examples include the St. Paul Rodeo, Silver Creek Falls, Oregon Garden, and Mt. Angel Oktoberfest.

Without improvements to traffic flow, travelers from surrounding communities may avoid Woodburn, and businesses may avoid locating or doing business in Woodburn and

surrounding areas. Interchange area business patrons are often confused by the lack of clearly defined access and by the current local street system, which also may reduce the number of return trips.

Purpose and Need of the Project

The purpose of the Woodburn Interchange Project is to improve the traffic flow and safety conditions of the existing I-5/Woodburn interchange.

The existing I-5/Woodburn interchange does not meet current design and operational standards, which causes traffic to move at slower speeds and increases congestion. Future growth in the interchange area will increase congestion problems, increase the difficulty to access adjacent businesses, and increase the likelihood of safety problems for drivers, bicyclists, and pedestrians.

Project Goals and Objectives

The IAMP shares the project goals included in the EA. The goals for the interchange reconstruction project and for this IAMP go beyond the state transportation issues identified in the Purpose and Need Statement of the EA. The goals are intended to balance state and local environmental and transportation values. Although the natural environment was originally considered as an evaluation criterion, it was not considered a goal because environmental impacts were not found to be a differentiator among the project's alternatives.

The following goals were approved by the EA Project Management Team after a recommendation by the EA Stakeholder Working Group (SWG). The SWG recommendation was formulated based, in part, on the review and comment by the general public at an open house meeting:

- Safety. Provide a facility that would safely accommodate multimodal travel demands 20 years into the future.
- · Access and Traffic Flow
 - Provide safe and convenient access to interchange area businesses (that is, consider signage and possible street connections to Oregon 214).
 - Reduce congestion and improve traffic flow in the interchange area.
 - Provide median treatment that would accommodate emergency vehicles.
- Social/Economics
 - Minimize displacements to existing residences and businesses.
 - Minimize adverse impacts on existing residences and businesses.
 - Minimize land conversion from private ownership to public transportation use.
- Aesthetics. Create a gateway entrance to Woodburn (that is, consider a variety of treatments such as underground utilities, landscaping, pavement widths).

Implementation

- Maximize efficient use of available funding for implementation of interchange and Oregon 214 improvements.
- Coordinate with affected property owners and provide fair compensation.
- Coordinate construction activities to maintain safe access to regional events.
- Minimize disruption and congestion caused by construction activities.
- Maintain travel on I-5 at all times.

The additional goals that are specific to this plan are:

- To help ensure that the reconstructed Woodburn Interchange can serve its intended function through the 20-year planning horizon.
- To help ensure that the interchange can safely meet Highway Design Manual mobility standards through the planning horizon.
- To help ensure that the Woodburn Interchange reconstruction meets the requirements of ODOT's access management administrative rule (OAR 731-0015).
- To support the development of the land use plan adopted in the City of Woodburn's 2005 Comprehensive Plan update for the interchange management overlay district established by the City's adoption of City Ordinance 2.116.
- To establish that ODOT and the City of Woodburn will work together to monitor and administer development within the interchange management overlay district described in City Ordinance 2.116 in order to help ensure that this area develops as planned.
- To provide an interchange funding strategy that enables ODOT to acknowledge the Woodburn Interchange reconstruction as a planned improvement in the Woodburn Comprehensive Plan and Transportation System Plan.

Existing Plans and Policies Review and Findings of Compliance

Overview

IAMP development involves close cooperation between ODOT and local government agencies. Management of the I-5/Oregon 214/219 interchange at Woodburn involves coordination between ODOT and the City of Woodburn. State and federal policies and rules, as well as local policies and codes and a history of public involvement (see Section 8), play a key part in the development, adoption, and implementation of IAMPs. State and federal policies guide the development and selection of alternative elements and interchange area management strategies; the IAMP must be consistent with federal and state policies. Policies and code language from local documents form a policy framework and serve as provisions to manage transportation and land use in the interchange influence area with the goals of protecting interchange function, providing for safe and efficient operations, and minimizing the need and expense for additional major improvements to the interchange through the 2025 planning horizon.

The review of state and federal plans presents discussion regarding how the Woodburn IAMP is consistent with relevant state and federal planning documents. The review of local planning documents (begins on page 3-16) and development codes (begins on page 3-20) presents local policies and code provisions that address interchange capacity protections or long-term interchange area management tools and describes how these policies and code provisions effectively support management of the I-5/Oregon 214/219 interchange.

The following subsections summarize the analysis of how the build alternatives proposed in the Woodburn Interchange Project EA comply with federal, state, and local plans, policies, goals, and regulations.

Federal and State Plans, Policies, and Regulations

Through the alternative development and screening process of the EA, the proposed project has been found to be in compliance with relevant federal and state planning goals and plans, and their implementing administrative rules. These include the National Environmental Policy Act (NEPA), Federal Interchange Policy, Oregon Transportation Commission (OTC) Policy for New Interchanges, the Oregon Transportation Plan (OTP), the OHP, Statewide Planning Goals, State Agency Coordination Program, Western Transportation Trade Network Report, Freight Moves the Oregon Economy, Willamette Valley Transportation Strategy, and the Woodburn/I-5 Refinement Plan. Also receiving particular attention was the project's need to comply with provisions of OAR 660-012 (Transportation Planning Rule) and OAR 734-051 relating to interchange area and access management.

National Environmental Policy Act (1969)

NEPA, signed into law in 1969, requires that, to the extent possible, the policies, regulations, and laws of the federal government be interpreted and administered in accordance with the protection goals of the law. For highway projects using federal funds, NEPA requires the examination and consideration of potential impacts on sensitive social and environmental resources when considering the approval of a proposed transportation facility.

Finding: The IAMP was developed in coordination with the NEPA process. Impacts to the natural and human environments were fully evaluated as part of the project's draft EA, in compliance with the requirements of NEPA. With the exception of environmental regulations (for example, wetlands, floodplains), there are no federal land use or management policies or regulations applicable to the Woodburn Interchange Project. Compliance with federal environmental regulations associated with the project is discussed in the project's draft EA.

Federal Interchange Policy (1998)

The purpose of the Federal Interchange Policy is to provide guidance to state transportation officials in justifying and documenting requests to add access or revise existing access to the interstate system. This policy defines eight specific requirements for adding a new access to the interstate system:

- Existing interchanges cannot satisfy design year traffic requirements.
- All transportation system management (TSM) improvements have been assessed. TSM includes activities that maximize the efficiency of the present system. TSM improvements might include such measures as ramp metering and high-occupancy vehicle (HOV) lanes.
- The proposed access point does not have a significant adverse impact on the safety and operation of the interstate facility.
- The proposed access connects to a public road only.
- The proposed access is consistent with local and regional land use and transportation plans.
- Where the potential exists for multiple interchange additions, requests for new access are supported by an interstate network study.
- The revised access demonstrates appropriate coordination with related or required transportation system improvements.
- The request contains information relative to the planning requirements and the status of the environmental processing of the proposal.

Revised access points must be coordinated with the District Office of the Federal Highway Administration (FHWA) and must be closely coordinated with planning and environmental processes. Major changes in access must be approved through the central office of FHWA in Washington, DC.

Finding: Under this policy, revised access is considered to be a change in the interchange configuration even though the actual number of points of access does not change. Interchange spacing standards are 3 miles in an urban area and 6 miles in a rural area. The project alternatives meet the requirements spelled out in the policy and will accommodate design-year traffic demands as a threshold. Alternatives advanced for the Woodburn Interchange Project meet the requirements of the policy.

Oregon Transportation Plan (1992)

The goal of the OTP is to promote a safe, efficient, and convenient transportation system that improves livability and facilitates economic development for residents of the state. The OTP sets out four goals with numerous actions to support their achievement. Many of these actions do not apply to the Woodburn Interchange Project, but relate more to the establishment of regional transportation plans. Those actions that do apply are addressed below.

Action 1G.4

Action 1G.4 states that resources should be targeted to dangerous routes and locations in cooperation with local and state agencies. Currently, the I-5/Oregon 214 interchange is identified as a relatively high-accident location.

Finding: The Woodburn Interchange Project build alternative would reconstruct this intersection to improve safety by adding capacity to reduce congestion, reducing multiple access point conflicts along Oregon 214 through consolidation of access points and adding medians, and correcting geometric conditions that do not meet current standards.

Action 1H.3

Action 1H.3 gives priority to funding transportation needs identified in state, regional, and local transportation system plans.

Finding: The Woodburn Interchange Project is identified in the Woodburn Comprehensive Plan and the Woodburn TSP as a means to address traffic congestion and safety problems that currently affect Oregon 214/219 and Interstate 5.

Action 4G.1

Action 4G.1 calls for preserving, maintaining, and improving transportation infrastructure and services that are of statewide significance.

Finding: The Woodburn interchange links an interstate highway (I-5) with a state (district) highway (Oregon 214) and facilitates access to a popular regional commercial destination—the Woodburn Company Stores. The Woodburn Interchange Project calls for improving an existing interchange and is therefore consistent with this action.

Action 4G.2

Action 4G.2 requires that access control be a part of transportation system projects to achieve reasonable levels of service.

Finding: The Woodburn Interchange Project build alternatives would enhance the already consolidated I-5 access to destinations within Woodburn and surrounding areas. Discussion of access control is continued in the OHP section below.

Action 4G.4

Action 4G.4 calls for controlled accesses to statewide transportation corridors and facilities.

Finding: The Woodburn Interchange Project build alternatives continue controlled access to I-5. Also, as part of the project, driveways along Oregon 214 would be consolidated and turn movements controlled through the installation of a center median. Elsewhere along the proposed footprint raised curbs would be used to control turning movements. These changes would improve safety along the highway and meet state access control guidelines.

Oregon Highway Plan (1999)

The 1999 OHP is a modal element of the 1992 OTP and defines policies and investment strategies for Oregon's state highway system over the next 20 years. The plan contains three elements: a vision element that describes the broad goal for how the highway system should look in 20 years; a policy element that contains goals, policies, and actions to be followed by state, regional, and local jurisdictions; and a system element that includes an analysis of needs, revenues, and performance measures.

The OHP is a modal element of the OTP. It addresses the following issues:

- Efficient management of the system to increase safety, preserve the system, and extend its capacity
- Increased partnerships, particularly with regional and local governments
- Links between land use and transportation
- Access management
- Links with other transportation modes
- Environmental and scenic resources

The OHP designates I-5 as part of the National Highway System and as a designated freight route between the California and Washington borders.

The policy element contains several policies and actions that are relevant to the Woodburn Interchange Project, described in the following subsections.

Policy 1A, Action 1A.1

Action 1A.1 categorizes state highways for planning and management decisions. Under this policy, I-5 is classified as an Interstate Highway, which provides connections to major cities and regions within Oregon and facilitates movement to and from other states. The operational objective for Interstate Highways is to provide safe and efficient high-speed travel in urban and rural areas.

Oregon 214/219 is classified as a District Highway, which provides connections between small urbanized areas, rural centers, and urban hubs, as well as providing access for local

traffic. The operational objective for District Highways is to allow safe and efficient moderate- to low-speed travel in urban and urbanizing areas for traffic flow, as well as bicycle and pedestrian movements.

Finding: The Woodburn Interchange Project build alternatives would support the existing highway classifications and would enhance the ability of either I-5 or Oregon 214/219 to serve in their defined functions. Furthermore, by addressing capacity and safety issues, the Woodburn Interchange Project would improve their ability to serve their defined functions and support the operational objective for safe and efficient high-speed travel on I-5 and safe and efficient regional and local travel and access on Oregon 214/219.

Policy 1B, Action 1B.7

Policy 1B directs the state to work with regional agencies and local jurisdictions to consider land use when planning transportation systems and projects. Action 1B.7 gives special designations for certain land use patterns off the freeway to foster compact development patterns in communities. The four designations provided are special transportation area, commercial center, urban business area, and urban.

Finding: Although the commercial center designation might apply to this interchange area, no formal designation has been made or requested. Furthermore, the City is now pursuing a more industrial land use pattern as defined in the 2005 Comprehensive Plan update and in the Interchange Capacity Preservation Measures included in the IAMP. Because the designation would not change the design or operational parameters of the improvements proposed at this interchange or along Oregon 214/219, the City of Woodburn, upon consideration, did not choose to pursue any special designation under Policy 1B.

Policy 1C, Action 1C.4

Action 1C.4 states that the timeliness of freight movements should be considered when developing and implementing plans and projects on freight routes.

Finding: I-5 is part of the statewide freight system, and the Woodburn TSP identifies Oregon 214/219 as a truck route. The Woodburn Interchange Project build alternatives would replace the existing access ramps from and to the I-5 mainline with a partial cloverleaf design. This design is expected to reduce delay for vehicles accessing the freeway at this location, including commercial vehicles. The nature of the design is particularly accomodating to freight truck travel. Through improved ramp geometry and operations, the likelihood of vehicles queuing onto I-5 or trucks tipping over when turning to and from the ramps onto Oregon 214/219, as occasionally occurs today, would be virtually eliminated. This would also be a major improvement for through and local freight traffic on I-5 and Oregon 214/219.

Policy 1F, Action 1F.1

Action 1F.1 requires that highways operate at a certain level of mobility, depending on their location and classification. Part of this action requires that freeway interchanges be managed to maintain safe and efficient operation of the freeway through the interchange area. The OHP directs that the maximum volume-to-capacity (V/C) ratio for the ramp terminals of interchange ramps be the smaller of the values of the V/C ratio for the crossroad or 0.85. *Relevance:* The Woodburn Interchange Project is inside the Woodburn UGB, but outside of

the boundary of a Municipal Planning Organization (MPO). As such, the V/C ratio that applies to the I-5 mainline is 0.70. As a District Highway with a speed limit of less than 45 mph, the V/C standard for Oregon 214/219 is 0.85. This V/C ratio is equal to the OHP prescribed maximum V/C ratio and therefore applies as the threshold V/C ratio for the interchange ramp termini.

The highest expected V/C ratio for any intersection on Oregon 214/219 within the project area under either build alternative is 0.84 at Cascade Drive. Expected V/C ratios for both build alternatives for the ramp termini are 0.58 at the I-5 southbound ramp and 0.63 at the I-5 northbound ramp.

Finding: Both Oregon 214/219 within the project area and the ramp termini of the proposed project will meet or better the OHP V/C ratio standards under either build alternative. For more detail on V/C ratios, refer to the Transportation Operations Analysis section of Section 7 of this report.

Policy 1G, Action 1G.1

Action 1G.1 directs agencies to make the fewest number of structural changes to a roadway system to address its identified needs and deficiencies through the 20-year planning horizon, and to protect the existing highway system before adding new facilities to it. The action ranks four priorities of projects, as follows:

- Preserving the functionality of the existing system
- Making minor improvements to improve the efficiency and capacity of the existing system
- Adding capacity to the existing system
- Building new transportation facilities

Finding: As described below, the Woodburn Interchange Project falls under the top three priorities.

Priority One. Protect the Existing System

The project build alternatives would preserve the functionality of Oregon 214/219 by consolidating access points and improving the facilities for alternative modes of transportation such as transit, cycling, and walking. Additionally, lesser improvements to maintain and keep functional have been made to the interchange over the last 30 years, including narrowing shoulders to provide additional travel lanes on the existing structure and adding turn lanes at the ramp terminals. Additional incremental improvements to the interchange to further extend its operational viability are not possible without reconstructing the entire interchange.

Priority Two. Improve Efficiency and Capacity of Existing Highway Facilities

Capacity improvements to Oregon 214 and to the northbound and southbound I-5 ramps would fall under priority two, by making minor improvements to existing highway facilities. However, as explained in the Priority One discussion, additional incremental improvements to the interchange to further extend its operational viability are not possible without reconstructing the entire interchange. The proposed improvements would add to

the existing roadway to improve safety and mobility along both I-5 and Oregon 214. Also, analysis conducted for the Woodburn Interchange Refinement Plans and the draft EA have demonstrated that simply managing the existing interchange area by addressing issues like access and signal timing would not be sufficient to address forecasted growth in this area.

Priority Three. Add Capacity to the Existing System

The project build alternatives would add capacity to the existing system by adding general purpose lanes to Oregon 214/219 and Evergreen Road and making alignment corrections to the corridor to better accommodate commercial vehicles. The analysis in the draft EA has demonstrated that any lesser measures would not address the project goals or other OHP policies.

Policy 1G, Action 1G.2

The intent of Action 1G.2 is to ensure that major improvement projects to state highway facilities have been through a planning process that involves coordination between state, regional, and local stakeholders and the public, and that there is substantial support for the proposed improvement.

Finding: The Woodburn Interchange Project is consistent with Action 1G.2 because the project has gone through a thorough public alternatives development and evaluation process, as explained below.

Improvements to the I-5/Oregon 214 interchange are recommended in the 1996 and 2005 Woodburn TSP and the Woodburn Comprehensive Plan. In 2000, the Woodburn/I-5 Interchange Refinement Plan was published. This plan documents preliminary alternatives analysis and recommendations for alternatives to advance into an EA process, as well as stakeholder input. Of the 45 stakeholders interviewed, many agreed that the partial cloverleaf option (recommended in both of the proposed build alternatives) showed the lowest level of impacts and lowest cost and provided good traffic flow. The EA process currently underway also includes substantial stakeholder and public involvement, as documented elsewhere in this report.

Although the costs associated with restructuring the interchange are substantial, the project would use some of the existing pavement and the existing bridge structure. Of the effective alternatives considered at this location, the partial cloverleaf option costs the least.

The 2002–2005 STIP includes \$2 million for completing the EA and, if remaining funding allows, preliminary right-of-way (ROW) acquisition. The 2004–2007 STIP included \$9.7 million for preliminary and final design and ROW acquisition. The draft 2006-2009 STIP increases this amount to a total of \$14.7 million (including \$2.5 million provided by the City of Woodburn to assist with early acquisition of ROW). This is about 25-30 percent of the total funding expected to be needed to complete construction of this project.

Policy 2F, Action 2F.1

Policy 2F identifies the need for projects in the state to improve safety for all users of the state highway system.

Finding: The Woodburn Interchange Project is consistent with this policy, in particular as it relates to motor vehicle safety. Both the Oregon 214/I-5 northbound ramp intersection and

the Oregon 214/I-5 southbound ramp intersection have been identified as high-accident locations in the Woodburn TSP, with an average of between 4.4 and 5.0 crashes per year. In addition, several segments of Oregon 214/219 within the study area are listed in the top 10 percent of the ODOT Safety Priority Index System (SPIS) list. The SPIS, which is maintained by the ODOT traffic management section, identifies locations where safety problems exist that may be addressed through operational or maintenance improvements. The top 10 percent SPIS sites are those with the highest priority. Study area intersections on the top 10 percent of the SPIS include Old Arney Road, the I-5 southbound ramp, the I-5 northbound ramp, and Lawson Avenue, based on data collected between 1998 and 2000. The proposed improvements will reduce the vehicle crash potential at this interchange by eliminating existing operational and geometric problems and will improve bicycle and pedestrian safety by providing upgraded facilities that meet current standards.

Policy 3A, Action 3A.1

Action 3A.1 directs access management along state highways based on access management guidelines.

Finding: I-5 is classified as an interstate freeway, and the proposed project complies with stated policies of no driveways, no traffic signals, no parking, and grade-separated crossings. Access and circulation issues are addressed in detail in the IAMP, and major actions are summarized below. Oregon 214/219 is classified as an urban District Highway. The project supports the access management directives as follows:

Discourage Private Access

No access to privately owned roads is provided as part of the build alternatives. Approxmately three private driveways would continue to have direct access to Oregon 214/219 between Oregon Way and Evergreen Road, subject to ROW negotiations, all of which would be restricted to right-in, right-out operations only. In total, more than 20 driveways are expected to be consolidated as part of this project on Oregon 214/219 or the local streets, Lawson Avenue and Evergreen Road.

Appropriately Space Public Road Connections

The build alternatives would consolidate access and space access to better comply with state design standards. However, a deviation will be required for the continued use of Evergreen and Woodland which, while meeting all operational requirements, will not meet the OHP spacing standards for full intersection spacing from interchange ramp terminals of 1,320 feet. Evergreen is approximately 900 feet from the new ramp terminal and Woodland is about 1,100 feet from the new ramp terminal. The ODOT Region 2 Access Management Engineer has approved this deviation in accordance with the deviation process requirements. The deviation approval letter is provided in Appendix C.

Discourage Traffic Signals

The build alternatives would keep or improve the signals of Oregon 214 with Woodland Avenue, the I-5 southbound ramp, the I-5 northbound ramp, Evergreen Road, and Oregon Way. Because of the heavy traffic volumes, the existing traffic signals are retained as part of this project as a way to manage traffic flows in the north-south and east-west directions.

Provide Nontraversible Medians

The OHP directs that nontraversible medians be considered for roadway projects where a median could improve safety. Nontraversible, raised curb medians, with 1-foot shy distance on each side, would be included along Oregon 214/219 to restrict left-turn movements. These medians would vary between 2 and 16 feet in width. Medians are planned from the I-5/Oregon 214/219 interchange west to Woodland Avenue, and east from the interchange to Lawson Avenue. Medians are planned from Lawson Avenue to Evergreen Road and from Evergreen Road to Oregon Way. Full turning movements would be allowed at Woodland Avenue, Lawson Avenue, Evergreen Road, and Oregon Way.

Prohibit Parking

Parking along this segment of Oregon 214/219 is prohibited.

Policy 3A, Action 3A.2

Action 3A.2 relates to establishing spacing standards on state highways. The spacing standard for interstate and noninterstate freeway interchanges is 6 miles in rural areas.

Finding: Although it does not add new access to the interstate highway interchange, the Woodburn Interchange Project complies with ODOT and the FHWA minimum spacing standards. The closest intersections to the Woodburn interchange are located 7 miles to the north at Aurora/Donald and 8 miles to the south at Brooks/Gervais.

Policy 3A, Action 3A.3

Action 3A.3 calls for management of location and spacing of traffic signals along state highways. Table 3-1 shows the spacing of intersections along Oregon 214/219 in the study area.

TABLE 3-1Intersection Signal Spacing in Study Area
Woodburn Interchange Project IAMP

From Intersection	To Intersection	Spacing (feet)
I-5/Oregon 214/219 Interchange	Woodland Avenue	1,080
I-5/Oregon 214/219 Interchange	Evergreen Road	900
Evergreen Road	Oregon Way	640

Finding: Due to pre-existing conditions in this already built environment, intersection spacing does not meet the minimum 1/2-mile desired spacing as described in Action 3A.3. Left-turn storage pockets are planned for Oregon 214/219 at Woodland Avenue, Evergreen Road, and Oregon Way. According to the Traffic Technical Report, study intersections under the build alternatives would operate acceptably in the 2025 forecast year and would meet OHP and HDM mobility standards. Because mobility standards are met and the access situation is improved, even though the spacing standards are not fully met, this policy is satisfied.

Policy 3C, Action 3C.1

Action 3C.1 requires that an IAMP be developed to protect the function of interchanges and provide safe and efficient operations between connecting roadways.

Finding: This IAMP has been developed for the Woodburn interchange. The intent of the IAMP is to manage the facility and adjacent land use to protect the function of the interchange to ensure safe and efficient operations between Highway 214 and I-5. The purpose of the IAMP is described further in Chapter 2 of this document.

Policy 3C, Action 3C.2

Action 3C.2 addresses spacing, access, and other supporting requirements for an interchange improvement project.

Finding: The requirements of this policy are discussed below:

Spacing Standards

As mentioned above, the spacing standard for interstate and noninterstate freeway interchanges is 6 miles in rural areas. The Aurora/Donald interchange is 7 miles to the north of the Woodburn interchange and Brooks/Gervais is 8 miles to the south.

Necessary Supporting Improvements

Necessary supporting improvements such as road networks, channelization, medians, and access control in the interchange management area must be identified in the local comprehensive plan and committed with an identified funding source or must be in place. The 2005 Woodburn TSP, adopted in October 2005, does commit to a network of local road improvements that have been demonstrated to reduce demand for state highway travel in the interchange management area. These facilities will largely be constructed as a requirement of new development. The proposed Woodburn Interchange reconstruction project does include channelization, medians and access control as described in Section 7 of this report.

Access to Cross Streets

ODOT minimum spacing standards require that full access to cross streets be no closer than 1,320 feet from an interchange ramp when possible. At a minimum, the access conditions associated with a reconstruction project should improve on current conditions by moving in the direction of the spacing standards. The nearest full access cross streets to the I-5/Oregon 214/219 intersection are Woodland Avenue (1,090 feet to the west) and Evergreen Road (900 feet to the east). These cross streets exist today and are also closer to the I-5 ramps than called for by the ODOT spacing standards. Closing them to meet ODOT spacing standards would negatively affect land use and traffic operations along Oregon 214/219. These connections are essential to maintain local access and total transportation system circulation in the area. Old Arney Road (500 feet to the west) and Lawson Avenue (460 feet to the east) are the closest limited access public road connections to the ramp terminals. Old Arney Road would continue to be limited to right-in, right-out movements and Lawson Avenue would be limited to right-in only movements. These connections will also contribute to improved traffic operations in the project area. While these access locations do not meet the full spacing standards, they do improve on the current condition, will operate adequately over the 20-year planning horizon, and have been approved through a deviation granted by

the Region 2 Access Engineer. This IAMP and the traffic analysis from the draft EA serve as the documentation to support the deviations from the ODOT spacing standards required to maintain these connections. The letter from the Region 2 Access Management Engineer approving these deviations in included in Appendix C.

Road Classification

The Woodburn interchange connects an Interstate Highway with a state-operated District Highway, which complies with the request that freeways connect with state highways.

Alternative Transportation Modes

Widening Oregon 214/219 for this project would create bicycle lanes and sidewalks on both sides to facilitate bicycle and pedestrian movement, including transit users. Limited fixed-route transit service operated by the City of Woodburn is available along this stretch of Oregon 214/219 on weekdays between 9:00 AM and 5:00 PM.

Policy 4B, Action 4B.4

Action 4B.4 requires that highway projects encourage the use of alternative passenger modes to reduce local trips.

Finding: The portion of the Woodburn Interchange Project that relates to Oregon 214/219 would add one bicycle lane and 6-foot sidewalks on both sides of the roadway, where bicycle and pedestrian facilities do not exist today. In addition, widening Oregon 214 would improve transit movement along the corridor and would facilitate bicycle and pedestrian movement between the retail development near the interchange and the residential uses to the east and west. ODOT is also pursuing the establishment of a transit park-and-ride facility on property purchased in the interchange area.

Oregon's Statewide Planning Goals

The State of Oregon has established 19 statewide planning goals to guide local and regional land use planning. The goals express the state's policies on land use and related topics. The Oregon Department of Land Conservation and Development (DLCD) has acknowledged that the Marion County Comprehensive Plan and the Woodburn Comprehensive Plan are in compliance with the statewide planning goals. Because the Woodburn Interchange Project is consistent with the City and County comprehensive plans (as discussed in the Local Plans, Policies, and Codes subsection below), the project is thus consistent with the statewide planning goals. No exceptions to statewide planning goals are needed.

Transportation Planning Rule

The Transportation Planning Rule (TPR) implements Oregon Statewide Planning Goal 12, which encourages construction of transportation facilities that are safe and efficient and designed to reduce automobile reliance. The objective of the TPR is to reduce air pollution, congestion, and other livability problems found in urban areas. Its relation to the proposed interchange project is described in the following subsections.

660-012-0010—Transportation Planning

Section 660-012-0010 discusses the two phases of transportation planning: transportation system planning, where land use controls are established, and transportation project development, where specific projects are designed to implement the TSP.

Finding: Improvements to the Woodburn interchange are recommended in the 1996 and 2005 Woodburn TSPs. The build alternatives being analyzed through the EA process include reconstructing the interchange from a diamond to a partial cloverleaf pattern and widening Oregon 214, bringing it up to state design standards.

660-012-0035 - Evaluation and Selection of Transportation System Alternatives

Section 660-012-0035 describes standards and alternatives available to entities weighing and selecting transportation projects, including benefits to different modes, land use alternatives, and environmental and economic impacts.

Finding: The primary users of the Woodburn interchange are personal and commercial vehicles. Other modes, such as bicyclists and pedestrians, do not use the interstate highway system, and the City of Woodburn Transit Division does not operate a transit route on I-5. The objective of the proposed project is to improve mobility and safety, consolidate access, and bring Oregon 214/219 up to state design standards. A portion of this project would be widening Oregon 214/219 and adding bicycle and pedestrian facilities where currently there are none. ODOT is currently pursuing development of a park-and-ride facility in the study area east of the I-5 interchange along Oregon 214/219. In addition, fixed-route transit operating along this corridor would benefit from the improved mobility at these intersections.

660-012-0050—Transportation Project Development

Section 660-012-0050 prescribes that transportation projects be reviewed for compliance with local and regional plans and, where applicable, undergo a NEPA process.

Finding: The EA addresses how the proposed project complies with applicable acknowledged comprehensive plan policies and land use regulations. When a preferred alternative is chosen, compliance and potential issues will be addressed. Improvements at the Woodburn interchange are recommended in the 1996 and 2005 Woodburn TSPs

ODOT Access Management Rules OAR 734-051

The intention of ODOT's Access Management Rule is to balance the safety and mobility needs of travelers along state highways with the access needs of property and business owners. ODOT's rule sets guidelines for managing access to the state's highway facilities in order to maintain highway function, operations, safety, and the preservation of public investment consistent with the policies of the 1999 OHP.

734-051-0080, (2) Public Approach

Section 734-051-0080 provides details on how to address an application for public approach to a state highway.

Finding: This OAR is relevant to the Woodburn Interchange Project because both Alternative 1 and Alternative 2 propose consolidating approaches to improve safety and mobility along the Oregon 214/219 corridor. As described in Appendix D of the OHP, I-5 is classified as an Interstate Highway and Oregon 214/219 are classified as District Highways. Spacing standards that apply along Oregon 214/219 in the vicinity of the I-5 interchange are 1,320 feet from the centerline of the access ramp to the centerline of the closest public full access roadway and 750 feet to the closest right-in, right-out roadway. Although the build alternatives consolidate more than 20 driveways, the proposed project does not fully meet these access standards. Table 3-2 outlines those access points to Oregon 214/219 in the study

area that would not meet the 1,320 and 750-foot standards under the proposed build alternatives. This IAMP serves as the documentation to support the deviations from the ODOT spacing standards required to maintain these connections. The letter from the Region 2 Access Management Engineer approving these deviations in included in Appendix C. By approving this deviation, ODOT has met this provision of the access management rule.

TABLE 3-2Proposed Deviations to Access Management Spacing Standards Woodburn Interchange Project IAMP

Name of Access	Distance from Closest Freeway Access Point (feet) ^a	
Woodland Avenue	1,080	
Old Arney Road (right-in, right-out)	530	
Lawson Avenue (right-in only)	460	
Evergreen Road	900	

^a Distances are recorded from the centerline of the nearest freeway ramp to the centerline of the intersection.

734-051-0115, Access Management Spacing Standards for Approaches

Section 734-051-0115 states that access management spacing standards depend on highway classification, type of area, and posted speed, and are to be applied to reconstruction as well as new construction projects.

Finding: The proposed project includes widening Oregon 214 from roughly 700 feet west of Woodland Avenue to the west to the intersection with Cascade Drive to the east, a stretch of roughly 0.9-mile. The build alternatives would consolidate access from more than 20 businesses to the state highway. Deviations to the access management spacing standards are being requested as part of the project. Section 734-051-0190 allows deviations in cases where a right of access exists, the designated access management standards cannot be accomplished, and where the property(ies) do not have reasonable access. The proposed access management spacing deviation locations at Old Arney Road (right-in, right-out only), Woodland Avenue, Lawson Avenue (right-in, right-out only), Evergreen Road, the Crossroads Shopping Center (right-in, right-out only), and the Wells Fargo Bank (right-in, right-out only) all currently exist, are in areas where development has largely occurred, have proposed modifications to either consolidate or modify access, and provide the only reasonable access for many businesses to the public street system. Deviations to the access management spacing standards have been requested and granted as part of the project (see deviation memo, Appendix C).

734-051-0125, Interchange Access Management Area Spacing Standards for ApproachesPolicy 734-051-0125 calls for a plan to be developed for the management of grade-separated interchange areas to ensure safe and efficient operation between connecting roadways.

Finding: This IAMP addresses access management for the area of the Woodburn interchange. Because it will correct existing geometric conditions that do not meet current standards and provide for improved operations that meet OHP and HDM mobility

standards, the proposed interchange reconstruction and Oregon 214 access management elements ensure the safe and efficient operation between connecting highways.

734-051-0155, Access Management Plans, Access Management Plans for Interchanges, and Interchange Area Management Plans

Section 734-051-0155 encourages the development of highway segment access management plans and interchange area management plans, especially for facilities with high traffic volumes and/or that provide important statewide or regional connectivity, and have the following characteristics: where existing developments do not meet spacing standards, existing development patterns and plans would result in a deviation request, or an access management plan would preserve or enhance the safe and efficient operation of a state highway.

Finding: By documenting the access strategy developed for Oregon 214/219 as part of the Woodburn Interchange reconstruction EA and the 2005 Woodburn TSP elements that support access management in the interchange area, this IAMP addresses this provision of Division 51.

734-051-0165, Design of Approaches

Section 734-051-0165 stipulates access control measures related to the construction or improvement of roads and/or interchanges. In accordance with 734-051-0165, approaches may be mitigated, modified, or closed pursuant to an adopted access management plan or IAMP.

Finding: The proposed project consolidates roughly 20 driveways along the Oregon 214/219 corridor, Lawson Avenue, and Evergreen Road, closing driveways where multiple driveways exist and, where possible, combining driveways to serve multiple businesses. Five accesses would be modified from full access to right-in, right-out only: Old Arney Road, Lawson Avenue, the entrance to the Crossroads Shopping Center, the driveway to Wells Fargo Bank, and the shared driveway to the ARCO Station/Dairy Queen. As described under the discussion of OHP Action 1.G.2, the proposed project is listed in the Woodburn TSP and the Woodburn Comprehensive Plan, and funding is provided through the STIP for environmental assessment, design, and ROW acquisition. The project is not fully funded at this time.

Approaches to cross streets are not fully consistent with established access management standards, as listed in Table 3-2. Deviations to authorize this project to advance with lesser spacing are described in this IAMP and have been approved by the Region 2 Access Management Engineer. The deviation approval letter is included in Appendix C. The Woodburn interchange connects an Interstate Highway to a state-controlled District Highway. Widening Oregon 214/219 would include adding bicycle and pedestrian facilities where none exist today. Fixed-route transit operations along this stretch of Oregon 214 would benefit from the widening project.

State Agency Coordination Program (December 1990) (OAR 731-0015)

State agency coordination programs describe what agencies will do to comply with Oregon's land use planning program. Specifically, they describe how an agency (that is, ODOT) will meet its obligations under ORS 197.180 to carry out its programs affecting land use in compliance with the statewide planning goals and in a manner compatible with

acknowledged comprehensive plans. Any needed local agency coordination not already accomplished or underway would occur before or as part of final project design.

Finding: The consistency of the proposed alternatives with local plans documented below meets the stipulations of the state agency coordination program.

Western Transportation Trade Network, Final Report Phase II

The Western Transportation Trade Network is a multi-state network of agencies addressing surface freight transportation issues with the goal of enhancing the economic prosperity of the 17 western U.S. states. The Phase II report identifies deficiencies in freight corridors around the study area and offers a set of possible solutions.

I-5 between Canada and Mexico is listed as one of 20 freight corridors in the Western Transportation Trade Network. The I-5 corridor has the highest percentage of pavement deficiencies and the second highest share of capacity deficiencies for the forecast year of 2016. The segment of I-5 between Eugene and Portland has a deficiency level of 22 percent, with an increase to 100 percent deficiency expected by 2016. One of the supplemental solutions offered by the network is to construct new or rehabilitate existing interchanges along I-5.

Finding: The Woodburn/I-5 Interchange build alternatives are consistent with the goals and recommendations of the Western Transportation Trade Network Phase II Report. The project would facilitate easier access to and from businesses in Woodburn, including the many large freight destinations in the interchange area by improving mobility as described in Section 7 of this document.

Freight Moves the Oregon Economy (1999)

As indicated in this publication, "Freight plays a major role in moving the Oregon economy. Most freight moves by truck, rail, waterway, air, and pipeline with truck accounting for the greatest volume of freight." Information found in this publication that may affect I-5 includes the following:

- Because the state's largest airports are located in four metropolitan areas along I-5, the majority of Oregon's in-state air traffic follows the I-5 corridor as well.
- Approximate daily truck volumes in the I-5 corridor are:
 - 10,000 per day across the I-5 bridge
 - 10,000 to 15,000 per day in the Salem and Eugene areas

Finding: By reconstructing the Woodburn Interchange to better serve truck and freight traffic (both geometrically and operationally), the Woodburn interchange is consistent with proposed strategies in this document to reduce delay and eliminate travel barriers. The IAMP is consistent with this plan because it seeks to accommodate the safe and efficient movement of freight.

Willamette Valley Transportation Strategy—Phase One Report

The Willamette Valley Transportation Strategy is a modal element of the OTP (discussed below under State Plans and Policies). The goal of the Willamette Valley Transportation

Strategy is to improve mobility, industrial growth, and livability for communities in the Willamette Valley and promote an understanding of the extent and significance of the transportation interdependence among these various communities.

Finding: Both Woodburn Interchange Project build alternatives are compatible with this stated goal because they would facilitate improved mobility at the interchange and build-out of adjacent developable lands in this location to the densities identified in the Woodburn Comprehensive Plan. Adjacent lands in this area are zoned for commercial use and identified as a commercial center. Transportation improvements to support focused development would discourage dispersed development in other locations. The project would improve livability by alleviating congestion on the roads, leading to shorter invehicle times and improved safety. Specific objectives of the plan relevant to the proposed project are discussed below.

Select Highway Projects that Maximize the Net Full Benefits to the Valley's Transportation System as a Whole

The Woodburn interchange serves a regional market. Not only is it the most direct regional approach to the Woodburn Company Stores, which received 3.2 million visitors in 2002, but it provides access from I-5 to downtown Woodburn and many communities in north Marion County. The interchange currently operates near capacity and is projected to exceed capacity levels before 2020. The Woodburn Interchange Project build alternatives would make improvements to the interchange to provide a greater level of mobility and improved safety for travelers on I-5 and Oregon 214/219.

Coordinate Highway Projects with Land Use Policies and Other Transportation Improvements

The land surrounding the Woodburn interchange is mostly zoned CG and LI. The build alternatives would bring Oregon 214 into compliance with state highway design standards and are compatible with local land use planning by improving access to commercial uses along Oregon 214/219. The project is further coordinated with land use policies and other transportation improvements through the provisions of the City's Interchange Management Overlay ordinance (Appendix D) and through the coordinated analysis that led to the selection of the supporting transportation improvements that have been adopted into the City's 2005 Transportation System Plan (TSP). This IAMP adopts and relies on those documents as key components of ODOT's long range management strategy to protect the operations and function of this interchange.

Make Strategic Capacity Enhancements to Controlled Access Highways

The Woodburn Interchange Project build alternatives would create a strategic capacity enhancement to a controlled-access highway (I-5). The current interchange experiences higher than average accident rates and is operating near capacity. Development in the area is growing at a rapid pace. The project is strategic because it takes advantage of the infrastructure already in place and supports planned land uses in this location. The project would add capacity in a way that improves overall operations along I-5 and the Oregon 214/219 corridor, benefitting local as well as statewide and regional traffic.

Improve North-South and East-West Links to the Existing State Highway System
The main objective of the Woodburn Interchange Project is to improve the connection between I-5 (a north/south freeway through Woodburn) and Oregon 214/219 (an east/west District Highway through Woodburn).

Include Provision for Bicycle and Pedestrian Use in All New Facilities and Major Construction Currently there are no bicycle or pedestrian facilities along Oregon 214/219 in the study area. The proposed project would include bicycle lanes and sidewalks along Oregon 214 to improve connections for bicyclists and pedestrians between residential and commercial development east of I-5 with the outlet stores and residential areas west of I-5.

Woodburn/I-5 Interchange Refinement Plan (2000)

ODOT's Woodburn/I-5 Interchange Refinement Plan was prepared in 1999 and 2000 to address the capacity and safety problems at the I-5/Oregon 214 interchange. This work was called for in the 1996 Woodburn TSP to determine the best way to address the problems at the existing Woodburn interchange. The study considered a total of ten alternatives, including a second interchange, a split diamond, a tight urban diamond, and a partial cloverleaf. Seven of these alternatives were dismissed, and three—the standard diamond, tight urban diamond, and partial cloverleaf—were recommended for advancement into the NEPA environmental documentation effort.

Finding: The refinement plan serves as a reference document to the Land Use Technical Report and does not contain any specific policies relevant to this review. This plan did address other interchange options originally raised in the 1996 TSP and provided guidance for access management and circulation options to consider during interchange project development. The refinement plan is an adopted part of the Woodburn TSP.

Local Plans, Policies, and Ordinances

Marion County Rural Transportation System Plan (1998)

The published mission statement for the Marion County Rural Transportation System Plan (Marion County TSP) is to develop a balanced, multimodal transportation system to accommodate planned growth, facilitate economic development, and maintain a high standard of livability. Goals of the plan that apply to the proposed project are as follows:

- Improve transportation system safety
- Provide an accessible, efficient, and practical transportation system
- Provide sufficient transportation capacity
- Consider land use and transportation relationships

Finding: The plan identifies the Woodburn interchange as unsafe and congested and recommends that a refinement study be conducted for constructing a new interchange in Woodburn or modifying the existing interchange. The Woodburn Refiment Plan was completed in 2000 and lead to the development of the Woodburn Interchange EA and this IAMP and also served to support the 2005 Woodburn TSP. The proposed project will improve safety by adding capacity to reduce congestion, reducing multiple access point conflicts along Oregon 214 through consolidation of access points and adding medians, and correcting geometric conditions that do not meet current standards. Many of the policies in the Marion County TSP are related to the county road system. No county roads would be affected by this project; therefore, the following policies generally affect most proposed projects in Marion County.

Transportation System Planning—Policy 2

Policy 2 addresses the need to evaluate all investments in the transportation system for efficiency, effectiveness, and practicality. The Woodburn Interchange Project build alternatives qualify as an efficient investment because they would improve an existing interchange instead of building a new one. The project would be an effective investment because the capacity improvements would decrease congestion and support existing and planned development. The Woodburn Interchange Project would be a practical investment because capacity improvements in conjunction with access consolidation would improve local and regional mobility and safety.

Transportation System Planning—Policy 8

Policy 8 relates to the role of state highways and county arterials as the backbone of the transportation network. The Marion County TSP supports efforts to enhance and maintain the capabilities of these roads. I-5 and Oregon 214/219 are both under the state's jurisdiction. The need for the capacity improvements, which has been identified in the Woodburn TSP and the Woodburn Comprehensive Plan, is also identified in the STIP, described below under State Plans and Policies.

State Highways

The Marion County TSP section on state highways addresses the county's desire to have ODOT address certain needs for the state highways within a 20-year time horizon. The Woodburn interchange is identified as such a need. The county recommends that ODOT conduct a refinement study to determine the best set of improvements for this location.

Marion County Comprehensive Plan

The goal of the Marion County Comprehensive Land Use Plan is to provide a guide to development and conservation of Marion County's land resources and to create a long-range policy guide that explains the basis for decisions about physical, social, and economic development of the county.

Finding: The Marion County Comprehensive Plan generally applies to land under the county's jurisdiction that is outside the Woodburn city limits. The Woodburn Interchange Project is completely inside Woodburn's city limits and the UGB. The county's transportation element, however, does include policies relevant to the Woodburn Interchange Project, as discussed below:

Policy 1

Policy 1 states that additional interchanges onto I-5 from the northern county line to the Chemawa interchange be discouraged. The Woodburn Interchange Project build alternatives are consistent with this policy because they would create improvements to an existing interchange rather than building a new one.

Policy 2

Policy 2 requires that the number of access points on collector and arterial roads be kept to a minimum. The Woodburn Interchange Project build alternatives are consistent with this

policy because they would propose to combine and consolidate existing accesses along Oregon 214/219 and implement other access management changes.

Policy 4

The intent of Policy 4 is to minimize damage from highway projects on the natural environment, specifically soil, timber, water, scenic or cultural resources. The Woodburn Interchange Project build alternatives are proposed for an area that is zoned commercial and industrial and is already largely developed. There would be minimal damage to soil, timber, water, scenic, or cultural resources, as documented in the draft Woodburn EA.

Policy 13

Policy 13 states that new transportation facilities should use existing ROWs as much as possible to minimize disruption to existing land use. The Woodburn Interchange Project build alternatives are consistent with this policy because most improvements would be made on or adjacent to existing rights of way.

City of Woodburn Transportation System Plan (1996, updated 2005)

The Woodburn TSP identifies transportation needs to support planned land uses in the city over a 20-year time horizon as defined by the 2005 Woodburn Comprehensive Plan update. The TSP was created in accordance with the TPR (Oregon Administrative Rule [OAR] 660-012-045) and the Comprehensive Land Use Planning Statute (Oregon Revised Statutes [ORS] 197.712). The Woodburn TSP was originally developed in 1996. The updated TSP serves as the new transportation element of the 2005 Woodburn Comprehensive Plan update.

Finding: The following elements of the Woodburn TSP are directly related to the Woodburn Interchange Project:

Goal 2, Policy 2

This policy calls for a strategy to improve certain highways in Woodburn, including Oregon 214 and Oregon 219, through added travel lanes, signalization, and access management. The proposed Woodburn Interchange Project is consistent with this goal because it would add capacity and consolidate access along Oregon 214/219 in the city, with the objective of improving safety and mobility through the corridor. The Woodburn Interchange reconstruction project does not improve the entire Oregon 214/219 corridor, but a follow-on environmental documentation process to determine how best to improve the rest of the corridor between the interchange project area and Oregon 99E is funded in the STIP and scheduled to begin in 2006.

Goal 3, Policy 1

This policy describes the need for access management strategies for three highways in Woodburn, particularly focusing on Oregon 214 between I-5 and Cascade Drive. The Woodburn Interchange Project is consistent with this goal because it would remove 14 driveways and modify an additional 4 driveways from full access to right-in, right-out only, instituting a higher degree of access control along this portion of Oregon 214/219.

Existing Conditions and Deficiencies

The TSP identified current deficiencies within the study area as follows:

- Pedestrian facilities are not provided on Oregon 214 west of Evergreen Road
- Bicycle facilities are not provided on Oregon 214 west of Boones Ferry Road
- Twenty-three crashes have been reported at the intersection of I-5/Oregon 214 at the southbound ramp over the last 5 years
- Twenty-four crashes have been reported at the intersection of I-5/Oregon 214 at the northbound ramp over the last 5 years
- Relevant sections of Oregon 214 (milepost [MP] 36.63 to 36.79, MP 36.81 to 36.91, MP 36.84 to 36.95, and MP 37.03 to 37.12) are listed in the top 10 percent of SPIS sites

The Woodburn Interchange Project would address these deficiencies through the addition of pedestrian and bicycle facilities, roadway and intersection reconstruction, and access management on these roadways.

Future Transportation Conditions, Deficiencies, and Needs

The TSP identifies anticipated future transportation system deficiencies within the study area. By 2020, it is expected that both the northbound and southbound ramps of I-5 at Oregon 214/219 will reach capacity deficiency if no improvements are made to the existing system. Oregon 214/Evergreen Road is also expected to reach capacity deficiency by 2020, and Oregon 219/Woodland Avenue and Oregon 214/Oregon Way are expected to operate near capacity. The lack of pedestrian and bicycle facilities along Oregon 214 in the study area was also identified as a future transportation need.

The Woodburn Interchange Project would address these deficiencies through roadway and intersection reconstruction and access management on Oregon 214/219.

Transportation Systems Plan Alternatives

The TSP chapter on alternatives specifically proposes widening on-ramps and off-ramps at the I-5/Oregon 214/219 interchange, widening Oregon 214/219, and constructing turn lanes along Oregon 214 between Woodland Avenue and Oregon Way. These improvements are recommended in all three alternatives discussed in the TSP chapter.

The TSP recommends bicycle and pedestrian treatments for major streets. The proposed Woodburn Interchange Project build alternatives are consistent with the recommended projects in the TSP.

The Woodburn Interchange Project directly addresses the identified existing and future anticipated safety and capacity deficiencies along the Oregon 214/219 corridor and the I-5/Oregon 214/219 intersection. The proposed project is consistent with the Woodburn TSP.

City of Woodburn Comprehensive Plan (1978, amendments through 2005)

The Woodburn Comprehensive Plan was written in 1978 with subsequent amendments, the latest in 2004. The Woodburn Comprehensive Plan establishes goals for development and

redevelopment in Woodburn over a 20-year time frame. It serves as the controlling land use document for the city and its UGB.

Finding: The following policies within the transportation element are relevant to the Woodburn Interchange Project.

Policy H1-3

Policy H1-3 states that state and federal highways with routes through Woodburn should be improved in accordance with projected traffic volumes and other elements. Existing and projected traffic volumes are discussed in more detail in the Transportation Technical Report, but the current interchange operates near capacity and development in the area is growing at a rapid pace. With the widening included in the project build alternatives, the interchange is expected to operate at acceptable mobility levels in the year 2025.

Policy H1-5

Policy H1-5 states that the city should promote pedestrian safety and activity by providing sidewalks with a minimum 4-foot width. Currently, Oregon 214/219 does not have sidewalks near the I-5 interchange. The project build alternatives would provide 6-foot-wide sidewalks along Oregon 214/219 at this location.

Policy H1-8

Policy H1-8 stipulates that driveway access along Highway 214 be consolidated. More than 20 driveways are expected to be consolidated as part of the proposed project, from Oregon 214/219 or from Lawson Avenue and Evergreen Road. In addition, access to three businesses has been modified to right-in, right-out operations only. See the Transportation Technical Report for more information.

Woodburn Development Ordinance

The Woodburn Development Ordinance supplies a set of regulations for development within the City of Woodburn. Two sections of the ordinance—land use zoning and street design standards—are applicable to the proposed project.

Finding: A new section addressing the Interchange Capacity Preservation Measures has been drafted (see Appendix D) for inclusion in the Woodburn Development Ordinance. The predominant land use zoning for the study area is CG, although the predominant use in the SW quadrant is IL. At both edges of the proposed project footprint there are smaller areas of noncommercial land uses, including RS, R1S, and P/SP (see Figure 3-5 in the main body of the EA). Each of these zones allows "rights of way and easements and the improvements therein for streets…" as a permitted use.

Because I-5 and Oregon 214 are both under state jurisdiction, the local street standards in the Woodburn Development Ordinance do not apply to most of the proposed project. Modifications to access for city streets at Woodland Avenue, Old Arney Road, Lawson Avenue, Oregon Way, and Cascade Drive do not affect the footprint of the city roads beyond the intersection area. Modifications to Evergreen Road, however, are under city jurisdiction; therefore, local street standards apply. The standards relevant to this project are outlined in the following subsections.

Section 3.101.12.1B Street Improvement Standard

The City of Woodburn street improvement standards call for 12-foot travel lanes, 5-foot sidewalks, proper drainage facilities, and bicycle facilities for one side of the road. The extension of Evergreen Road north from Oregon 214 to Country Club Road (included in both build alternatives) would consist of two 12-foot travel lanes with no median and 2-foot shoulders. Curbs and gutters with 6-foot sidewalks would be added on both sides of the road.

Finding: No bicycle lane would be added, which does not comply with the City of Woodburn street improvement standards. A deviation from this standard would be required from the city for the project design.

Section 3.104.01A Street Access Required

This policy directs that every developed lot will be given an irrevocable access easement to have entry to a public street or shared driveway. The policy was established to guarantee that a property owner would have access to their property, and that customers could reach a business.

Finding: The project build alternatives without the Access Option would eliminate two driveways to Evergreen Road—the Union 76 and ARCO parcels. Under this scenario, both parcels would be acquired by ODOT. The Access Option (for both build alternatives) would provide access to the ARCO parcel by way of a 50-foot public road easement south of the ARCO structure.

Section 3.104.01B Access to City Streets, Permit Required

Modifications to access for city streets would be made at Oregon Way, Evergreen Road, and Lawson Avenue as follows:

- Eastbound on Oregon 214 from the I-5 interchange
 - Access to existing frontage road located in the SE quadrant of the interchange would be closed.
 - Only a right-in turn would be allowed from Oregon 214 onto Lawson Avenue. The right-out from Lawson onto Oregon 214 is prohibited.
 - No access would be allowed between Lawson Avenue and Evergreen Road (closes one access to McDonalds and two accesses to Union 76).
 - One right-in, right-out access would be allowed at the ARCO gas station and Dairy Queen; one right-in, right-out access would be allowed at Wells Fargo Bank (formerly Midland Bank).
- Westbound on Oregon 214 from Oregon Way toward the I-5 interchange
 - One mid-block access between Oregon Way and Evergreen Road would be allowed.
 - No access would be allowed between Evergreen Road and the I-5 interchange ramps.
- Access along Evergreen Road, north and south of Oregon 214

- No access would be allowed 200 feet from Oregon 214 except under the Access Option, where access to the Union 76 parcel would be allowed along its southern property line.
- Access along Oregon Way, south of Oregon 214
 - The Mid-Valley Bank would lose driveway access from both driveways onto Oregon Way under both build alternatives without the Access Option.
- Access along Country Club Road, north of Oregon 214
 - The Mae Thai Restaurant on the west side of Country Club Road would lose direct driveway access to Oregon 214. The northern driveway onto Country Club Road would remain.

Old Arney Road would remain as right-in, right-out access only. Although geometric modifications would be made to Woodland Avenue, access would not be affected.

Finding: Access modification permits would be requested from the city during the preconstruction phase of this project. All access modifications to private road and driveway approaches are subject to future ROW negotiations with property owners.

Land Use and Environmental Analysis

Land Use

The City of Woodburn was founded about 2 miles east of the current I-5/Woodburn interchange near the tracks of the Oregon & California (O & C) Railroad, (now owned and operated by Southern Pacific Railroad). City development patterns began to move west in 1954 when I-5 was constructed with an interchange connection to the City. As of the 2000 U.S. Census, the City's population was 20,100.

Existing Land Use

Most of the land in the immediate vicinity of the I-5 and Oregon 214/219 interchange is developed, primarily with commercial and light industrial uses and a smaller amount of residential development. However, the IMA also includes a number of undeveloped properties. Appendix A includes land use planning maps (existing uses, comprehensive plan, and zoning) that served as the basis for the analysis in the EA and the IAMP.

West of the interchange, land uses are commercial, industrial, and single-family residential. The northwest quadrant is dominated by the Woodburn Company Stores outlet mall, which opened in 2000. This development consists of approximately 300,000 square feet of retail development. Access to the company stores is along Woodland Avenue and Old Arney Road. Other commercial uses in the northwest quadrant include three car dealerships, a motel, a gas station, one sit-down restaurant and two fast-food restaurants. A single-family neighborhood is located immediately west of Woodland Avenue and north of Oregon 219. Land in the southwest quadrant is primarily light industrial, with two large warehousing and distribution centers.

East of the interchange, nearby land uses are mainly commercial, including gas stations, fast-food or sit-down restaurants, a bank, and a motel. This area also contains an older shopping center development and a vacant motel. Along most of the eastern edge of the IMA, north and south of Oregon 214 is Senior Estates, a large development of single-family homes zoned for retirement use that also includes a golf course. A tunnel under Oregon 214 is used by golf carts and pedestrians and links the northern and southern portions of the golf course. The Woodburn Super Wal-Mart store is located in the southeast quadrant along with a relatively new residential development adjacent to Senior Estates.

Future Land Use Assumptions

Woodburn's 2005 Comprehensive Plan update includes the addition of several hundred acres of industrially zoned land south of Oregon 214/219, both east and west of I-5. On the west side, this land is located east of Butteville Road and north of the Parr Road overpass. On the east side, the industrial land is located north and south of Parr Road. The travel model forecast developed for the EA and the TSP assume this land will be developed, in accordance with the 2020 population and employment forecasts adopted in 2004 for

Woodburn by Marion County. The analysis for the EA has extrapolated these forecasts to 2025. The travel models forecasts for the TSP and the EA also assume the redevelopment of all currently underdeveloped commercial property located adjacent to Oregon 214 on the east side of the interchange.

ODOT and the City of Woodburn are in agreement regarding the travel demand (trips and trip distribution) based on the population and employment assumptions. The City has updated its Comprehensive Plan policies and implementation ordinances to reflect these agreements and to provide safeguards to maximize the service and function of the interchange. These provisions are highlighted in the next section.

Comprehensive Plan Policies and Implementation Ordinance

The Woodburn Development Ordinance (WDO) includes the City ordinances that implement the goals and policies established in the WCP. The WDO combines zoning, specified use standards, development guidelines and standards (for example, street standards), partition and use standards, administration and procedures, and application requirements in one ordinance.

The Interchange Management Area Overlay District described in WDO (2.116) is the primary provision in the WDO supporting preservation of the long-term capacity of the Woodburn interchange. The IMA Overlay District protects interchange capacity by establishing trip generation budgets for parcels in the overlay district. The parcel budgets are intended to be high enough to accommodate peak hour trips anticipated by the 2005 WCP and TSP, while not providing for unplanned vehicle trips that could adversely affect the interchange. The IMA Overlay District also ensures that needed industrial, commercial, and residential land is protected from commercial encroachment. This complements and supports provisions of the Southwest Industrial Reserve (SWIR) District (2.114) by ensuring that industrial land is retained for targeted employment called for in the Woodburn Economic Opportunities Analysis (EOA) and the Economic Development Strategy. The IMA Overlay District ordinance is included in Appendix D.

In addition to the provisions in the WDO, the WCP includes specific goals and polices that guide land development in the IMA and support this IAMP, including:

- B-2. Woodburn will coordinate with affected state agencies regarding proposed comprehensive plan and land use regulation amendments, as required by state law.
 - (e) The state agencies most interested in transportation programs and projects are ODOT and DLCD. These agencies will be notified and asked to participate in amendments to the TSP, or regarding plan amendments or zone changes that could adversely affect a state transportation facility.
- E-1. Woodburn shall provide and maintain an adequate supply of suitable industrial sites to attract targeted firms consistent with Statewide Planning Goal 9 (Economy of the State), the recommendations of the 2002 Woodburn EOA and the Woodburn Economic Development Strategy.
 - E-1.1 It is the policy of the City to provide for developments that, whenever possible, will allow residents of the City of Woodburn to work in Woodburn and not

have to seek employment in other areas. To accomplish this, the City should encourage that there be a healthy job market within the City and enough industrial land is available for industrial growth to accommodate the residential growth expected in the City.

- E-1.6 The industrial park concept is one that the City deems is the most desirable form of industrial development. Whenever possible the industrial park concept will be encouraged in an attractive and functional design. Master planning of industrial areas shall be required prior to annexation of industrial land to the City. Master plans shall reserve parcels of sufficient size to meet the needs of targeted industries identified in the EOA.
- E-1.8 Industrial lands shall be protected from encroachment by commercial or other uses that will either increase the price of industrial land or cause traffic generation that will interfere with the normal industrial practices.
- E-2. Woodburn shall reserve suitable sites in the SWIR for targeted industrial firms, as directed by the 2002 Woodburn EOA.
 - E-2.1 Woodburn shall designate industrial land near Interstate 5 with a SWIO (Southwest Industrial Overlay) designation. Land within this designation shall be reserved exclusively for industrial uses identified in the EOA, and shall not be converted to another commercial or residential plan designation.
 - E-2.2 A master development plan shall be approved by the City Council prior to annexation to the City. The master plan shall show how streets, sanitary sewer, water and stormwater services will be sized and located to serve the entire SWIO area. The master plan shall show how arterial, collector, and local street access will be provided to each lot if land division is proposed. The proposed master plan shall be referred to Marion County for comment prior to consideration by the City Council.
 - E-2.3 This SWIO master plan shall demonstrate how sites with the size and access characteristics identified in the EOA will be maintained, consistent with Policy Table 3 (not included).
- G-1. The City's goal is to manage growth in a balanced, orderly, and efficient manner, consistent with the City's coordinated population projection.
 - G-1.3 The City shall provide an interconnected street system to improve the efficiency of movement by providing direct linkages between origins and destinations.
 - G-1.4 The City shall assure the provision of major streets as shown in the TSP. The City shall hold development accountable for major streets within and abutting the development. In addition, the policy of the City is to emphasize development outward in successive steps and phases that avoid unnecessary gaps in the development and improvement of the major streets.
 - G-1.7 The City's policy is to accommodate industrial and commercial growth consistent with the 2001 2002 Woodburn.
 - G-1.10 Woodburn will ensure that land is efficiently used within the UGB by requiring master development plans for land within Nodal Overlay or Industrial

Overlay designations. Master plans shall address street connectivity and access, efficient provision of public facilities, and retention of large parcels for their intended purpose(s).

- H-5. Develop amendments to City land use standards and ordinances to reduce travel demand and promote use of modes of transportation other than the automobile.
 - H-5.1 Identify a range of potential Transportation Demand Management (TDM) strategies that can be used to improve the efficiency of the transportation system by shifting single-occupant vehicle trips to other modes and reducing automobile reliance at times of peak traffic volumes.
- H-7. Coordinate with the Oregon Department of Transportation (ODOT) to maintain highway and intersection capacity, safety, and functionality by:
 - (a) Developing and adopting performance standards; and
 - (b) Prohibiting comprehensive plan amendments that do not meet adopted performance standards.
 - H-7.1 The Woodburn TSP shall determine and implement an interchange capacity management plan within the UGB based on potential and substantial adverse impacts to state highway facilities.
 - (a) Peak hour trip generation estimates and numerical ceilings based on land uses permitted by the updated Woodburn Comprehensive Plan (2005) shall be determined for each designated sub-area.
 - (b) The City will coordinate with ODOT in monitoring trip generation impacts for each designated sub-area, considering the cumulative impacts of existing and new development.
 - (c) Transportation impact studies shall be required for subdivisions and planned developments, and for new commercial, industrial, public and multi-family residential development within designated sub-areas.
 - (d) Comprehensive Plan amendments that exceed the trip generation ceiling for a designated sub-area shall be prohibited.
 - (e) Comprehensive Plan amendments from Industrial to Commercial shall be prohibited, regardless of impact, within the SWIR Overlay.
 - (f) Woodburn shall provide ODOT with copies of transportation impact studies upon request, and as part of the Periodic Review process.

Environmental

Because the area is already significantly disturbed and committed to urbanization, the Woodburn Interchange EA determined that environmental consequences to natural resources were generally negligible and could be mitigated as necessary. The EA addressed potential natural and human impacts to hydrology and water quality, biology and wetlands, cultural resources, transportation, land use, socioeconomics, environmental justice, visual

quality, air quality, noise, and hazardous materials. Many of these resources also were analyzed for secondary, cumulative, and construction impacts.

Because the two build alternatives considered in the EA are the same in function and design and only differ in the direction in which Oregon 214/219 is widened, most of the environmental impacts are the same for both alternatives. The differences in environmental impacts between the build alternatives are mostly due to Alternative 1 (Widen Equal) widening to the south of Oregon 214/219 and Alternative 2 (Widen Equal) widening to the north of Oregon 214/219. The key distinguishing potential environmental impacts for all the alternatives are shown in Table 4-1.

The build alternatives would result in minor noise increases (1 to 4 decibels A-scale [dBA]) compared to the No Build Alternative. Although it is not a substantial increase, traffic noise impacts do occur and are expected to continue to occur in the future without sound walls. Four new sound walls are proposed to be built with the build alternatives. The project would have only minor impacts on air quality, visual landscape, and land use.

No resources of the historic built environment exist within the project area. However, the project area does contain archaeological potential beneath existing transportation corridors, utility corridors, and other buildings and structures. Potential impacts on subsurface resources would be addressed during interchange reconstruction. If cultural resources are discovered during construction, a qualified archaeologist would be brought to the area to properly document and assess the significance of the find. More detailed information about environmental issues can be found in the Woodburn interchange draft and revised EA documents. The No Build Alternative would not meet the project's purpose and need (improving the interchange design and safety).

TABLE 4-1Summary of Distinguishing Environmental Impacts
Woodburn Interchange Project IAMP

Environment	Alternative 1 Widen Equal	Alternative 2 Widen North	No Build Alternative
Wetlands Impact	Up to 0.01-acre (may not be jurisdictional)	Up to 0.01-acre (may not be jurisdictional)	
Waters of the U.S. Impact	Up to 0.01-acre	Up to 0.01-acre	
New Impervious Surface Area	2.97 acres (12,019 square meters)	2.58 acres (10,442 square meters)	
Average Travel Speed on Oregon 214/219	18 mph	18 mph	10 mph
Volume to Capacity Ratio (v/c) at:			
I-5 Southbound Ramp	0.58	0.58	>1.0
I-5 Northbound Ramp	0.63	0.63	>1.0
Woodland Avenue	0.54	0.54	0.96
Evergreen Road	0.73	0.73	>1.0

TABLE 4-1Summary of Distinguishing Environmental Impacts *Woodburn Interchange Project IAMP*

Environment	Alternative 1 Widen Equal	Alternative 2 Widen North	No Build Alternative
Oregon Way/Country Club Road	0.78	0.78	0.90
Boones Ferry/Settlemier Road	0.82	0.82	>1.0
Business Displacements	7-10 businesses	8-11 businesses	
Residential Displacements	1-3 residences	3-5 residences	Newson
Right-of-Way Required	11.1 acres required 56-59 parcels affected	10.9 acres required 55-58 parcels affected	
Cost of Right-of-Way	\$17.5 million	\$17.1 million	sia- Co
Cost to Construct	\$23.3 million (plus \$650,000 for Access Option)	\$23.4 million (plus \$650,000 for Access Option)	

mph = miles per hour

Existing Conditions and Forecast DeficienciesAnalysis

This IAMP is based on the operational, geometric, and safety analyses contained in the Woodburn Interchange EA. The traffic forecast upon which this IAMP is based assumes a land use plan that will develop at a rate consistent with the citywide population and employment growth rates. Without improvements to the interchange, traffic growth and safety concerns on Oregon 214 and I-5 will continue to grow. Appendix B includes figures depicting accident history, existing and forecast traffic volumes, proposed lane configurations, and queuing lengths (2025) for the proposed project alternatives. Figure 1 (see Section 1) shows the location and functional classifications of the roads.

Existing Geometric Conditions

The existing standard diamond interchange configuration of the Woodburn interchange is typical of an interchange designed to accommodate relatively low traffic volumes in a rural area. The current bridge structure design meets seismic requirements and has a sufficiency rating of 97 out of a possible 100, which represents a high-value asset. Oregon 214 functions with a travel through lane in each direction and continuous two-way left turn refuge. Over the Woodburn interchange, Oregon 214 has one lane in each direction and continuous side-by-side left **turn** lanes between the ramp terminal intersections.

On the east side of I-5, Oregon 214 is a three-lane section, with one through lane in each direction and a continuous two-way left turn lane widening to one through travel lane in each direction and side-by-side left turn lanes across the overpass. A right turn lane to the northbound on-ramp to I-5 has been recently added to facilitate operational improvements. Oregon 219 on the west side of I-5 is a four-lane section between the freeway ramps and Woodland Avenue, with two lanes in each direction, and a raised median on either side of the Oregon 219/Old Arney Road intersection. Right-in/right-out turns are allowed at Old Arney Road on the north side of the highway.

Deficiencies noted by the ODOT refinement planning process in 2000 include the following:

- Vertical grades across the structure are 5 percent and 5.5 percent, which are greater than the desired 3 percent. This causes truck traffic to move at slower than normal speeds to counteract tipping motions when turning from or onto the ramps.
- Even though bicycle lanes have been added at the Oregon 214 approach to the northbound ramps, the existing shoulder width/bikeway of 0 feet to 4 feet is inadequate to meet standards of 6 feet next to Oregon 214/219 and 6 feet across the overpass.
- Existing access spacing from the ramp end to the first unsignalized intersection is 550 feet, and 1,105 feet to a signalized intersection. This does not meet current minimum spacing standards of 1,320 feet to the first intersection.

- There are no sidewalks on the south side of the overpass, creating circulation problems for pedestrians.
- Utility power poles are placed in the sidewalks and do not meet standards of the federal Americans with Disabilities Act (ADA). Minimum sidewalk clearance requirements are 3 feet according to the ADA and 4 feet according to ODOT standards.
- Northbound and southbound existing ramp lengths do not meet current safety requirements for deceleration, stopping, and storage (Table 5-1).

TABLE 5-1 Ramp Length Deficiencies Woodburn Interchange Project IAMP

Ramp	Entrance	Exit
NB Existing	1,915 feet	1,083 feet
NB Required	1,980 feet	1,735 feet
SB Existing	1,100 feet	1,740 feet
SB Required	1,680 feet	1,830 feet

Safety Analysis

The crash analysis performed using the latest 5 years of crash statistics (1997-2001) did not identify any patterns among crashes at any intersection in the Woodburn Interchange Project study area that indicate a geometric or operational deficiency. In 2000, both the I-5 southbound and northbound ramp intersections were modified as part of the mitigation for the Woodburn Company Stores. ODOT will monitor these intersections to evaluate any change in crash histories as a result of the modifications. The 2003 operational analysis found that critical ramp movements are far in excess of a 1.0 V/C ratio. The critical movements at failure are leading to safety concerns related to traffic backing up into the ramp deceleration zone and even spilling back onto the shoulder and travel lanes during special events in the Woodburn area. These backups pose extreme safety risks because resulting accidents involve collisions between slow-moving or stopped vehicles and vehicles traveling at high speeds.

Crash rates for intersections are reported in crashes per million entering vehicles (MEV). In addition to patterns among crashes, such as rear-end or side-swipe collisions, a crash rate greater than one may indicate the need for further analysis. None of the Oregon 214 intersections in the study area had a crash rate exceeding one, even though several intersections experienced a relatively high number of crashes. Even in the absence of clear patterns among the crashes and crash rates below one, it is worth noting that over 50 percent of all of the crashes resulted in injury. A summary of the intersection crash data is provided in Table 5-2, which includes crash rate, severity, and type of crashes over the 5-year analysis period at the study intersections.

TABL5-2 Intersection Crash History: January 1997 to December 2001 Woodburn Interchange Project IAMP

				C	ollision Ty _l	pe		Sev	erity
Intersection	# of Crashes	Crashes per MEV	Rear End	Angle	Turning	Head On	Other	Injury	PDO
Oregon 219/ Woodland Ave.	4	0.19	0	0	4	0	0	1	3
Oregon 219/ Arney Road	5	0.21	0	0	5	0	0	4	1
Oregon 214/ I-5 SB Ramp	23	0.67	5	0	16	0	2	12	11
Oregon 214/ I-5 NB Ramp	24	0.61	18	1	4	0	1	14	10
Oregon 214/ Lawson	1	0.02	0	0	1	0	0	1	0
Oregon 214/ Evergreen Road	17	0.48	9	2	5	0	1	10	7
Oregon 214/ Oregon Way/ Country Club	21	0.64	12	3	6	0	0	11	10
Oregon 214/ Cascade	2	0.07	1	0	1	0	0	0	2

MEV - Million Entering Vehicles

PDO – Property Damage Only

SB - Southbound

NB - Northbound

No fatalities were reported at the study intersections during the study period. A brief synopsis of the detailed analysis for intersections with the highest number of crashes is discussed below.

Oregon 214/I-5 Southbound Ramp

Twenty-three crashes were recorded during the 5-year study period. This intersection was improved in 2000. Of the 15 crashes recorded in 2000 and 2001, eight involved turning collisions on the westbound approach. The left turns on the east and west approaches are controlled by permitted phasing.

Oregon 214/I-5 Northbound Ramp

During the 5-year study period, 24 crashes were reported at this intersection. This intersection was also improved in 2000. Of the eight reported crashes in 2000 and 2001, the majority (seven) were rear-end collisions and these occurred on all of the intersection approaches. No pattern that is indicative of an existing safety deficiency at the intersection was established among the crashes.

Oregon 214/Oregon Way/Country Club Road

Of the 21 reported crashes at this intersection, the majority (12) were rear-end collisions on the east and west approaches, which is fairly common at a signalized intersection. The remaining crashes involved turning movement collisions and angle crashes. No pattern was apparent from the crash data history that is indicative of an existing safety deficiency at the intersection.

Safety Priority Index System Locations

ODOT has developed a SPIS, generated annually and based on the most recently available 3 years of crash data, to identify hazardous locations along state highways. Highway locations within the highest 10 percent SPIS score are evaluated for potential safety improvements. Four roadway segments within the Woodburn Interchange Project study corridor on Oregon 214/219 fall within the top 10 percent of ODOT's SPIS rankings of the worst crash locations in the state. These highway segments are summarized in Table 5-3. Of the highway segments identified in the top 10 percent SPIS group, four of the study intersections are located within these segments. These intersections include the north and southbound I-5 ramp terminals, the Oregon 219 intersection with Old Arney Road, and the Oregon 214 intersection with Lawson Avenue. Three other study intersections are located close to the SPIS segments, including Evergreen Road, Oregon Way/Country Club Road, and Cascade Drive.

TABLE 5-3
ODOT 2001 Woodburn Interchange Project Study Corridor Top 10 Percent SPIS Segments
Woodburn Interchange Project IAMP

Route	Beginning Milepost	Ending Milepost	Length	1999 ADT	Crash	SPIS
OR-214	36.63	36.79	0.16	10,800	25	55.06
OR-214	36.81	36.91	0.10	19,200	23	46.55
OR-214	36.84	36.95	0.11	19,200	24	48.69
OR-214	37.03	37.12	0.09	19,200	27	52.03

ADT Average daily traffic.

SPIS Safety Priority Index System

Previous Safety Analysis

The results of the safety analysis done in 1999 (prior to the opening of the Woodburn Company Stores complex) show:

<u>I-5 mainline and ramps (MP 271.4 to 272.4)</u> – There are no significant hot spots or high-crash sites.

- Crash severity of 25 total crashes recorded, there was 1 fatality (involving a pedestrian) and 11 injuries.
- Crash type 10 are rear-end crashes, 6 are overtaking or passing crashes, and 4 crashes involved hitting a fixed object in the roadside.

- Crash location about 50 percent of all crashes happened on the interchange ramps.
- Crash rate the crash rate is 0.51 compared to a statewide average of 0.30 for suburban interstate highways.

<u>Oregon 214, I-5 to Evergreen (MP 36.5 to 37.2)</u> - There are 10 locations in the top 10 percent of the state listing for comparable urban highway segments.

- Crash severity of 75 total crashes recorded, there was 1 fatality (involving a pedestrian) and 65 injuries.
- Crash type 33 crashes happened while turning, 29 are rear-end with the remaining 13 a combination of categories.
 - Crash location 40 of the crashes occurred at intersections (the two worst sites are the accesses between Lawson Avenue and Evergreen Road).
- Crash rate the crash rate is 5.39, more than twice the statewide average of 2.14 for urban arterials.

Traffic Operations Analysis

The term "operation" refers to the quality of traffic flow. Travel demands are represented as projected design hour traffic volumes. These volumes are the basis for analysis of traffic impacts. The peak-hour volumes were analyzed using traffic "volume" demand to facility lane "capacity" (V/C) as a numeric indicator of facility performance. The V/C ratio is the degree of saturation of an intersection. As the numeric ratio approaches 1.0, congestion increases. Likewise, the closer the number is to 0.0, the more free-flowing the traffic functions. Although it is possible to achieve numbers higher than 1.0 mathematically, there is no practical meaning other than failure, which is characterized by motorists sitting through several traffic signal cycles and making little progress during peak demand periods.

Signalized intersections and unsignalized intersections have different measures of level of service. For signalized and four-way stop intersections, level of service is based on the average delay experienced by all vehicles entering the intersection. For two-way stop intersections, level of service is based on the delay experienced by the worse movement, which is usually the left-turn movement on the stopped approach. ODOT has specific mobility standards for the state facilities within the city of Woodburn based on the facility's classification and travel speed.

Existing and Future No Build Operational Conditions

In 1999, travel volumes on I-5 through the interchange were 73,100 Average Daily Traffic (ADT). Ramp volumes varied from a high of 6,300 ADT to a low of 4,000 ADT. In July 1999, manual counts recorded 18,900 ADT on Oregon 214 east of the interchange, and 15,000 ADT west of I-5. In 2004, ADT just south of the interchange was 85,400 vehicles and increases to nearly 115,000 vehicles just south of Wilsonville.

An operational analysis was performed for nine study area intersections along Oregon 214/219 in the study corridor. Under current conditions three of the nine intersections,

including both north- and southbound ramp terminals, fail to meet designated mobility standards. Without improvement, future 2025 volumes indicate that seven of the nine study intersections will fail to meet the mobility standard and the ramp terminal intersections will exceed capacity. This level of congestion represents significant traffic delay on 214/219, with impacts expanding beyond the immediate study area. This congestion also increases the likelihood for traffic queues on the ramp terminals to back up from each off-ramp signal all the way down the off-ramps into the freeway shoulder and travel lanes. Table 5-4 presents the OHP mobility standards, and 2003 observed and forecast 2025 V/C ratios for study area intersections.

TABLE 5-4Existing and Future Design Hour Volume to Capacity Ratios Woodburn Interchange Project IAMP

Location	Traffic Control	V/C Mobility Standard	2003	2025 No Build
Woodland Avenue	Signal	0.80	0.54	0.96
Old Arney Road	Stop	0.80	0.10	0.19
I-5 Southbound Ramp	Signal	0.70	0.83	>1.0
I-5 Northbound Ramp	Signal	0.70	0.81	>1.0
Lawson Avenue	Stop	0.80	0.28	0.84
Evergreen Road	Signal	0.80	0.76	>1.0
Oregon Way/Country Club	Signal	0.80	0.82	0.90
Cascade Way	Stop	0.80	0.39	0.36
Astor Way	Stop	0.80	0.43	>1.0
Boones Ferry/Settlemier	Signal	0.80	0.92	>1.0

Notes:

All volume-to-capacity ratios are shown as average intersection conditions and may include critical movements that do not meet standards.

The Cascade Way intersection is stop-controlled. Local traffic will reroute critical northbound left turns to Evergreen Road, a signalized intersection, during peak periods.

Old Arney Road is right-in and right-out only.

The Boones Ferry/Settlemier intersection is outside of the project construction limits.

Currently, the average travel speed through the corridor is 16 miles per hour (mph). The average travel speed will decrease to 10 mph as a result of increased congestion in the No Build scenario. Under these conditions, emergency service providers noted that this type of congestion could impede response times, especially for locations east of the freeway.

Summary of Existing and Future Deficiencies

Analysis of existing and future No Build conditions revealed geometric, safety and operational deficiencies throughout the study area. Appendix B includes diagrams

depicting accident history, and existing and future traffic volumes. Key deficiencies in the corridor include:

- Access spacing standards between ramp terminals and street intersections do not meet the 1,320 feet spacing standard. East of I-5, travel on Oregon 214 is also interrupted by closely spaced intersections and driveways to businesses.
- Bicycle and pedestrian facilities are incomplete and/or inadequate.
- Northbound and southbound existing ramp lengths do not meet current safety requirements for deceleration, stopping, and storage.
- Vertical grades across the overpass are greater than the desired grades
- Safety improvements to the ramp terminals have been made, but there are four top 10 percent SPIS segment locations in the study corridor.

Traffic operations at the interchange ramps currently exceed mobility standards. Future operations demonstrate failures throughout (and beyond) the study corridor, from Woodland Avenue to Boones Ferry Road.

Alternatives Analysis

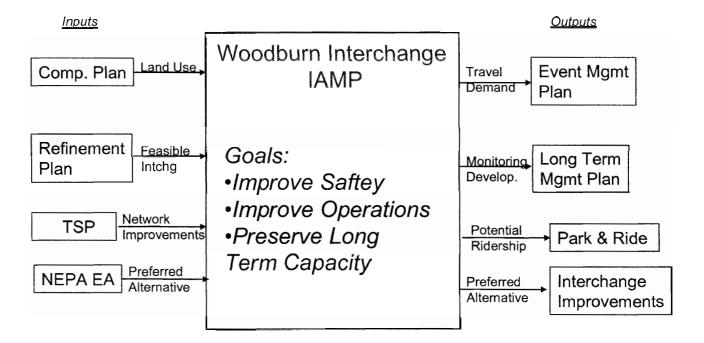
Introduction

The purpose of this section of the IAMP is to document the Alternatives Analysis process and results of the IAMP. This process was extensive from a planning process, public involvement, and technical analysis perspective. The organization of this section includes the following topics:

- Process Overview Review of the Woodburn Interchange Refinement Plan, Woodburn Comprehensive Plan, Woodburn TSP and Comprehensive Plan, long-term solution set, and Woodburn Interchange Environmental Assessment.
 - EA Management Structure and Decision Process The EA project defined roles and responsibilities for decision making prior to initiating the study. The decision hierarchy culminated in ODOT recommending a decision to FHWA regarding the selection of a preferred alternative for implementation.
- Definition of Transportation Problem The problem to be solved was defined during the Refinement Plan and updated for the NEPA process.
- **Development of Evaluation Framework** The evaluation framework consisted of threshold criteria and evaluation criteria.
- Formulation of Alternatives The formulation of alternatives involved consideration of interchange layout alternatives, Oregon 214 layout alternatives, and local access/circulation options.
- Threshold Screening of Alternatives Threshold screening consisted of eliminating infeasible and unreasonable alternatives/options.
- Evaluation of Feasible Alternatives The method for evaluating alternatives consisted of developing technical ratings to the evaluation criteria, applying the relative weights for each of the criteria, and determining the alternative ranking.
- Selection of Alternatives for Detailed Evaluation Through a process of public comment, stakeholders recommend alternatives for detailed evaluation in the NEPA process, with approval of the Project Management Team (PMT).
- NEPA Evaluation For the selected alternatives, a more detailed safety and operational
 analysis was performed using the land use scenario providing the most conservative
 capacity requirements. The evaluation examined existing conditions, growth rates,
 progression and queuing analysis, access management, and local circulation comparing
 the No Build, Widen North, and Widen Equal alternatives.

Process Overview

The Woodburn Interchange Improvement Project has come about as a result of several planning processes executed in collaboration between the City of Woodburn, ODOT, Marion County and FHWA. The IAMP is the culmination of a multi-pronged project approach. The following diagram illustrates the inter-relationships of the IAMP with other projects:



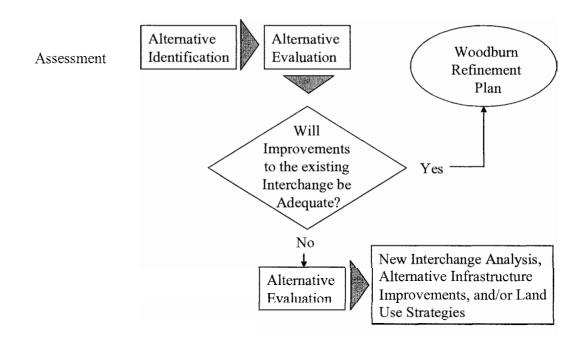
Highway 214 Study

The City of Woodburn conducted a technical study to evaluate the existing conditions and future needs of Highway 214 east of the interchange but not including the interchange. Without the interchange, the full implications of the interchange improvements were not evaluated. As part of the process, widen north, widen equal, and widen south were evaluated. Outcome: The study determined the root problem of local congestion was the interchange rather than Highway 214 capacity restriction. Widening south alternative was determined to be infeasible politically due to the cost of ROW. The number of displacements existing property improvements would be greater than the other alternatives, resulting in higher relative costs.

Refinement Plan

The general approach for the refinement planning process included a "decision point" to determine the long-term capacity of the existing interchange. This was concluded prior to the final identification and evaluation of alternatives because ODOT is required by policy to optimize investment in existing facilities before expanding the transportation system. If the existing interchange was proven unable to meet future demand, then study of a second interchange access or some alternative infrastructure service or land use strategy would

have been initiated and completed simultaneously with the Refinement Plan for the existing interchange. The public involvement process consisted of presenting information to focus groups representing expanded City and County staff, Public and Emergency Services, General Citizens, Representative Citizens, Elected Officials and one-on-one interviews with the Silverton Mayor, Mt. Angel Mayor, Woodburn Schools Superintendent, Woodburn City Councilor, and representatives from Concerned Business Owners on Highway 214. The Refinement Plan is depicted in the following diagram:



The Refinement Plan consisted of the following tasks:

- Scoping and Inventory Review of all existing plans, policies, and study documentation related to the existing interchange to determine data collection needs. Outcome: There have been numerous studies performed since the early 1980s with a technical analysis showing Oregon 214 would require five lanes and traffic signals at interchange ramps by 1988. Studies of one type or another were initiated about every other year as the interchange vicinity and growth in the Woodburn area continued to put pressure on the low volume, rural interchange. Due to funding limitations ODOT and the City of Woodburn did not implement interchange improvements to keep up with increasing demands. An environmental scan including literature search and site recon 'wind shield' survey was performed to determine vicinity constraints.
- **Deficiency Assessment** Analysis and validation of existing operating and geometric conditions; development of future year traffic volumes; and analysis of operating conditions assuming the existing geometric conditions remained in place. *Outcome: Vertical alignment and ramps are typical of 1960s and 70s 'rural interchange' design, which is substandard for existing volumes and future needs. There is inadequate capacity on Oregon 214, causing delay and traffic spill back from the ramps onto I-5 mainline. The accident rate along*

Oregon 214 in the vicinity of the interchange is indicative of areas with high volumes and numerous accesses. Bike and pedestrian facilities are inadequate to provide safe travel. Freight movement is impaired by slower travel speeds through the interchange due to substandard alignments.

- Alternative Identification Identification of a range of facility management and improvement alternatives and screening to select the most feasible alternatives for evaluation. Improvements considered a full range of solutions; highway network improvements, alternative modes, freight mobility, TDM, intelligent transportation systems, and land use. Outcome: System to Service interchanges in an urban setting connecting to a primary highway or major street were determined to be the appropriate interchange family. All other forms of interchanges were dismissed from consideration on the basis of form inconsistency with the function of the highway system. For example, it would not be appropriate to provide high-speed, free-flow operations at the Woodburn interchange vicinity and a low-speed, rural interchange is not capable of handling current travel demand. Other alternatives considered and dismissed included a second interchange at Butteville Road and St. Louis Road, split diamond, single point diamond, Parclo B, and folded diamond.
- Alternative Evaluation Evaluation of operational performance and geometric feasibility of the selected alternatives using the future traffic volumes for year 2020. Alternatives were evaluated on a comparative basis using transportation mobility, progression, and mobility as well as impacts and ease of implementation including costs of ROW and construction. Outcome: Three feasible alternatives were evaluated including the diamond, tight urban diamond, and partial cloverleaf A type interchanges. The tight urban diamond did not offer any advantages compared to others from a transportation performance perspective, impact footprint, and ease of implementation.
- Refinement Plan Preparation Preparation of interchange refinement plan including summary of previous steps, investment requirements, and recommendations for adoption. Outcome: The results of the Plan were presented to the OTC for guidance on the formulation of alternatives to be recommended for the NEPA process. It was determined that full standards would not be in the interests of ODOT or the City of Woodburn. ODOT staff was directed to pursue the diamond and partial cloverleaf A in combination with resolving local access and circulation issues existing in the interchange vicinity. Based on the findings of the Refinement Plan, a collaborative methodology was developed to proceed to the NEPA process through to implementation should the NEPA process result in a build alternative.

Woodburn TSP and Comprehensive Plan

The City of Woodburn Transportation System Plan update served as one element of the City's comprehensive plan periodic review process. During development of the 1996 TSP, the Woodburn Transportation Task Force, in concert with the City of Woodburn staff, developed five goals and associated policies to guide development and implementation of the TSP. As part of the 2005 plan update, a Technical Advisory Committee (TAC) was established to provide direction throughout the project and endorsed continued use of the established goals and policies with minor revisions to guide this update. The TAC considered the impacts of three future land use alternatives before selecting three system alternatives for the TSP to address deficiencies identified as part of the existing conditions and future No Build analyses. Alternative 1 primarily includes those improvements as part

of the Woodburn Interchange EA, as well as those improvements anticipated as part of ongoing land use applications. Alternative 2 included elements of Alternative 1 and added improvements to other arterials. Alternative 3 is a policy-driven alternative that was developed to determine improvements located outside of the UGB that would benefit the overall transportation system (that is, State, County and City), complementing Alternatives 1 and 2. These projects are of priority to the City but need to be planned for and incorporated into the Marion County TSP. Roadway facilities shown outside the UGB are recommended, not planned facilities in the TSP, and are logical extensions and improvements to the planned roadway network.

Recommendations in the TSP acknowledge the critical importance of the I-5/Woodburn interchange and associated Oregon 214/219 corridor improvements. The TSP assumptions are consistent with recommendations contained in the environmental assessment described below. The system plan also recognizes the importance of complementary arterial and collector facilities to provide more efficient circulation for both east/west and north-south travel demands. Ultimately, this system will provide better balance for access to the interchange from both east and west sides of I-5. In addition, formulation of the Interchange Management Area Overlay District ordinance was initiated as part of the TSP update process recognizing that interchange capacity preservation is an essential element of the City's economic development strategy. The ordinance, developed with considerable City input and thorough review by both the city council and planning commission, establishes a vehicle trip budget for the overlay district consistent with the City's population and employment forecast. The TSP will guide management and development of appropriate transportation facilities in Woodburn, incorporating the community's vision, while remaining consistent with state, regional, and local plans. The plan provides the necessary elements to be adopted as the transportation element of the City's comprehensive plan.

Other Long-Term Solutions

The long-term solution set consists of a multifaceted approach to improve mobility in the Woodburn interchange vicinity. The interchange improvements would be enhanced through other complementary proposed solutions:

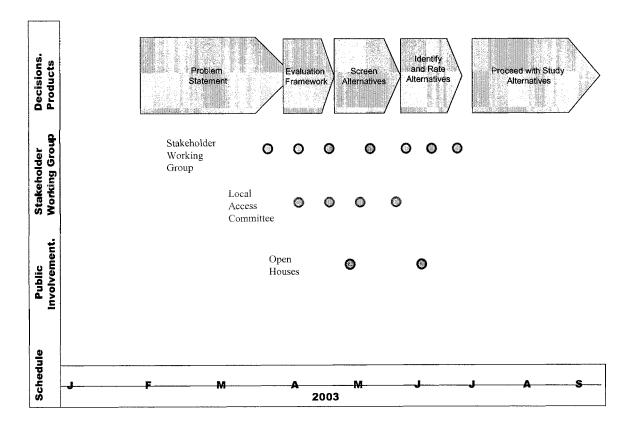
- Events Management Plan This plan catalogues the special events that occur in the Woodburn and North Marion County area, evaluates travel demand, and proposes a system management plan tailored to each event with agency coordination plan.
- Intergovernmental Agreement This agreement is between ODOT and the City of Woodburn and provides long-term management measures for state facilities within the City (see Appendix E).
- Interchange Park-and-Ride ODOT will pursue development and improvement of a
 park-and-ride on property acquired as a result of construction of the westbound to
 northbound auxiliary lane on Oregon 214 and other property that became available. The
 park-and-ride will lessen the long-term demand on I-5. Intercity transit service will be
 sought to connect Woodburn to Salem, Wilsonville, Washington County, and other
 locations as opportunities arise.

Environmental Assessment

The general approach was developed to build on the previous work of the Refinement Plan and coordinate with other efforts underway consistent with the NEPA process and incorporating community values in the solutions to be evaluated. The public involvement process consisted of information kiosks placed in prominent community locations, website, Open Houses, stakeholder working group, local access and circulation committee, and PMT consisting of technical planning and engineering representatives from City of Woodburn, Marion County, ODOT, and FHWA. The structure of the process followed the following steps:

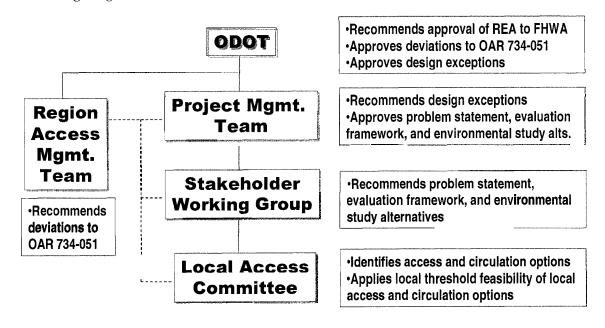
- **Problem Definition** update and reformat the information from the Refinement Plan.
- Evaluation Framework threshold and evaluation criteria were developed to select
 alternatives for evaluation in the NEPA process. Threshold criteria were developed to
 determine feasible alternatives from infeasible alternatives on the basis of sound
 engineering principles and agency policies and standards. The evaluation criteria were
 developed on the basis of the project goals developed for the project by SWG and
 approved by the PMT.
- Identification of Alternatives package interchange layouts, Oregon 214 widening alternatives, and local access and circulation options. Packages were formulated to develop an 'apples to apples' comparison. Validation of previous alternatives considered and dismissed.
- Threshold Screening application of threshold screening criteria to determine feasible and non-feasible alternatives. Non-feasible solutions were dismissed from further consideration.
- Evaluate Alternatives using the evaluation criteria, determine the technical ratings to compare alternatives (apples to apples) on a quantitative or scaled basis. Using the results of the highs and lows for each evaluation criteria category, members of the SWG were asked to apply relative weights to each category. There was an opportunity to view the results and reapply relative weights.
- Selection of NEPA Study Alternatives with the application of the relative weights, the
 alternatives were ranked and NEPA study alternatives were recommended by the SWG
 and approved by the PMT.

The general approach, key public involvement process, and schedule used to perform the alternative analysis for the Woodburn Interchange EA is shown in the following diagram:



EA Management Structure and Decision Process

ODOT developed a management structure for the Woodburn Interchange EA project to provide a framework for identification and analysis of project alternatives, as shown in the following diagram:



The management structure consists of the following groups:

- ODOT The agency recommends approval of the Revised EA (after public hearing comment period of EA) to FHWA. The agency is responsible to approve deviations to the Access Management Policy as defined in OAR 734-051 and design exceptions from ODOT's Highway Design Manual. The Agency's decision makers include: Chief Highway Engineer, Region 2 Manager, and Technical Services Engineer.
- Project Management Team Recommends design exceptions for approval. PMT approves the problem statement, evaluation framework, and environmental study alternatives.
- **Region Access Management Team** Recommends access management deviations to the ODOT Region 2 Manager in compliance with OAR 734-051.
 - **Stakeholder Working Group** Recommended the problem statement, evaluation framework, and environmental study alternatives.
- Local Access Committee (LAC) Identified access and circulation options. Applied local threshold feasibility criteria to local access and circulation options in the formulation of alternative packages to SWG.

Definition of Transportation Problem

A detailed description of the problem definition was provided in Section 2 of this IAMP document. A summary of the problem consists of the following points:

- The interchange was designed in the late 1960s to handle traffic for a small rural town.
- Over the last 30 years, Woodburn and the area around the interchange have developed and now attract high volumes of local, regional, and truck traffic.
- Oregon 214 gets very congested and it can be difficult to get to I-5 from surrounding communities.
- The road congestion leads to unsafe situations with traffic backing up on the freeway, and makes it hard to get to local businesses.

This is a priority project. The City, County, and ODOT completed the Refinement Plan. The Mid-Willamette Valley Area Commission on Transportation has highlighted the project as one of their top two priorities. The City and ODOT have acquired property and constructed the westbound to northbound right turn lane in 2004, and anticipate a future park-and-ride in the northeast quadrant of the interchange.

Development of Evaluation Framework

The evaluation framework is a tool to assist in evaluating alternatives. The framework is divided into two main parts:

• Threshold Criteria: These criteria are "pass/fail" thresholds used to screen out non-feasible alternatives (see Table 6-1). The thresholds represent minimum conditions of

acceptance encompassing federal, state, and local parameters. Alternatives that do not meet the threshold criteria are dismissed from further consideration. Feasible solutions are refined further to account for local site conditions as well as to minimize adverse impacts. These thresholds will remain as considerations throughout the project; if data analysis completed in later phases of the alternative evaluation indicates that an alternative does not meet a threshold criterion, it can be eliminated from further consideration at that point.

• **Evaluation Criteria**: These criteria are used to evaluate the performance of feasible alternatives against a broad range of desired project characteristics (see Table 6-2). These characteristics represent the full range of stakeholder values. Evaluation criteria within each of the broad categories were selected to most effectively differentiate among potential alternative solutions for this project location; the evaluation criteria do not include the full universe of potential criteria.

The performance of each of the feasible alternatives (those meeting the threshold criteria) was evaluated by technical staff for each of the evaluation criteria. The methods used to determine the technical ratings are included in Appendix G. The SWG set a weighting factor for each evaluation criterion to establish its relative importance. A total score (the sum of all the performance ratings times weighting factors) was calculated for each feasible alternative, and an associated ranking of alternatives prepared. The higher the score, the more successfully the alternative matches the SWG values for the project. The ranking was used by the SWG in developing its recommendation of alternatives to be evaluated further as part of the environmental documentation process.

TABLE 6-1Threshold Criteria

Recommended Threshold Criteria	Recommended Measure
F1. FHWA Policy 1F - 20-year Design Life (2025), OHP Mobility Standard	Does the alternative accommodate the 20-year projected traffic demand on the affected system, in its ultimate configuration, by meeting the mobility standards?
F2. FHWA Interstate Access, Policy 4 – meets design and access requirements for an interchange	Do the freeway ramps connect to public roads and provide traffic movements in all directions?
F3. FHWA Interstate Access, Policy 5 – Local Plan Consistency, – transportation improvements are consistent with land use and transportation plans.	A. Does the interchange alternative conform to County and City plans or reasonably stand a good chance of plan amendment?
	B. Does the interchange alternative conform to statewide goals and transportation plans or reasonably stand a good chance of plan amendment?
F4. FHWA Interstate Access, Policy 7 – local system improvements	Does the improvement package address local system needs necessary to support interchange investment?
S1. State Highway Freight System, OHP Policy 1C – provides for safe movement of trucks.	Does the alternative improve safe movement of freight on or to/from the interstate?

TABLE 6-1Threshold Criteria

Recommended Threshold Criteria	Recommended Measure
S2. Lifeline Route, OHP Policy 1E – provides for emergency traffic	Does the alternative satisfy defense design requirement on the interstate (vertical clearance under the overcrossing)?
S3. OHP Major Improvements, OHP Policy 1G	Does the alternative provide improvement according to the major investment policy hierarchy?
	1. Protect the existing system
	Improve efficiency and capacity of existing highway facilities
	3. Add capacity to the existing system
	4. Add new facilities to the system
S4. OHP Access Management Standards, Appendix C	Does the distance of public roads and private accesses from interchange terminal meet policy requirements or reasonably justify deviation?
L1. Direct one to one comparison.	Does this alternative have relatively the same impacts or a distinct advantage over another alternative (e.g., lower costs, lower right-of-way impacts)?

¹ The FHWA Interstate Access Policy is derived from Section 111 of Title 23 USC. This essentially establishes the policy for amending or adding new points of access to the interstate system. All elements of the policy will apply.

TABLE 6-2 Evaluation Criteria

Recommended Categories	Recommended Performance Measure	Comments
A. Safety		
A1. Truck safety and operations	High, medium, low ratings for functional operations and safety.	Quality of truck turning movements at ramp terminals as a function of speed, turning radius, etc.
A2. Pedestrian safety and operations	High, medium, low ratings for functional operations and safety.	Route continuity, quality of design to meet Americans with Disabilities Act, number of conflicting movements, etc.
A3. Bike safety and operations	High, medium, low ratings for functional operations and safety.	Route continuity, number of conflicting movements.
A4. Auto safety and operations	High, medium, low ratings for functional operations and safety.	Number of conflicting movements.
B. Access and Traffic Flow		
B1. Mobility – Traffic flow at intersections	Volume to Capacity Ratio	Report volume-to-capacity results for two intersections; one state/regional and one regional/local to indicate travel performance (e.g., NB ramp terminal and Evergreen).

TABLE 6-2 Evaluation Criteria

Recommended Categories	Recommended Performance Measure	Comments
B2. Travel time delay – Traffic Flow along Highway 214	Cumulative travel time of ten movements weighted by volume, sum of interchange intersection system delay in seconds	Report time from Synchro analysis. Includes social/ economic attribute of access to neighboring communities, special events, and east/west movement of agricultural goods and services.
B3a. Economic – accessibility change to businesses	Out of direction travel to access sensitive businesses (gas, food, and lodging).	Some consider access to more important than access from destination business.
B3b. Economic – accessibility change to businesses	High, medium, low of out-of-direction travel for all businesses	Travel distance increase out of out-of- direction travel due to access change. Improved safety is covered under transportation operations category.
C. Social/Economics		
C1. Noise	# of potential receptors impacted	Not likely to differentiate among build alternatives.
C2. Land use – conversion to transportation	A. Area converted to transportation use by type of loss	Use of common metrics will be determined by the technical team rating
	B. Value in dollars	the alternatives.
C3. Economic – displacements	A. # of displacements	Number of jobs is less important that
	B. # of jobs	unique displacements.
D. Aesthetics		
D1. Aesthetics – gateway creation	High, medium, low	Gateway identity, landscaping, surface widths, surface texture and color, materials selection, etc.
		Aesthetic features are comprised of elements of design; for example, color, texture, form, shape, balance.
E. Implementation		
E1. Funding – Project Construction Costs	Total construction cost in dollars (includes order of magnitude estimates for construction, and mitigation costs.)	City and County CIP include two line items; one for construction costs and one for ROW and Engineering.
E2. Funding – Right-of-way and Engineering Costs	Total estimated costs to acquire right- of-way and perform engineering, permitting, and construction contract management.	City and County CIP include two line items; one for construction costs and one for R/W and Engineering.
E3. Coordination – Constructibility	High, medium, and low	Factors to include estimated number of construction seasons, maintaining I-5 traffic flow and access to regional events. Includes impact to commerce during construction.

TABLE 6-2 Evaluation Criteria

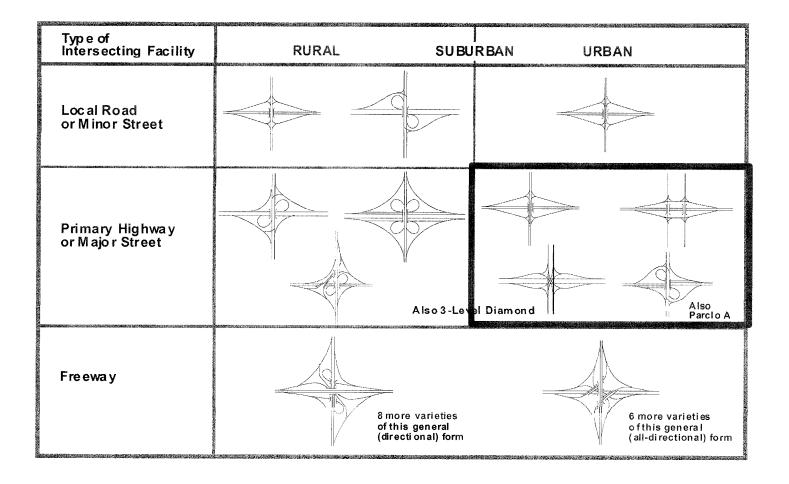
Recommended Categories	Recommended Performance Measure	Comments
F. Environment		
F1. Air quality	Number of intersections within study area exceeding volume-to-capacity ratio of 0.9	Not likely to differentiate among build alternatives.
F2. Water quality	Total square feet of impervious surface	
F3. Biology	High, medium, and low based on the quantity and quality of impacts, # of species, or acres of affected habitat	Not likely to differentiate among build alternatives.
F4. Wetlands	Acres of affected critical habitat	Not likely to differentiate among build alternatives.
F5. Hazardous Materials	# of parcels with known contamination	

Formulation of Alternatives

The formulation of alternatives consisted of the interchange layouts, Oregon 214 widening alternatives, and local access and circulation options. The interchange layouts were determined during the Interchange Refinement Plan. The widening of Oregon 214 alternatives were determined during the Highway 214 Study and the Woodburn Interchange EA process defined the local access and circulation options through the use of the Region Access Manager (RAM) and the LAC. During the Woodburn Interchange EA process, each of the previous steps (interchange layout solutions and widening alternatives) were summarized, presented to the SWG for validation, presented at an Open House for comment, SWG (with public comment) for recommendation, and for PMT for approval.

Interchange Layouts

Through the years of highway design and use of modern vehicles, engineers and planners have found that by knowing the function of intersecting facilities along with using a structured system hierarchy, the correct form can be determined. There are a limited number of interchange layout concepts and combinations. The practice of interchange design begins with a practice referred to as Functional Planning. Functional Planning combines the use of proven geometric concepts with travel demand to determine an engineered single line sketch with scaled lengths for ramps and curves. The family of interchange concepts determined applicable during the Refinement Plan are shown in the following diagrams.



The rational for selection of the concept solution family is based on I-5 functioning as a fully access controlled, free flow facility and Oregon 214 functioning as a major highway in an urban setting. Table 6-3 indicates a range of interchange layouts considered.

TABLE 6-3 Interchange Concept

Concept	Advantages
Split Interchange – uses parallel arterials for half diamond ramp pairs with connecting frontage roads between to connect ramp pairs.	Works well in larger urban areas with well-defined network grid
3 Level Diamond – uses two pair of arterials for ramps to/from both mainline and intersecting facility.	Works well in extremely large urban areas and provides very high capacity
Partial Cloverleaf B – uses loop ramps beyond intersection facility to facilitate departure from freeway	Works well for the opposite skew of I-5/Oregon 214 and extremely high volume freeway or mainline facility
Tight Diamond – reduces right-of-way impact by compressing ramp spacing and storing left turning movements external to signals	Works well with 90 degree skew in urban environment
Single Point Diamond – reduces right-of-way impact by compressing ramp spacing by funneling ramp pair through a single traffic signal	Works well with 90 degree skew in urban environment with closely spaced high volume signalized intersections
Folded Diamond – uses combination of Parclo A or B loop and eliminates diamond ramp in opposite quadrant.	Works well when one or two quadrants is constrained by built or natural environment from development of roadway
Standard Diamond – uses single ramp in each quadrant with full movements at ramp terminals	Works well with rural and moderately urban traffic volumes
Parclo A – uses loops to eliminate left turns from crossing facility with diamond ramps at all four quadrants.	Works well in urban setting with moderate urban traffic volumes and skewed roadway

Note: The auxiliary lane configuration is slightly different for each layout to meet the future travel demand.

Widening Alternatives

The proposed standard typical section is consistent for each widening configuration. The widening alternatives are as shown in Table 6-4.

TABLE 6-4 Oregon 214 Widening Alternative

Widening Alternative	Advantages
North Widening (NW) – uses existing south curb line with limited additional right-of-way to the south to accommodate bike/pedestrian facilities.	Supported locally by property owners on the south side of Oregon 214.
Equal Widening (EW) – uses approximate centerline and impacts property on each side of the highway equally.	Supported locally by property owners on the north side of Oregon 214.
South Widening (SW) – uses existing north curb line with limited additional right-of-way to the north to accommodate bike/pedestrian facilities.	No support locally due to the highest property impacts.

Local Access and Circulation Options

The RAM reviewed the existing project conditions and examined the potential to move toward full compliance with OAR 734-051 and developed parameters for the LAC as givens and options for choices the LAC could discuss.

- Things to think about
 - Diamond or Parclo A
 - Widening north, south, or equal
 - Business and individual property access
 - Median width, shoulder width, and u-turns
 - Bike and pedestrian traffic (current and future potential)
 - Transit facilities
 - Park-and-ride locations
- Assumptions
 - Deviation from OAR 734-051 is expected, provided access management requirements are followed
 - All options are subject to threshold and evaluation criteria
- Access Management Requirements
 - Evergreen to NB Ramp and Woodland to SB Ramp will have a raised median and no private driveways
 - Traffic signals at Woodland, Evergreen, and interchange ramps
- Access Management Options on Oregon 214
 - Lawson and Old Arney Road options are subject to analysis for right-in, right-out, and no connection
 - Evergreen to Oregon Way options will have a median with driveways and redevelopment code revisions or no median and no driveways.

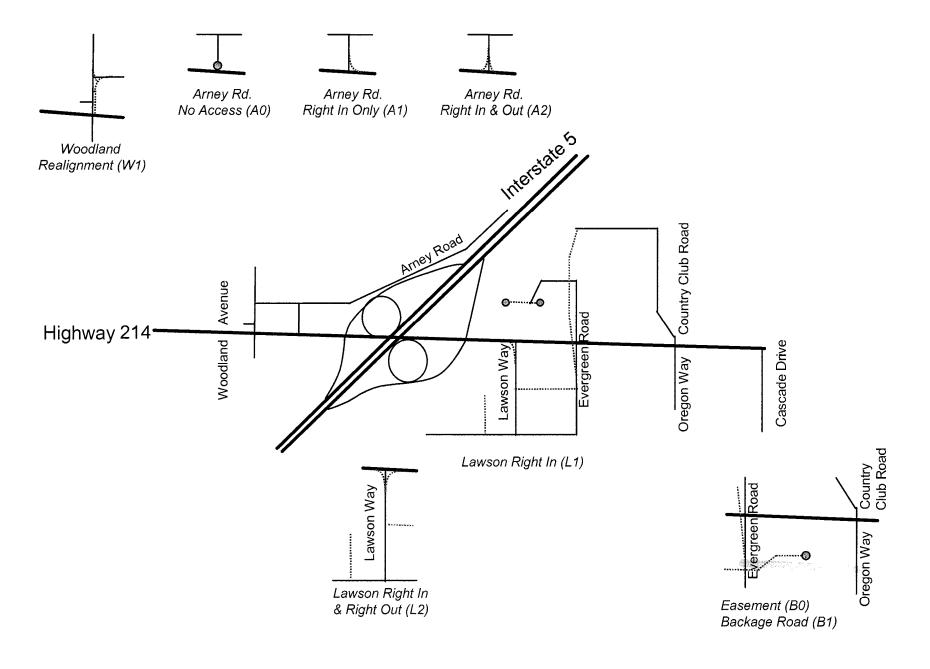
- Access management Options on Local Streets
 - Access management choices are subject to location and operational evaluation, median treatment, and local street improvements

The LAC carefully considered the RAM guidance by reviewing the issues within the corridor. The LAC had a chance to take the identified issues into account in formulating the local access options. For a brief description of each option and the naming convention for the various access options, see Table 6-5. The options are depicted in the following diagram.

TABLE 6-5Local Access and Circulation Options

Naming Convention	Option Description	Advantages
W1	Woodland Realignment – Arney Road would be realigned from a tee intersection with Woodland to a curve. Woodland would be tee up to Arney Road in the curve.	Realigns street to favor heaviest travel pattern.
A0	Arney Road – access to Oregon 219 would be closed.	The risk of traffic conflicts and delay on Oregon 219 would be eliminated, reducing the potential conflicts with ramp traffic to zero.
A1	Arney Road – right in access only, no left turns	The risk of traffic conflicts and delay on Oregon 219 is due to the deceleration of traffic to make a right turn.
A2	Arney Road – right in and right access, no left turns	The risk of traffic conflicts and delay on Oregon 219 is associated with the deceleration of right turning movements and acceleration of Arney Road traffic merging with Oregon 219 traffic.
L0	Lawson Road – access to Oregon 214 would be closed.	The risk of traffic conflicts and delay on Oregon 214 would be eliminated, reducing the potential conflicts with ramp traffic to zero.
L1	Lawson Road – right in access only, no left turns	The risk of traffic conflicts and delay on Oregon 214 is due to the deceleration of traffic to make a right turn.
L2	Lawson Road – right in and right access, no left turns	The risk of traffic conflicts and delay on Oregon 214 is associated with the deceleration of right turning movements and acceleration of Arney Road traffic merging with Oregon 214 traffic.
В0	South Side Cross Property Easement (Evergreen to Oregon Way) – acquire property rights and reconfigure multiproperty circulation patterns to accommodate flow of traffic.	This allows businesses to remain intact with minimal disruption.
B1	South Side Backage Road – construct public street on the back of properties adjacent to the south side of Oregon 214 between Evergreen and Oregon Way	This allows business to remain with public access.

Note: All of the local street access and circulation patterns include realignment of Evergreen Road to provide improved access to Woodburn Company Stores. Access would be provided to properties in the NE quadrant and the private road connecting Lawson Road with Evergreen Road would be acquired as a public right-of-way.



Threshold Screening of Alternatives

As the basis for the threshold criteria, there are federal and state criteria based on FHWA and ODOT policy that pertain specifically to the interchange layout solutions. The local threshold is based on political and/or relative cost feasibility if all else is equal and is applicable to the widening alternatives and local access and circulation options.

Interchange Layout Solutions

The application of the threshold criteria to the interchange layouts was performed by technical staff and presented to the SWG for validation, as shown in Table 6-6.

TABLE 6-6Application of Threshold Criteria

Alternative ¹	F1	F2	F3A ²	F3B	F4	S 1	S2	S3	S4	L1 ³
2 nd Interchange @ Butteville Road	No	Yes	Yes	No	No	No	Yes	No	Yes	No
2 nd Interchange @ St. Louis Road	No	Yes	Yes	No	No	No	Yes	No	Yes	No
Split Interchange	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Single Point Diamond	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
3 Level Diamond	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	No
Partial Cloverleaf B	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Folded Diamond	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Standard Diamond	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Partial Cloverleaf A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tight Diamond	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

¹ The 2nd interchange alternatives are not forwarded as mutually exclusive alternatives to solve existing interchange deficiencies.

When the layouts were described, the SWG perceived the diamond interchange as being a minimal upgrade to the existing interchange when compared to the Parclo A. The Parclo A has less impact to the properties on the east side of I-5 while the diamond has less impact to the southeast and northwest quadrants. Vacant land for curing impacts in the quadrants is more plentiful than adjacent to Oregon 214. Upon review, SWG recommended not evaluating the Standard Diamond.

² Neither County or City plan calls for or precludes a second interchange.

³ The 2nd interchange on its own may be less expensive. However, to address deficiencies of the existing interchange, the costs would likely require one of the other solutions in addition to the improvements to a second interchange.

Oregon 214 Widening Alternatives

The SWG recommended dropping the widen south alternative of Oregon 214 after the preliminary recommendation went to an Open House for review and comment. The impacts to property improvements would be more than the other two alternatives. The impacts to the natural environment and transportation benefits are very similar with the other two alternatives. The SWG recommendation went to the PMT and was approved. The results of threshold screening of the widening alternatives are shown in Table 6-7.

TABLE 6-7 Oregon 214 Widening Alternative

Widening Alternative	Application of Threshold Criteria			
North Widening (NW) – uses existing south curb line with limited additional right-of-way to the south to accommodate bike/pedestrian facilities.	Yes			
Equal Widening (EW) – uses approximate centerline and impacts property on each side of the highway equally.	Yes			
South Widening (SW) – uses existing north curb line with limited additional right-of-way to the north to accommodate bike/pedestrian facilities.	Dismissed – high right-of-way costs and politically unacceptable.			

Local Access and Circulation Options

The results of threshold screening of the local access and circulation options are shown in Table 6-8.

TABLE 6-8
Local Access and Circulation Options

Naming Convention	Option Description	Application of Threshold Criteria
W1	Woodland Realignment – Arney Road would be realigned from a tee intersection with Woodland to a curve. Woodland would be tee up to Arney Road in the curve.	Yes
A0	Arney Road – access to Oregon 219 would be closed.	Yes
A1	Arney Road – right in access only, no left turns	Yes
A2	Arney Road – right in and right out access, no left turns	Yes
LO	Lawson Road – access to Oregon 214 would be closed.	Dismissed – local circulation to commercial and retail
L1	Lawson Road – right in access only, no left turns	Yes

TABLE 6-8Local Access and Circulation Options

Naming Convention	Option Description	Application of Threshold Criteria
L2	Lawson Road – right in and right out access, no left turns	Dismissed – the conflicts of the right out would cause spill back on the northbound ramp terminal and adversely impact mobility and safety.
В0	South Side Cross Property Easement (Evergreen to Oregon Way) – acquire property rights and reconfigure multiproperty circulation patterns to accommodate flow of traffic.	Yes
B1	South Side Backage Road – construct public street on the back of properties adjacent to the south side of Oregon 214 between Evergreen and Oregon Way	Yes

Note: All of the local street access and circulation patterns include realignment of Evergreen Road to provide improved access to the Woodburn Company Stores. Access would be provided to properties in the NE quadrant and the private road connecting Lawson Road with Evergreen Road would be acquired as a public right-of-way.

Evaluation of Feasible Alternatives

The method for evaluating alternatives consists of assigning technical ratings to the evaluation criteria, then applying the relative weights for each of the criteria to determine the alternative ranking. The technical team develops the technical ratings. The SWG develops the relative weights. The technical team analyzes the ranking results and performs sensitivity testing for the benefit of the SWG recommendation process.

Technical Rating

The general approach of evaluating alternatives was to use the criteria and measurement system defined in the methods. To achieve consistency from alternative to alternative, the assigned lead evaluated each of the alternatives for their criteria category. The technical ratings were loaded into a spreadsheet as shown in Table 6-9. There were a few criteria that became non-differentiated among the alternatives using the rating measurement methodology. They were:

- Bike safety and operations alternatives will provide similar standard facilities.
- Mobility alternatives will provide the same capacity for the same demand.
- **Gateway Creation** the aesthetic treatments are a design feature that will be defined in future phases.
- Hazardous Materials the alternatives impact the same known properties.

TABLE 6-9 Technical Ratings of Alternative Packages

Category Time Measure Score Score NWTA/080 NWTA/181 NWTA/181 NWTA/180 NWTA/281 EWTA/080 EWTA/080 EWTA/081 EWTA/080 EWTA/080 EWTA/081 EWTA/080 EWTA/081 EWTA/080 EWTA/081 EWTA/080 EWTA/081 EWTA/080 EWTA/081 EWTA/080 EWTA/081 EWTA/080 EWTA/080	EW1A2B0 EW1A2B1 27 27 7 7 5 5 10 1 0.66 0.66 43845 43700 41645 41500 6.87 7.47 \$13,115,000 \$13,115,000
Pedestrian safety and operations High, medium, low ratings for functional operations and safety. 5 7 7 7 5 5 5 5 5 5	7 7 5 5 10 1 0.66 0.66 43845 43700 41645 41500
Pedestrian safety and operations High, medium, low ratings for functional operations and safety. 5 7 7 7 5 5 5 5 5 5	7 7 5 5 10 1 0.66 0.66 43845 43700 41645 41500
Bike safety and operations High, medium, low ratings for functional operations and safety. 5 5 5 5 5 5 5 5 5	5 5 10 1 0.66 0.66 43845 43700 41645 41500
Ad. Auto safety and operations High, medium, low ratings for functional operations and safety. 0 10 9 0 9 0 10 1 9 0 9 0 9 0 10 1 9 0 9 0	10 1 0.66 0.66 43845 43700 41645 41500 6.87 7.47
B. Access and Traffic Flow	0.66 0.66 43845 43700 41645 41500 6.87 7.47
B1. intersections Volume to Capacity 0.66	43845 43700 41645 41500 6.87 7.47
B2. Business Accessibility Dut of direction travel to/from access of travel service businesses (gas, food, lodging) in distance. 34,610 52,320 43230 43085 35760 35615 34755 34610 52320 52175 44850 44705	43845 43700 41645 41500 6.87 7.47
B2. Business Accessibility businesses in distance. 41,500 52,190 52190 51395 47980 46670 46145 46000 48095 47950 42315 42170 C. Social/Economics Land-use - Conversion to Transportation Acres converted to transportation use by type of loss 7 8 7.05 7.65 7.05 7.65 7.07 7.67 6.85 7.45 6.85 7.45 Land-use - Conversion to Transportation C1. Transportation Value of land in Dollars 13,115,000 19,245,000 \$19,165,000 \$19,245,000 \$19,245,000 \$19,245,000 \$19,165,000 \$13,115,000 \$13,115,000 \$13,195,000 \$13,745,000 Displacement impacts to adjacent properties # of residential properties 0 2 2 2 2 2 2 2 2 2 2 0 0 0 0 0	6.87 7.47
Land-use - Conversion to Transportation Acres converted to transportation use by type of loss 7 8 7.05 7.65 7.05 7.65 7.07 7.67 6.85 7.45 6.85 7.46 Land-use - Conversion to Transportation Value of land in Dollars 13,115,000 19,245,000 \$18,615,000 \$19,165,000 \$19,245,000 \$18,615,000 \$19,165,000 \$19,165,000 \$13,115,000 \$13,115,000 \$13,195,000 \$13,745,000 Displacement impacts to adjacent properties # of residential properties 0 2 2 2 2 2 2 2 2 2 2 0 0 0 0 0 0	
C1. Transportation Acres converted to transportation use by type of loss 7 8 7.05 7.65 7.05 7.67 6.85 7.45 6.85 7.46 C1. Land-use - Conversion to Transportation Value of land in Dollars 13,115,000 19,245,000 \$19,165,000 \$19,245,000 \$19,165,000 \$19,165,000 \$13,115,000 \$13,195,000 \$13,745,000 C2 Displacement impacts to adjacent properties # of residential properties 0 2 2 2 2 2 2 2 0 0 0	
C1. Transportation Value of land in Dollars 13,115,000 \$18,615,000 \$19,165,000 \$19,245,000 \$19,165,000 \$19,165,000 \$19,165,000 \$13,115,000 \$13,195,000 \$13,745,000 C2 Displacement impacts to adjacent properties # of residential properties 0 2 2 2 2 2 2 2 0 0 0 0	\$13.115.000 \$13.115.000
Displacement impacts to adjacent properties # of residential properties 0 2 2 2 2 2 2 2 0 0 0 0 0	
Displacement impacts to adjacent	0 0
C2 properties # of business properties 7 10 10 10 10 10 10 10 7 7 7 7 7	7 7
Displacement impacts to adjacent properties # of jobs lost resulting from business displacements 91 134 134 134 134 134 134 91 91 91 91	91 91
D. Aesthetics	
D1. Gateway Creation High, medium, low 5	5 5
E. Implementation	
Total construction cost in dollars (includes order of magnitude estimates for construction, mitigation and construction management costs) Total construction cost in dollars (includes order of magnitude estimates for construction, mitigation and construction management costs) 24,060,000	\$24,210,000 \$24,290,000
E1 A Project Staging Safety Traffic staging simplicity High, Low 0 5 5 5 5 5 5 0 0 0 0	0 0
Right of way Preliminary E2. Engineering Costs Total estimated costs in dollars to acquire right-of-way and perform engineering and permitting 4,812,000 4,858,000 \$4,812,000 \$4,817,000 \$4,833,000 \$4,833,000 \$4,838,000 \$4,818,000 \$4,818,000 \$4,818,000 \$4,837,000 \$4,833,000	\$4,842,000 \$4,858,000
F. Environment	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
F1. Water Quality	315000 331000
F2. Hazardous Materials # of parcels with known contamination 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 4

N - Widen Oregon 214 north, holding the south right-of-way line.
E - Widen Oregon 214 equal, holding the existing centerline.

A0 - Arney Road no access to Oregon 214
A1 - Arney Road, right in access only
A2 - Arney Road, right in and right out
B0 - Oregon to Evergreen, raised median with U-turns allowed at the intersections
B1 - Oregon to Evergreen, raised median, backage road, and no U-turns allowed.

Relative Weighting

There was a workshop held with the SWG to determine the relative weights. The technical team facilitated the session. SWG members were asked to first allocate 100 points to the high-level categories (5). The team provided real-time visual feedback showing the high, low, and average. The SWG was asked to revisit their allocation of points for up to two more cycles prior to moving to the sub-categories using the same process. The relative weights were as shown in Table 6-10. The results of the relative weights were provided to the PMT for review and validation. There were no objections.

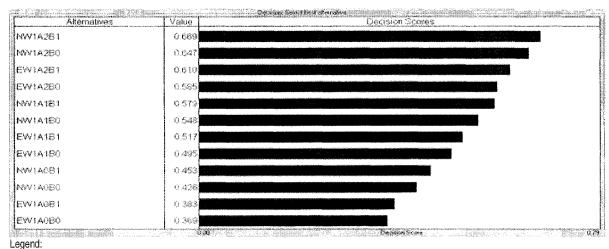
TABLE 6-10Community Values and Relative Weights

			·		
Category/Measure	Category Weight	Х	Sub- Category Allocation	=	Relative Weight
Safety & Operations					
Trucks	21	X	39	=	8
Pedestrians	21	X	14	=	3
Bikes	21	X	6	=	1
Auto	21	X	42	=	9
Access and Traffic Flow				=	
Mobility	33	X	41	=	14
Business Travel Services	33	X	35	=	12
Business Non-travel Services	33	X	24	=	8
Implementation					
Construction Costs	9	X	55.5	=	5
R/W & Engineering Costs	9	X	45.5	=	4
Social/Economic					
Loss in Acres	23	X	16	=	4
Value	23	X	14	=	3
Residential Displacements	23	X	16	=	4
Business Displacements	23	X	31	=	7
Loss of Jobs	23	X	22	=	5
Aesthetics	8	X	100	=	8
Environment					
Water quality	6	X	49	=	3
Hazardous Materials	6	X	51	=	3
					100

Ranking Process

To determine the ranking, each evaluation category contribution is weighted based on the relative weight as a percentage of the total. The percentage is applied to the range of the technical ratings. The highest of the range (best) in each category multiplied by each of the

relative weights will total 1.0 for the maximum ranking potential for each alternative. The results of the ranking process are shown in the diagram below:



N - widen north

E - widen equal

W1 - realign Woodland Avenue

A0 - no access to Arney Road

A1 - right in only to Arney Road

A2 - right in/right-out to Arney Road

B0 - no backage road

B1 - backage road

The analysis of the results indicates the top two alternatives are a tradeoff between staging costs (widen north) and right-of-way costs (widen south). The most sensitive evaluation criteria toward determining a new alternative ranking first is auto safety. The SWG was presented the following findings:

- Based upon relative weights by strength of ranking
 - Arney Road right-in/out ranks higher than right-in, which ranks higher than no access
 - Widen North preferred over widen equal
 - Backage Road preferred over no backage road
- Cost was less of a value than convenience to access and least disruption

The preliminary recommendations and questions from the SWG to take to the PMT were:

- Preferences
 - Widen Oregon 214 to the north is preferred over widen equal even though:
 - Property acquisition costs an additional \$4M dollars
 - Has three more business displacements
 - Impacts 43 more jobs
 - Lawson right-in is assumed a given as the only option passing threshold criteria.

- Questions
 - Is Woodland realignment necessary?
 - Is Arney Road safety of right-in only preferred over the convenience of right-in/right-out?
 - Is backage road worth additional investment?

The PMT responded by eliminating the realignment of Woodland. For Arney Road right-in/right-out, the traffic analysis determined there was very minimal impact to queuing. The backage road is not worth the investment if the property owners are willing to participate in cross property easements.

Sensitivity Testing

Based on the preliminary SWG recommendation, the team reviewed the results of the weighting by taking out the non-differentiating scores. The ranking results are shown in the diagram below:

		Decision: Select best alternative
Alternatives	Value	Decision Scores
NW1A2B0	0.783	
EW1A2B0	0.778	
EW1A1B0	0.671	
NW1A1B0	0.659	
NW1A2B1	0.598	
EW1A2B1	0.595	
NW1A1B1	0.491	
EW1A1B1	0.486	
[[EW1A0B0	0.483	
NW1A0B0	0.443	
NVV1A0B1	0.268	
EW1A0B1	0.248	
	0.00	Decision Score 0.92

The findings from the sensitivity testing analysis was:

- Top two are very close, clearly scoring better than others
 - NW1A2B0 North widening, Arney Road right-in/right-out, and cross property easement
 - EW1A2B0 Equal widening, Arney Road right-in/right-out, and cross property easement
- The backage road is not in the top four
- Arney Road with right in/out scores better than right in only
- Closing Arney scores the lowest four
- The top six are all strong alternatives by score

Selection of Alternatives for Detailed Evaluation

The SGW selected two preliminary alternatives for evaluation in the NEPA process. The selected alternatives are described in Section 7 of this IAMP. The preliminary alternatives

were presented at an Open House for review and comment. The comments were reviewed by the SWG and confirmed the recommendation. The PMT approved the recommendation to evaluate the following alternatives along with the No Build, as shown below:

Alternative	Interchange Layout	Widening Alternative	Option
Alternative 1	Parclo A	Equal	Arney right-in/right-out, Lawson right in, easement from Evergreen to Oregon Way
Alternative 2	Parclo A	North	Arney right-in/right-out, Lawson right in, easement from Evergreen to Oregon Way

NEPA Evaluation

Two build alternatives for the interchange were being forwarded for environmental study. The interchange design and local road improvements for both alternatives are the same. The difference between the alternatives is the alignment of the alternative configuration - how Oregon 214 and 219 are widened to accommodate the new interchange. For additional information about the alternatives evaluation, see the *Woodburn Interchange Environmental Assessment*. The NEPA evaluation process included definition of the study area, data collection, future growth forecasts, operational analysis (including progression and queuing analysis), local circulation and access management, transportation demand management, forecast traffic volumes, public involvement, environmental impacts (including secondary and cumulative impacts), construction impacts, and mitigation measures. Section 7 of this IAMP summarizes a description of the alternatives.

Plan Recommendations

Proposed Project

The alternatives analysis conducted for the Refinement Plan and subsequently updated and validated for the EA confirm that replacing the existing diamond interchange with a partial cloverleaf interchange would improve safety and provide operational performance that meets OHP and HDM standards through 2025 and accommodates the 2005 Woodburn Comprehensive Plan growth assumptions.

Two build alternatives for the interchange, both based on the Parclo A design, were analyzed for the EA. Because the two alternatives advanced have the same basic design, they operate identically. That is, the lane configurations, traffic control, access management and local road improvements are the same for both variations. The most substantial difference is how Oregon 214/219 and the interchange structure would be widened to accommodate the travel lanes needed to achieve the project's operational, geometric, and safety goals. One alternative would widen the facilities equally on both sides of the roadway, while the second would widen to the north. The interchange reconstruction alternative for north widening is shown in Figures 2 and 3. For the purpose of the EA, these differences are significant because of the properties that they impact. For the purpose of this IAMP, these differences are not significant. Neither alternative impacts any interchange management expectations. The north alternative is shown for illustration purposes only and its use does not constitute an endorsement of it versus the widen equal alternative.

Both alternatives would include new 6-foot sidewalks with an additional 6-foot-wide landscaped buffer between the sidewalk and the curb. One bicycle lane would be provided in each direction along Oregon 214 and 219 for both alternatives. A raised median would be added and modifications to access for city streets would be made at Oregon Way, Evergreen Road, and Lawson Avenue for both alternatives.

As a potential add-on option to both build alternatives, an Access Option is included that would acquire an additional 60-foot-wide strip of ROW and a 50-foot-wide strip of easement. The 60-foot-wide ROW purchase would be acquired south of Oregon 214, extending west from Lawson Avenue. The 50-foot-wide public road easement would be acquired south of Oregon 214, extending east from Evergreen Road to the Dairy Queen property.

Both project alternatives would add improvements along Old Arney Road (MP 36.63), Lawson Avenue (MP 36.95), Evergreen Road (MP 37.02), Oregon Way/Country Club Road (MP 37.14), and Cascade Drive (MP 37.27). Other optional improvements may be made along Woodland Avenue (MP 36.52) and between Lawson Avenue and Stacey Allison Way. These optional improvements, which could be constructed as part of either alternative, have minimal operational value to the statewide transportation system, but could be advanced as improvements to local system function and property access.

Traffic Operations Analysis

As described in Section 4, modeling of the alternatives was based on what are now adopted growth, population, and employment forecasts. The transportation system operational performance expected upon completion of the interchange reconstruction is shown in Table 7-1. After completion of the Woodburn Interchange Project, the interchange will provide sufficient capacity for a 20-year design life according to the traffic modeling performed for the Woodburn EA and TSP update.

Transportation impacts of the build alternatives would result in less congestion at all intersections except Cascade Drive, as compared to the No Build Alternative. Truck traffic flow would improve under the build alternatives, and there would be lower V/C ratios for the I-5/Woodburn interchange area and the related local transportation network east of I-5. In addition, the build alternatives would improve intersection operations as well as local circulation. Safety of the Woodburn interchange would be improved by upgraded roadway geometry. The improvements would increase average traffic speeds on Oregon 214/219 from 10 mph to 18 mph.

TABLE 7-1
Intersection System No Build and Build Alternatives (widen north and widen equal) Design Hour V/C Ratios
Woodburn Interchange Project IAMP

Location	Traffic Control	V/C Mobility Standard	2003	2025 No Build	2025 Build
Woodland Avenue	Signal	0.80	0.54	0.96	0.54
Old Arney Road	Stop	0.80	0.10	0.19	0.25
I-5 Southbound Ramp	Signal	0.70	0.83	>1.0	0.58
I-5 Northbound Ramp	Signal	0.70	0.81	>1.0	0.63
Lawson Avenue	Stop	0.80	0.28	0.84	0.11
Evergreen Road	Signal	0.80	0.76	>1.0	0.73
Oregon Way/Country Club	Signal	0.80	0.82	0.90	0.78
Cascade Way	Stop	0.80	0.39	0.36	0.84
Astor Way	Stop	0.80	0.43	>1.0	0.42
Boones Ferry/Settlemier	Signal	0.80	0.92	>1.0	0.82

Notes:

All volume-to-capacity ratios are shown as average intersection conditions and may include critical movements that do not meet standards.

Bold italics and shaded indicates intersection does not meet standards for volume-to-capacity according to the Oregon Highway Design Manual.

The Cascade Way intersection is stop-controlled. Local traffic will reroute critical northbound left turns to Evergreen Road, a signalized intersection, during peak periods.

The Boones Ferry/Settlemier intersection is outside of the project construction limits.

The City of Woodburn and ODOT have been working in cooperation to solve congestion problems in and around the interchange as evidenced by the following actions:

- Facilitation of traffic flow, especially at interstate and interchange ramps. Chief among these short-term transportation improvements has been the I-5 to Evergreen project. This project has resulted in closure of all accesses on the north side of Oregon 214 between Evergreen Road and the northbound I-5 on-ramp. A median has also been constructed to restrict left turn movements from a driveway on the south side of Oregon 214 that is directly adjacent to the northbound I-5 off-ramp.
- Establishment of an interim park-and-ride lot. The park-and-ride lot is to be sited on three properties owned by ODOT that are adjacent to I-5 and have access through the traffic signal at Oregon 214 and Evergreen Road. Funding will be sought to add amenities such as shelters and landscaping to make this a fully improved park-and-ride facility. This park-and-ride would be able to serve Woodburn's local transit service, the CARTS paratransit service, and express commuter service between Wilsonville to Salem provided by South Metro Area Rapid Transit (SMART) of Wilsonville. The connection to Wilsonville would also provide transit access for Woodburn residents to the METRO commuter rail that is scheduled to begin operation in 2006.
- Coordination of traffic monitoring and signal operations. Monitoring will be focused
 on peak periods of travel demand for events such as Oktoberfest, Tulip Festival, and
 holiday sales. A Woodburn Events Management Plan is being prepared to formalize
 temporary travel routing to improve safety in the interchange vicinity.

Access Management

OAR 734-051 promotes the protection of emerging development areas rather than the retrofit of existing built-up roadways. The rules also provide access management spacing standards for approaches for various types of state roadways and for interchanges. OAR 734-051-0190 specifies that these standards are to be used in planning processes involving state highways, including corridor studies, refinement plans, state and local TSPs, and local comprehensive plans. The access management plan contained in this IAMP is consistent with the strategy identified in the Woodburn Interchange EA. The access management plan for the interchange area has been prepared under the project development guidelines rather than an application for an individual permit application.

On Oregon 214 and Oregon 219, the access spacing standard for both public and private approaches is 400 feet. Access spacing standards along Oregon 214/219 from the I-5 ramps are 1,320 feet for full access intersections and 750 feet for right-in and right-out intersections.

West of the interstate, direct access to Oregon 219 would remain unchanged. The median would be extended to the Woodland Avenue intersection. The extension of the median barrier would reduce the number of occurrences where drivers attempt a mid-block U-turn between Old Arney Road and Woodland Avenue.

East of the interstate to Evergreen Road, Oregon 214 would have a median barrier and would eliminate all private road approaches. Lawson Way would remain open for right-in

only. The McDonalds site travel pattern would not be changed with either of the build alternatives. Right-out turning movements at Lawson Way would be prohibited.

The northbound approach of Evergreen Road to Oregon 214 would provide double left turns to expedite clearing the intersection and reducing the traffic back ups. This would allow local street accesses to remain on Evergreen and would minimize adverse impacts to existing and potential redevelopment land uses.

From Evergreen Road to Oregon Way there would be a raised median. Because of the lack of local streets parallel to Oregon 214, U-turns would be permitted at Evergreen Road and Oregon Way. Because of the proposed median, mid-block access may be permitted without adversely affecting travel.

Proposed project elements include prohibition of full movement private accesses a quarter mile east and west of interchange ramp termini, design of public road approaches to minimize interference with intersection traffic control devices, and installation of raised medians from Woodland Avenue to Oregon Way along Oregon 219 and Oregon 214.

The City of Woodburn and ODOT may be required to eliminate direct accesses as redevelopment of Oregon 214 frontage occurs in the future. Two accesses on the south and one access on the north were determined to be adequate. The EA includes an option to provide backage access to existing land uses.

These proposed changes do not fully meet OHP spacing policy and OAR standards. However, based on the cost of impacts to fully meet the standards, including impacts to the local transportation system and businesses, ODOT has deemed the proposed project, although a deviation from the standards, would move toward the standards while providing for safe and efficient operations. The Region Access Management Engineer has thus approved the deviation (see Appendix C). This is consistent with direction provided by the OTC when presented with the results of the Woodburn Interchange Refinement Plan in 2000.

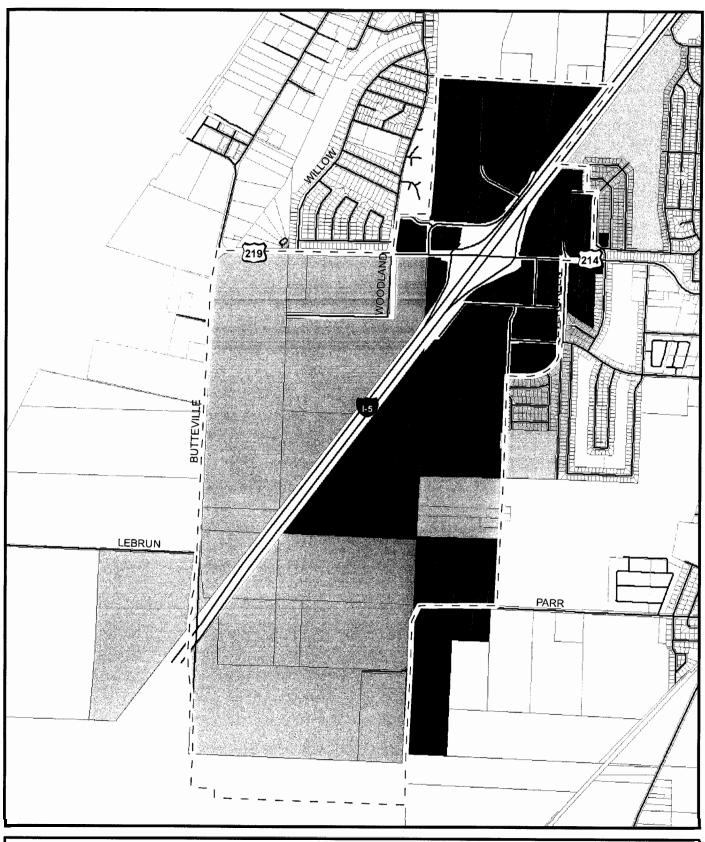
Land Use Management and Findings

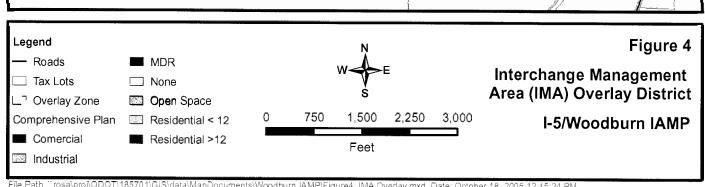
There has been extensive collaboration between the City of Woodburn and State of Oregon on plan updates. The agencies have coordinated updates to the Woodburn Comprehensive Plan, including land use and UGB analysis, and the updated TSP (2005).

The City of Woodburn already has policy, development code, and city ordinance language that applies to lands designated within the city limits and UGB. These measures have been updated as part of the Comprehensive Plan and TSP updates, and include new land use and transportation policy that legislate City authority through the following mechanisms:

 Land use controls, including Comprehensive Plan, sub-area master planning, zoning and subdivision ordinance, overlay zoning, design review, and conditions of development

Transportation controls, including transportation design and access standards and traffic impact study requirements





A long-term interchange management strategy that improves interchange operations and safety and preserves capacity has been developed in support and protection of the major investment improvements being planned for the I-5/Woodburn interchange. This strategy is the centerpiece of the IAMP for the Woodburn interchange and will be implemented by new provisions to the WDO (see Appendix D). Procedures for ongoing monitoring of the strategy's implementation would be defined in an intergovernmental agreement (IGA) between the City of Woodburn and ODOT. A draft of this agreement is provided in Appendix E.

The revised WDO creates an IMA Overlay District, where trip generation from the development of vacant land uses within the district and from comprehensive plan amendments will be managed within a specified trip budget. The proposed IMA Overlay District is shown in Figure 4. The trip budget will be established at a level consistent with the land use designations and assumed rate of development so as to not exceed the 2025 forecasted trip generation and travel demand assumed in the traffic modeling for the TSP and the Woodburn Interchange EA. The parcel trip budgets are intended to be high enough to accommodate peak hour trips but low enough to restrict unplanned vehicle trips that could adversely affect the interchange.

Budgeting trip generation in the IMA Overlay District will give the state assurances that the City intends to manage development within the overlay district at planned levels to protect the function of the interchange and preserve the capacity provided by the interchange improvement. The purpose of this overlay district is to preserve the long-term capacity of Woodburn's I-5 interchange with Oregon 214, in coordination with ODOT.

Preserving the capacity of this interchange is an essential element of the City's economic development strategy, because continued access to I-5 is necessary to attract and maintain basic employment within the Woodburn UGB. This strategy complements the provisions of the existing SWIR Overlay District by ensuring that industrial land is retained for targeted basic employment, which is called for in the Woodburn EOA. Creation of the IMA Overlay District also ensures that industrial and residential land within the district is protected from commercial encroachment.

With the improvements to the interchange and the management tools provided by the local ordinance and the ODOT and City agreements, the City of Woodburn and ODOT staff have the means necessary to administer the trip budget, protect the function of the interchange, and preserve the capacity of the interchange without compromising the legitimate fulfillment of the City's newly adopted 2005 Comprehensive Plan.

Interchange Management Area Overlay District

The boundary of the IMA Overlay District is shown in Figure 3 and is described approximately as follows: Beginning at a point on the north UGB on Old Arney Road at I-5; thence west along the north UGB to the west edge of high-density residential property; thence south along high-density residential property and commercial property to Robin Avenue; thence west along Robin Avenue to Woodland Avenue; thence south on Woodland Avenue to Oregon 219; thence west on Oregon 219 to Butteville Road; thence south on Butteville Road to Le Brun Road; thence approximately 1,500 feet west on Le Brun Road; thence south approximately 2,700 feet following the UGB; thence east approximately

500 feet to I-5; thence northeasterly following I-5 to Butteville Road; thence south on Butteville Road approximately 2,000 feet; thence west approximately 3,500 feet; thence north approximately 2,500 feet to Parr Road; thence easterly on Parr Road to Stubb Road; thence north on Stubb Road and its extension to the north to the intersection with Evergreen Road; thence east, then north on Evergreen Road to the intersection with Oregon 214; thence east to the intersection with Country Club Road; thence northerly along Country Club Road to Country Club Terrace; thence northerly along Country Club Terrace to the west extension of the north loop of County Club Terrace; thence west along a west extension of the north loop of County Club Terrace to Interstate 5; thence northeast along Interstate 5 to the point of beginning.

This area includes approximately 1,000 acres total, of which approximately 462 acres are vacant and buildable. These lots would be served by the I-5 interchange via Parr Road, Butteville Road, Crosby Road and Oregon 214. The IMA Overlay District includes the SWIR, the Parr Road Nodal Development Area, and other vacant commercial areas **immediately** served by the I-5 interchange. The interchange management area land use overlay zone encompasses approximately:

- 205 acres of commercial lands (64 acres vacant)
- 533 acres of industrial lands (362 acres vacant)
- 166 acres of residential lands (36 acres vacant)

Within this zone, trip generation associated with redevelopment will be based on existing zoning. This is a reasonable assertion assuming the most likely properties to redevelop are those located in the immediate interchange vicinity and are currently commercial uses and traveler services.

Trip Budgets

The assumed total trip generation of all developable and re-developable land within the IMA Overlay District will serve as a trip budget baseline. This total is based on an assumed rate of build-out consistent with adopted population and employment forecasts as reflected in the Woodburn traffic model prepared and maintained by ODOT. The operational performance indicator was determined to be the PM peak hour travel demand. This IMA Overlay District will be managed as a single land use unit, not on a parcel by parcel basis, with a baseline of trip generation potential from trips associated with existing land use zoning. For simplicity of administration and ongoing tracking purposes, the budget will apply to development of vacant properties within the overlay district, assuming the differences in trip generation associated with redevelopment are negligible relative to the overall trip generation and the precision of forecasting methodologies. The baseline budget is established by subtracting 2003 existing trips generated within the overlay district from 2025 forecasted trips generated within the overlay district.

A total trip generation budget for planned employment (commercial and industrial) land uses within the IMA Overlay District-defined as the IMA Trip Budget-and a trip budget for each vacant commercial or industrial parcel-defined as the parcel budget-has been

¹ Morning and mid-day peak flows have historically been lower than PM peak periods in this vicinity, indicating driver preference to link trips of multiple purposes at the end of the day. Traffic count data indicate that seasonal and special events are less than PM peaks as well.

determined. The IMA Trip Budget for commercial and industrial uses within the IMA Overlay District is 2,500 peak hour vehicle trips through the Year 2020. (An estimated 1,500 additional peak hour residential trips are planned within the IMA District.) The IMA Trip Budget will be allocated to vacant commercial and industrial parcels on a first developed, first served basis. According to the current for the IMA Overlay District (WDO 2.116), the overall trip budget for vacant SWIR parcels is 2,703; for vacant commercial properties the budget is 2,789 (see Appendix D, Table 2.116.1).

The parcel budget for each vacant commercial or industrial parcel within the IMA Overlay District is based on 11 peak hour trips per developed industrial acre, and 33 peak hour trips per developed commercial acre. The parcel budget for each parcel will be reduced in proportion to actual vehicle trips generated by new development on any portion of the parcel. The City *may* allow development that exceeds the parcel budget for any parcel in accordance with specified exemptions and conditional use provisions of the revised WDO.

There are 6,534 2003 PM peak hour trips for existing developed land within the overlay district, based on existing zoning and calibrated model output from the Woodburn traffic model prepared and maintained by ODOT.

12,628 2025 PM peak hour trips are based on trips associated with build-out of existing developed land and future forecasted trips associated with new development within the overlay district, based on 2025 trips assumed in the Woodburn traffic model prepared and maintained by ODOT.

A 6,094 2025 PM peak hour trips baseline budget is based on the difference between the two previous 2003 and 2025 PM peak hour trips described above.

Baseline budget adjustments will be made periodically to reflect any major changes in redevelopment assumptions that may occur. These changes will be measured and incorporated into a revised trip budget baseline at the time of periodic review of the Comprehensive Plan and TSP updates in accordance with statewide planning goals.

The state will not track, bind, or hold the City accountable for travel demand variances in growth originating from outside the overlay district that result from the inability to control development patterns from neighboring cities and the greater northern Marion County area. The forecasted growth from other areas of Woodburn has been adequately accounted for in the Woodburn TSP and traffic model. Given the relative accuracy of the traffic model as a forecasting tool (+ or – 10 percent), monitoring trip generation outside of the IMA Overlay District would provide only marginal value compared to the cost and complexity of implementing such an all-encompassing approach. ODOT will monitor overall traffic growth in the interchange area to ensure that any potential operational problems are identified and addressed as early as possible. Such problems might result if more rapid than forecasted growth occurs outside the IMA Overlay District.

Public Involvement Summary

Public involvement was an ongoing and consistent activity with the Woodburn Interchange Project, from refinement planning through development of the EA, TSP, and Comprehensive Plan amendments. This history of public involvement is summarized below. Appendix F includes a summary of public and agency coordination for the EA, along with attachments that include meeting minutes and summaries over the course of project development.

For the Refinement Plan, three alternative solutions were identified and evaluated: standard diamond, tight urban diamond, and partial cloverleaf interchange forms. The results of this evaluation were presented to stakeholders through six focus group meetings, at which 26 people participated; six one-on-one meetings; an OTC presentation; and a City Council and Planning Work Session. This outreach was not considered to be extensive or conclusive of opinions held by the general public or the City of Woodburn, the surrounding community, and other transportation users. The input was sought as a process and product check to help focus the plan. Based on input and comments received, additional evaluation and consideration was given to the alternatives and next steps for project development.

For the TSP, the community's goals and visions were assessed. The plan's results were reviewed by the public through a variety of forums. Throughout development of the TSP, public input was sought through an Open House in January 2004, three work sessions with the City Council and Planning Commission in the spring and summer of 2004, and various community meetings. In addition, input on the plan was also received via public forums held for the Woodburn Interchange EA. City staff gave a presentation of the plan to a group from Senior Estates in July 2004. This valuable feedback, combined with input from the Technical Advisory Committee (TAC), has produced a plan that will help to guide the future of Woodburn's transportation system for the next 20 years. The plan had a public hearing before the Woodburn Planning Commission in February 2005, and the City Council has held hearings on the TSP as part of the Comprehensive Plan periodic review package from March to July 2005.

For the EA, the Project Management Team (PMT) developed an interview strategy to elicit information on project issues and general project approach from Woodburn Interchange Project area stakeholders. The PMT consisted of lead ODOT and consultant team staff assigned to manage the project components, as well as FHWA, city, and county staff who are responsible for planning and transportation policy within their jurisdictions. Data from interviews were used to develop a public involvement and agency coordination plan to detail outreach activities that were conducted during the project. The plan defined activities to be conducted throughout the project, expected timing in relation to decision points and project milestones, and participating roles, commitments, and lead-time requirements for decision makers and other participants. Measures to evaluate the effectiveness of the public involvement activities were also identified. The plan provided recommendations concerning membership of the Stakeholder Working Group (SWG). Three committees were formed to

provide direction and input on the project: PMT, the SWG, and the Local Access Committee (LAC). The SWG consisted of representatives from local business, emergency services, residential communities, cultural communities, outlying communities, and other appropriate interest groups. The role of the SWG was to be advisory to the PMT on values, ideas, and concerns of the broader community. Seven SWG meetings were held between March and July 2003.

The LAC functioned as a sub-committee of the SWG. There were people on the LAC who were not on the SWG, and vice versa. All property owners located immediately adjacent to the interchange and property owners who rely on access to or from Oregon 214/219 between Country Club Road and Woodland Avenue were invited to participate on the LAC. The purpose of the LAC was to recommend an access plan as a part of the recommended set of improvements to the I-5/Woodburn interchange. The access plan, together with the favored alternative, was forwarded to the PMT from the SWG. Three LAC meetings were held during May and June 2003.

A fact sheet was developed in March 2003. A project newsletter was distributed to all property addresses and property owners within the project area in May 2003. Two project postcards were distributed to the same mailing list and through the informational displays—the first in late May 2003, and the second in mid-June 2003.

To reach the traveling public, cultural communities, and the surrounding community, informational displays were constructed at locations within and around the project area. Press releases were issued that announced process steps and opportunities for involvement. Press releases were distributed through ODOT's communications office. Display ads in local news publications were used to advertise public meetings, and reporters wrote articles on the meetings.

Two public meetings were held to introduce the project to the public and discuss alternatives being studied. The purpose of these meetings was to provide maps of the alternatives under consideration, the recommendations from the SWG, and the project goals, and to gather input on outstanding issues to address. Forty-three people signed in as participants.

ODOT's Region Access Manager (RAM) was involved to establish the range of access alternatives with locations and turning movements that would meet ODOT policies. These options were presented to the LAC and modified to apply the actual context. The LAC and RAM clarified the alternatives and they were then evaluated for operations and feasibility. The LAC then made a recommendation to the SWG of their preferred ranking of alternatives. These alternatives were evaluated by the SWG and a recommendation was developed for public comment at the open house. The PMT then decided on the access alternatives to be carried forward into the EA process based on public comment and the SWG recommendation.

A Public Hearing on the EA was held in Woodburn on July 21, 2005; nineteen citizens provided oral testimony, 9 citizens submitted written comments at the hearing, 5 submitted e-mails, and 8 sent letters, including the Senior Estates Golf and Country Club. Comments from the Public Hearing are summarized in Appendix F.

A project website was maintained that provided information on the status of the project, contact information, alternatives development, upcoming meetings, past meeting notes, and the Environmental Assessment. The website address is: http://www.oregon.gov/ODOT/HWY/REGION2/Woodburn_Interchange.shtml/shtml.

Plan Implementation Responsibilities

Implementing Actions

The I-5/Woodburn Interchange Project (including the 2000 Refinement Plan, the Woodburn Interchange EA, and the Woodburn TSP update) and this IAMP were conducted and developed with ODOT and local agency coordination and extensive public participation. Because this facility is contained within the City of Woodburn's UGB, no goal exceptions are required for the I-5/Woodburn Interchange Project or this IAMP. Because the City adopted a significant update to their Comprehensive Plan and TSP in 2005 (Ordinance 2391, October 31, 2005) that addressed and incorporated all of the local actions needed to be consistent with and support the I-5 Woodburn Interchange Project and this IAMP, further Comprehensive Plan amendments are also not required for this IAMP. City actions and policies from the 2005 TSP are provided in detail in Sections 3 and 4 and Appendix D.

All of these processes and actions ensure that this IAMP, as an ODOT Facility Plan, is consistent with the State Agency Coordination (SAC) Agreement and Administrative Rule (731-0015) that defines the process for how ODOT Facility Plans must be developed to comply with Oregon's Statewide Planning Goals and Land Use Planning Program. A summary of the ODOT and Woodburn implementing actions identified in the 2005 Woodburn Comprehensive Plan and TSP update and in this IAMP is provided below. These actions constitute the substance of the Woodburn Interchange IAMP.

- ODOT shall reconstruct existing interchange to meet forecasted traffic demand and ODOT operational standards through 2025-2030 in accordance with the EA, if approved, and the City of Woodburn's TSP as soon as full funding can be secured to do so.
- 2. ODOT has entered into an IGA (#_____) with the City of Woodburn that describes funding responsibilities and establishes the Woodburn interchange reconstruction as a planned facility for the purpose of implementing the City's Comprehensive Plan and TSP.
- 3. ODOT shall close all private access on Oregon 214 and 219 between the interchange ramps and the first existing signalized public road intersections (Evergreen Road and Woodland Avenue) when the Woodburn interchange is reconstructed.
- 4. ODOT shall construct full median control between Woodland Avenue and Oregon Way at the time of the reconstruction of the Woodburn interchange.
- 5. ODOT is developing a permanent park-and-ride facility on newly acquired properties in the northeast quadrant of the interchange. This is currently expected to be constructed in 2007 or 2008.

- ODOT has entered into an IGA (#_____) with the City of Woodburn to monitor development in the interchange management area overlay zone and track the application of the adopted trip budget.
- 7. Woodburn has adopted and shall implement policies (Comprehensive Plan Policy H-7.1) to discourage strip commercial development and promote downtown redevelopment.
- 8. Woodburn has adopted and shall implement an IMA overlay zone ordinance (WDO 2.116) that:
 - a. Allows no conversion of industrial lands to commercial or residential zoning.
 - b. Allows no increase in trip generation potential above the level forecasted in the City's traffic model (based on the City's proposed 2005 land use plan update).
 - c. Creates a trip budget based on the City's traffic model and implementation of the newly updated Comprehensive Plan.
 - d. Links implementation and allocation of trip budget to City's economic development goals.
 - e. Provides for use of TDM measures (in development code) to meet trip budget requirements.
- 9. Woodburn has adopted (Ordinance 2391, October 31, 2005) and shall implement a TSP that includes policies to:
 - a. Provides for the improvements being proposed to the existing interchange and Oregon 214/219. (Comprehensive Plan Policy H-7.1; TSP pages 6-3 and 7-5)
 - b. Calls for development of and identifies supportive local transportation system improvements. (Comprehensive Plan Policy H-7.2; TSP pages 7-5 through 7-7)
- 10. Woodburn has adopted and shall implement a revised land use plan and development code changes to increase city-wide residential density approximately 20 to 25 percent. (Ordinance 2391; WDO 2.115; Comprehensive Plan Policy Table 1)
- 11. Woodburn has adopted and shall implement maximum and minimum density standards for new development. (Ordinance 2391; WDO 2.115; Comprehensive Plan Policy Table 1)
- 12. Woodburn has entered into an IGA (#_____) with ODOT to monitor development in the IMA overlay zone and track the application of the adopted trip budget.
- 13. Woodburn has entered into an IGA (#_____) with ODOT that describes funding responsibilities and establishes the Woodburn interchange reconstruction as a planned facility for the purpose of implementing the City's Comprehensive Plan and TSP.

Local Adoption Process

The City of Woodburn has coordinated the development of the Woodburn Refinement Plan, EA, and IAMP with major updates to their Comprehensive Plan and TSP that were

completed through their periodic review process between 2000 and 2005. Hearings to adopt these documents were conducted between May 2005 and September 2005, concluding with the Woodburn City Council directing staff to draft an ordinance to adopt the updated plans. Ordinance 2391 was adopted by the Woodburn City Council on October 31, 2005.

State Adoption Process

ODOT is currently developing an EA of the potential reconstruction of the Woodburn interchange. Based on SAC requirements, ODOT must complete all local land use actions that demonstrate that the ODOT project is compatible and consistent with the Woodburn Comprehensive Plan and TSP prior to completing the EA. The IAMP is an ODOT Facility Plan that documents that the project will be compatible and consistent with the 2005 Woodburn Comprehensive Plan and TSP. As such, OTC adoption of this IAMP as a Facility Plan is required prior to completing the EA process. Prior to taking this plan to the OTC for adoption, ODOT must also submit the plan to the City of Woodburn for a formal assessment of its compatibility and consistency with their adopted plans. The City of Woodburn's letter confirming the IAMP's compatibility and consistency will be presented to the OTC when the IAMP is presented to them for adoption.

Cooperative Plan Implementation

This section clarifies IAMP implementation consequences. Because the Woodburn Comprehensive Plan and TSP elements upon which the IAMP relies to help protect long-term interchange function and operation have already been adopted by the City of Woodburn, no additional changes to these local plans are necessary to implement this IAMP. If or when the City of Woodburn seeks to amend the existing policies or code provisions relied on for this IAMP, it will be necessary for ODOT to review the proposed changes to ensure that these remain consistent with the IAMP. If ODOT finds that proposed plan or code amendments are not consistent with the IAMP, then ODOT and the City of Woodburn must work together to reach agreement on methods and mechanisms to resolve all identified conflicts. Implementation of the agreed upon solution(s) may require amendments to local plans and codes, or to this IAMP, or both.

Investment Requirements

The total project cost is estimated in the EA at approximately \$48 million, including preliminary engineering and ROW acquisition. Full funding has not been secured as of the writing of this IAMP, but ODOT and the City of Woodburn have entered into an IGA (included in Appendix D) that defines the local cost share for the reconstruction of the Woodburn interchange as 7.2 million. ODOT and the City are committed to jointly pursuing and securing full funding for the reconstruction project as quickly as possible.

References

- City of Woodburn, *City of Woodburn Comprehensive Plan*, adopted December 1978 with amendments through 2004. Available on-line at http://www.ci.woodburn.or.us/development/planning/planninghome.htm.
- City of Woodburn and the Oregon Department of Transportation. January 2005 (Revised). *Woodburn Transportation System Plan*.
- City of Woodburn, *Woodburn Development Ordinance*, Adopted April 9, 2002 (revisions pending June 2005). Available on-line at http://www.ci.woodburn.or.us/development/wdo/wdodocs.htm.
- City of Woodburn. April 1996. Woodburn Transportation System Plan, April 1996.
- Department of Land Conservation and Development (DLCD), *Oregon Administrative Rule* (*OAR*) 660-012-0000 *Transportation Planning Rule*. Available on-line at http://www.lcd.state.or.us/newspdfs/transportation%20planning%20rul.pdf (last accessed August 1, 2003).
- Department of Land Conservation and Development (DLCD), *Oregon's 19 Statewide Planning Goals and Guidelines*. Available on-line at http://www.lcd.state.or.us/goalhtml/goals.html (last accessed August 1, 2003).
- Kittelson & Associates, Inc. March 1998. Transportation Impact Analysis Woodburn Factory Stores.
- Kittelson & Associates, Inc. December 1998. *Transportation Impact Analysis Woodburn Factory Stores Phases II/III*.
- Marion County. 1981 through 2002. *Marion County Comprehensive Land Use Plan, adopted May* 13, 1981 with amendments through December 2002. Available on-line at http://publicworks.co.marion.or.us/Planning
- Marion County. December 1998. Marion County Rural Transportation System Plan, adopted December 1998. Available on-line at http://publicworks.co.marion.or.us/engineering/transplan/index.asp
- Oregon Department of Transportation, Federal Highway Administration. July 2005.
 Woodburn Interchange Project Environmental Assessment. Available from ODOT
 Region 2 Planning and at
 http://www.oregon.gov/ODOT/HWY/REGION2/Woodburn_Interchange.shtml/shtml
- Oregon Department of Transportation. October 2001. 2002-2005 Statewide Transportation Improvement Program. Available on-line at http://www.odot.state.or.us/STIP/ (last accessed August 1, 2003).

- Oregon Department of Transportation. February 2000. *Division 51 Access Management Rules: Highway Approaches, Access Control, Spacing Standards and Medians*. Available on-line at http://www.odot.state.or.us/tdb/planning/access_mgt/OAR_Revision/revisions.htm (last accessed August 1, 2003).
- Oregon Department of Transportation. October 2002. *Draft* 2004-2007 Statewide Transportation Improvement Program. Available on-line at http://www.odot.state.or.us/STIP/ (last accessed August 1, 2003).
- Oregon Department of Transportation. July 2003. *I-5/Woodburn Interchange Refinement Plan, Final Report*.
- Oregon Department of Transportation. March 18, 1999. 1999 Oregon Highway Plan.
- Oregon Department of Transportation, Oregon Highway Plan Implementation Handbook.

 Available on-line at

 http://www.odot.state.or.us/tdh/planning/highway/highway_plans.htm

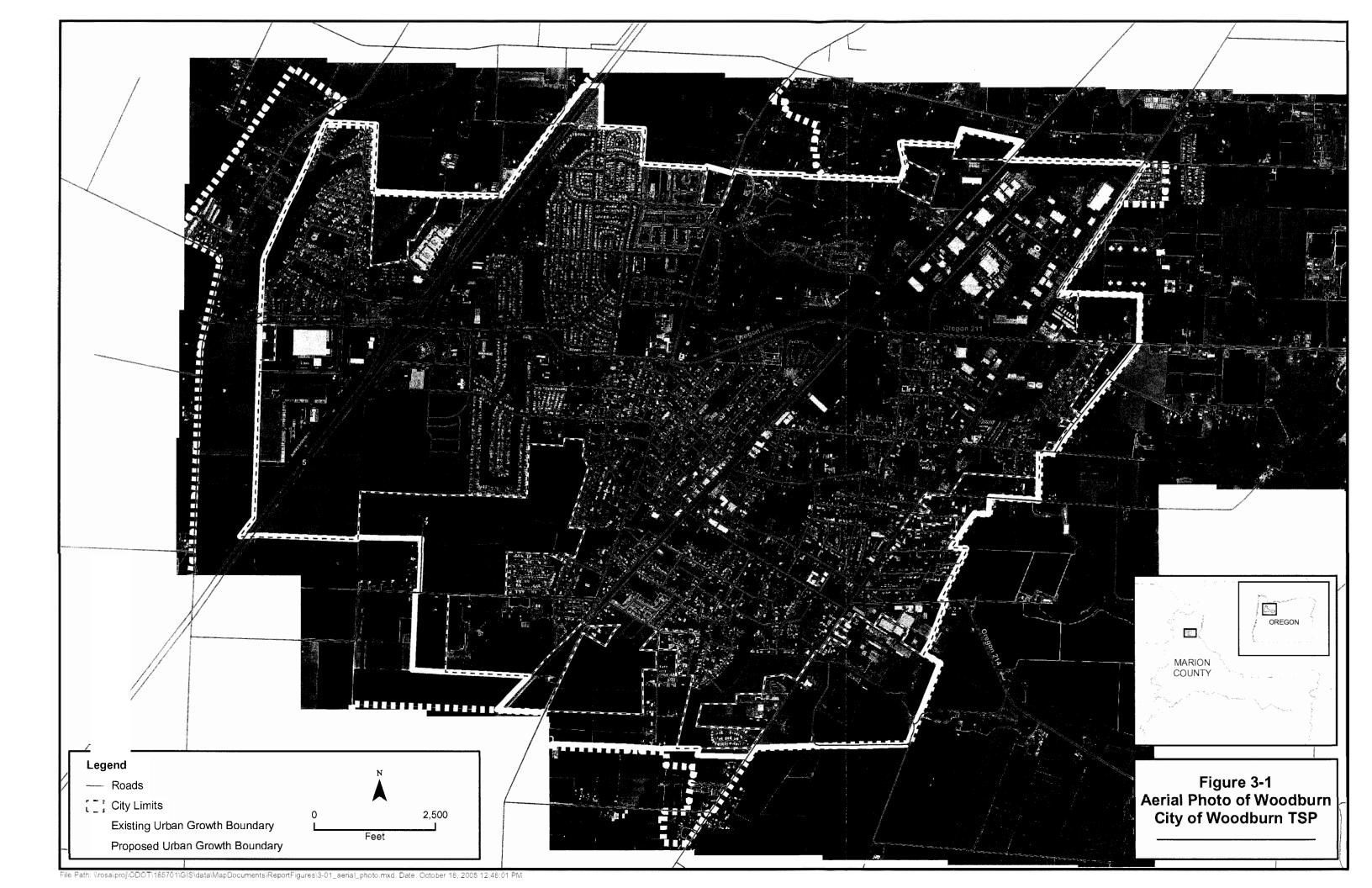
http://www.odot.state.or.us/tdb/planning/highway/highway_plans.htm (last accessed August 1, 2003).

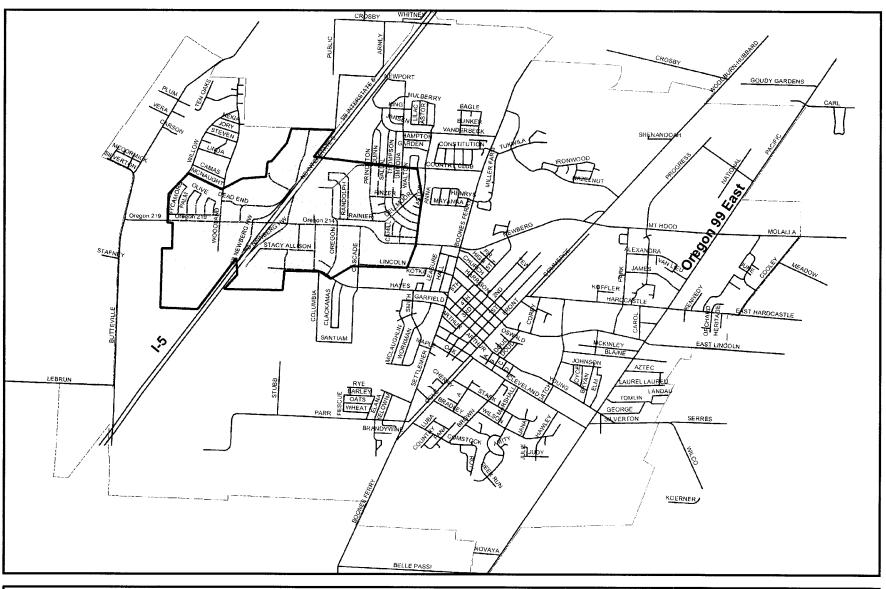
- Oregon Department of Transportation. September 15, 1992. Oregon Transportation Plan.
- Oregon Department of Transportation. January 1998. Transportation Planning Section, Statewide Congestion Overview for Oregon.
- Oregon Department of Transportation. August 16, 1995. Willamette Valley Transportation Strategy: 1995 Phase One Report.
- Western Transportation Trade Network. 1999. Final Report, Phase II Western Transportation Trade Network. Available on-line at http://www.dot.state.co.us/Publications/wttn/wttn.htm (last accessed August 1, 2003).

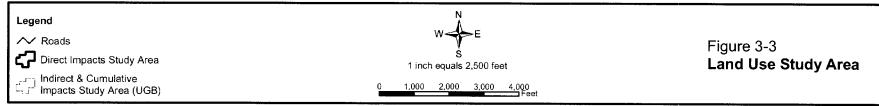
CVO\051450013

Land Use Planning Maps

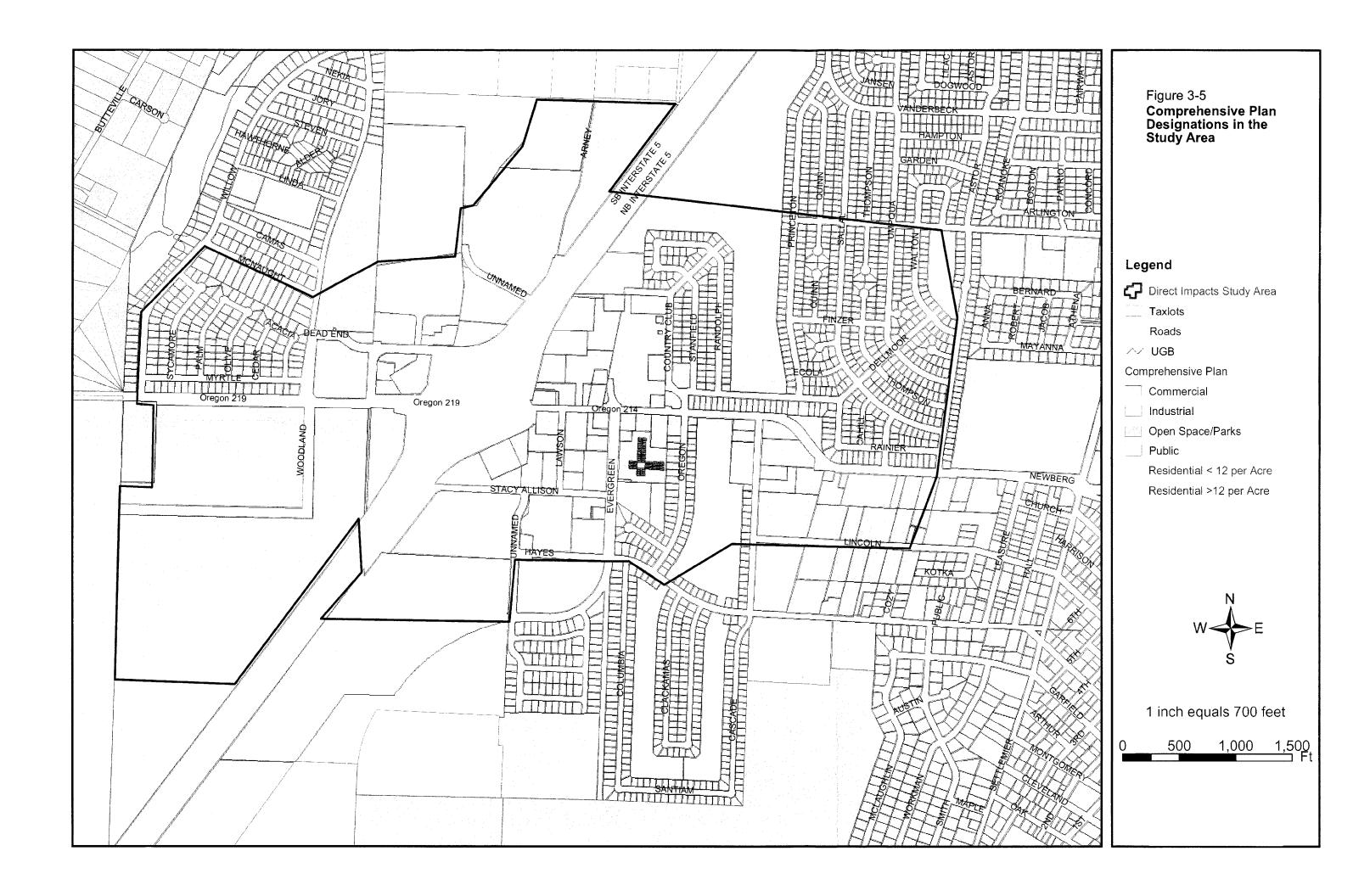
CVO\051450013 A-1

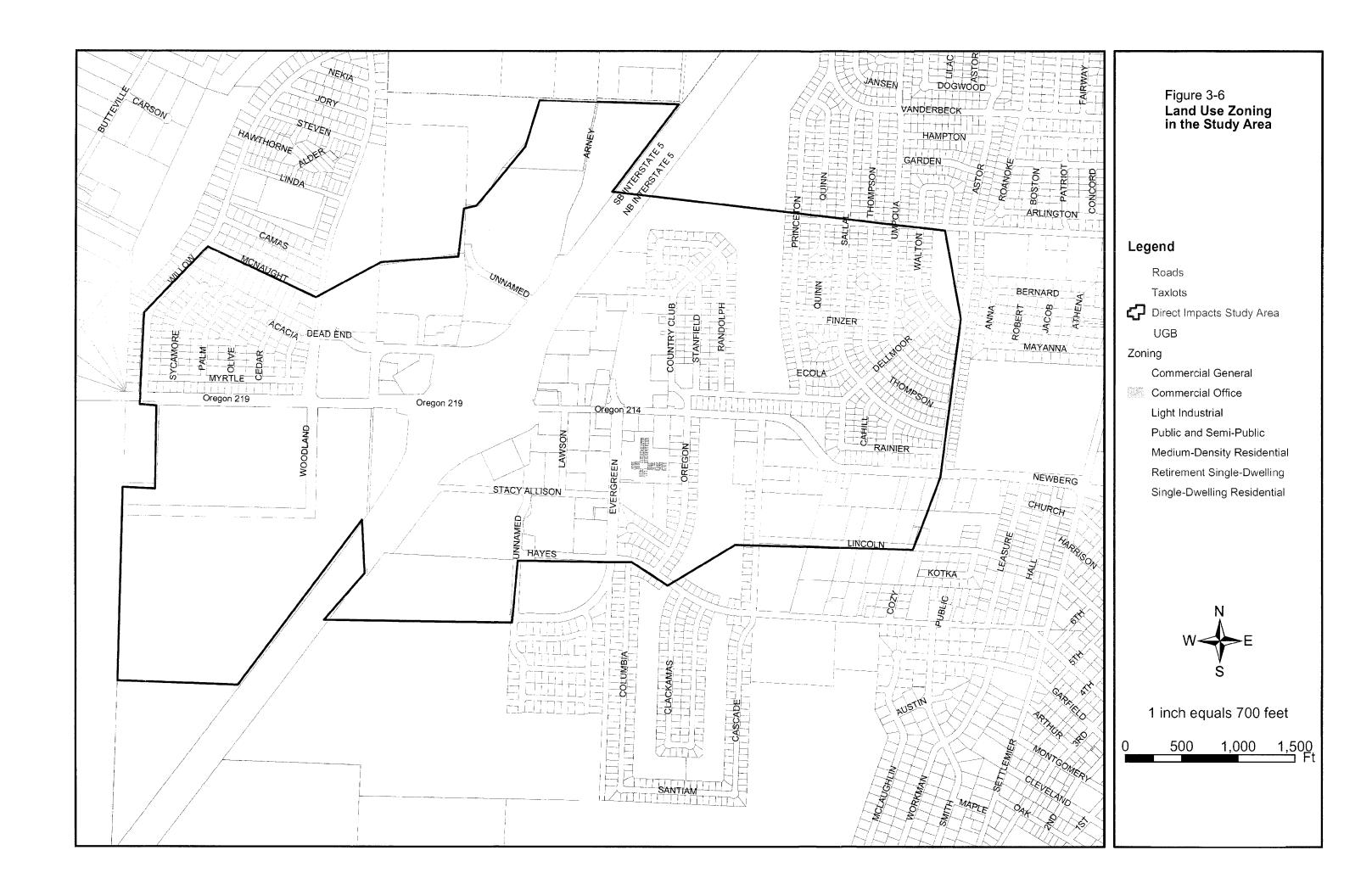






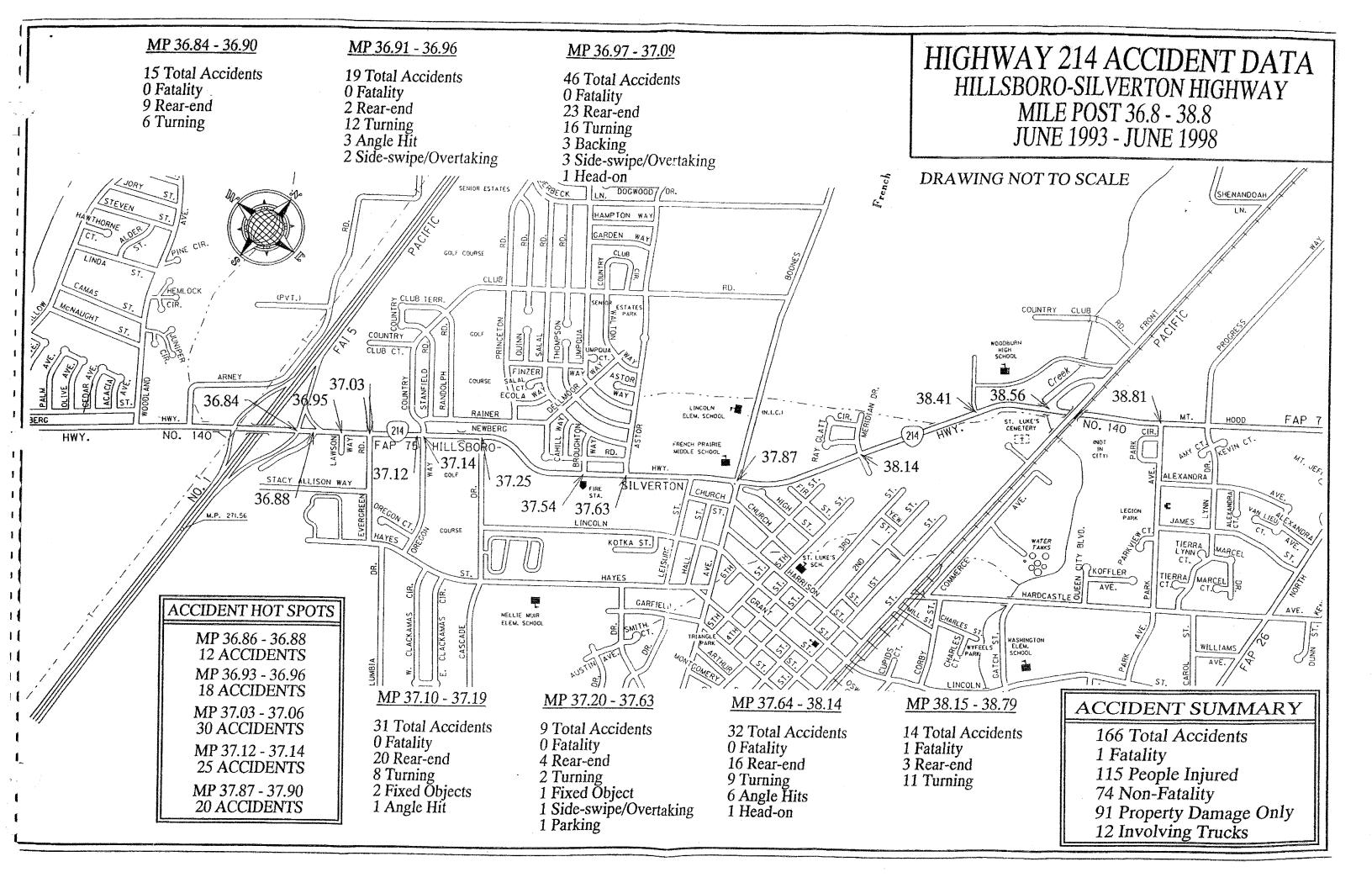






APPENDIX B

Existing and Forecast Traffic Volumes, Proposed Cross Sections, and Queuing Lengths of Alternatives (2025)



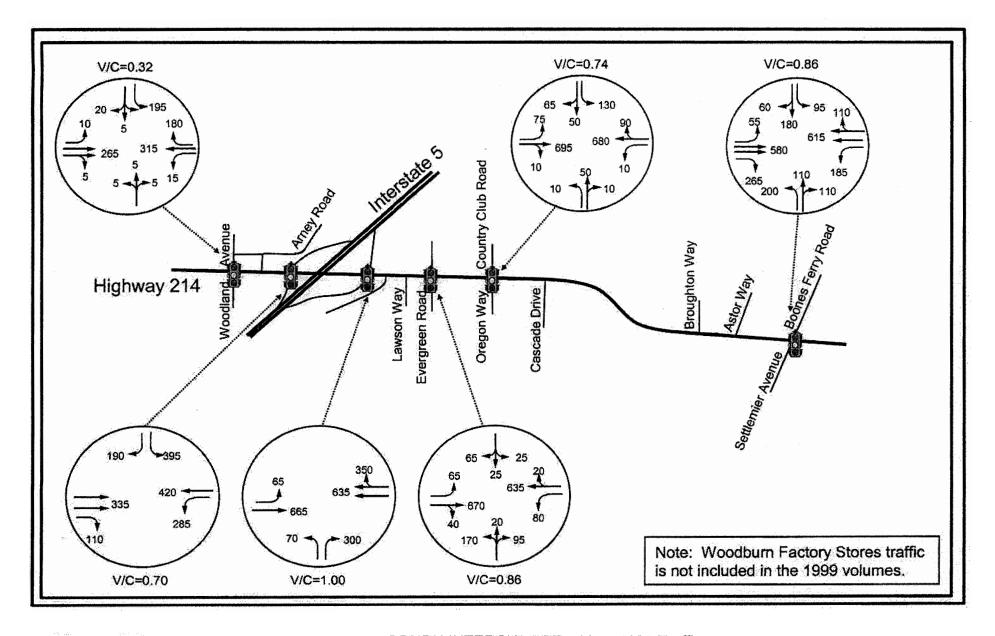


Figure 4-4

WOODBURN INTERCHANGE - Year 1999 Traffic Existing Weekday PM Peak Hour Traffic Volumes, V/C Ratio, & Lane Configuration

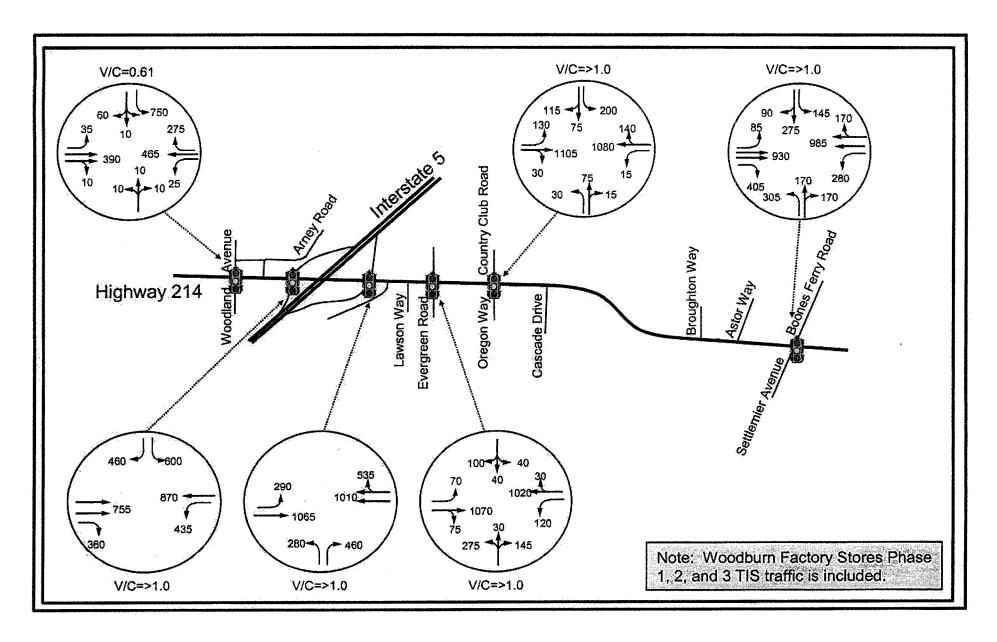


Figure 4-5

P	lante Strip	er O			(C/L Turn				7,450	Plante Strip	er O
Walk	•	Bike	Lane	Lane	Med	Lane	Lane	Lane	Bike	Turn Lane		Walk
6′	6′	6′	12'	12'	4'	13'	12'	12'	5′	15′	6′	6′
		1			1'							

Oregon 214/219 with Median Turn Lane Cross Section

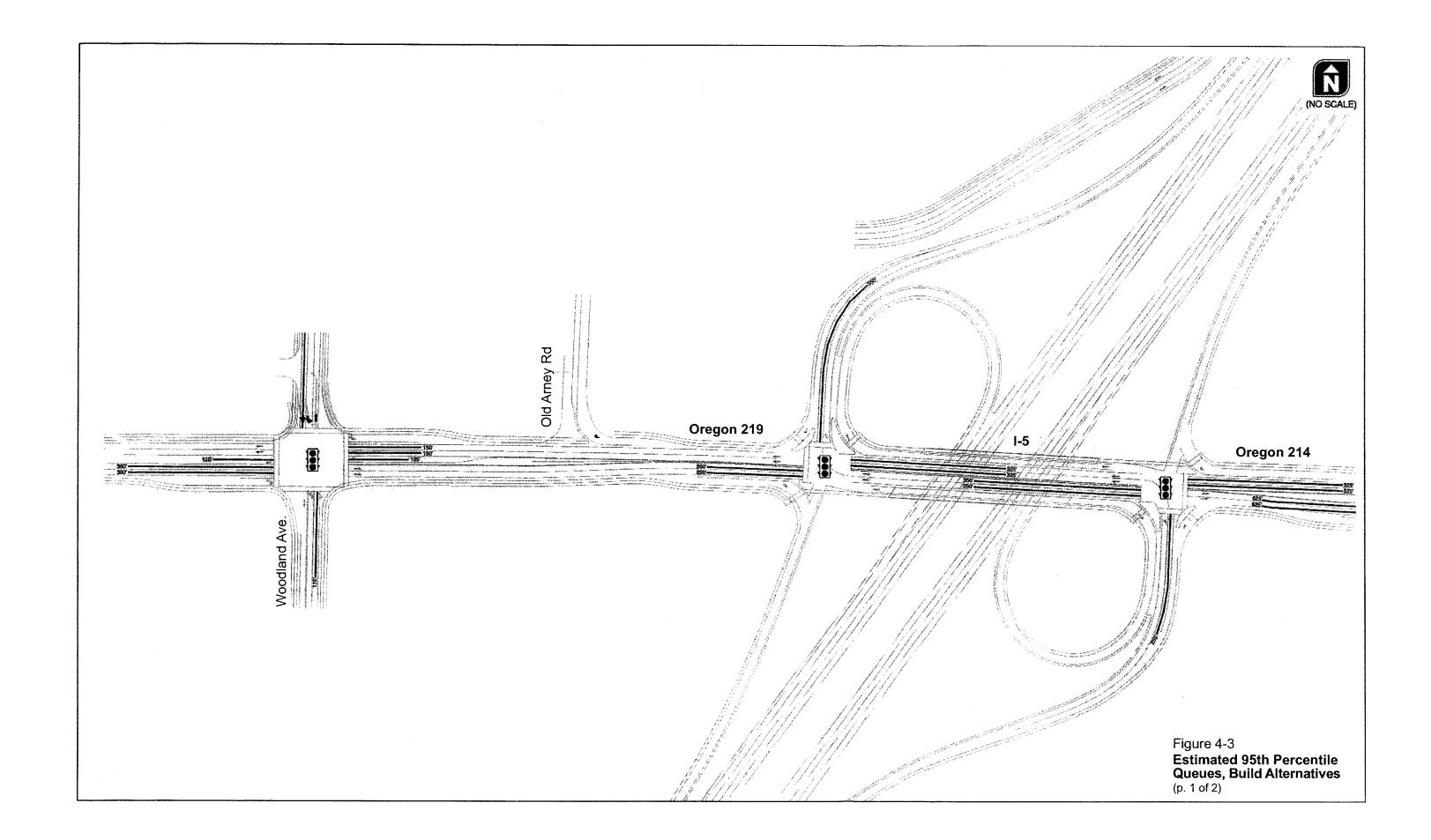
	Sho	oul	der								St	noul	der
			Ţurn								Turn		147 77
1	Walk		Lane	Bike	Lane	Lane	Med	Lane	Lane	Bike	Lane		Walk
	6′	31	12'	5′	12'	12'	4	12'	12'	5′	12'	3'	6′
							لجبل						
ľ													
							-	- 2'					

Oregon 214/219 with Outside Turn Lanes Cross Section

P	lante Strip	er O	Ū		C/L			P	lante Stri	e <i>r</i>)
Walk		Bike	Lane	Lane	Median	Lane	Lane	Bike		Walk
6′	6′	6′	12'	12'	18′	12'	12'	6'	6′	6'
						- 16′				

Oregon 214/219 with Raised Median Cross Section

Figure 2-7 **Build Alternatives Cross Sections**



APPENDIX C

Standards Deviation Approval

CVO\051450013 C-1



INTEROFFICE MEMO

TO: Mike Long, Region-2 Project Delivery Manager

pg 11-1-05

FROM: Dave Warren, Region-2 Access Management Engineer

DATE: August 9, 2005

SUBJECT: Standards Deviations for I-5/Woodburn Interchange Area Access

Management

I have reviewed the access management measures for the I-5/Woodburn Interchange Project that are included in the Interchange Area Management Plan (IAMP). On the basis of this review, I am authorizing the deviations noted in the IAMP, which are integral to the project's selected alternative of the draft Environmental Assessment. East of I-5, travel on Oregon 214 is interrupted by closely spaced intersections and driveways to businesses. The spacing from the interchange ramp to the nearest full access public streets east and west of the interchange are below OHP policy for 1,320 feet, or 1/4-mile, spacing. The spacing from the interchange ramp to the nearest right-in, right-out access public streets east and west of the interchange are below OHP policy for 750 feet. The deviation for access spacing is on the basis that the improvements proposed will improve safety and operations while moving toward the access spacing standards identified in Table 6 of OAR Chapter 734, Division 51, Spacing Standards Applicable to Freeway Interchanges with Multi-Lane Crossroads.

Full compliance with the access spacing standards would result in significantly more investment to reconstruct local streets, relocate utilities, and wholesale displacements of businesses and residences in the interchange area. The authorized deviations are listed below:

Authorized Deviations to Access Management Spacing Standards – I-5Woodburn Interchange

Name of Access	Distance from Closest Freeway Access Point (feet) ^a
Woodland Avenue (full access/signalized)	1,080
Old Arney Road (right-in, right-out)	530
Lawson Avenue (right-in only)	460
Evergreen Road (full access/signalized)	900

^a Distances are recorded from the centerline of the nearest freeway ramp to the centerline of the intersection.

Cc: Gerry Juster, Access Development Review Coordinator

Ryan Brown, Senior ROW Agent

Terry Cole, Special Projects Coordinator

Woodburn Development Ordinance 2.116

Woodburn Development Ordinance 2.116

(Council approved on 10/31/05)

2.116 Interchange Management Area (IMA) Overlay District (new)

2.116.01 Purpose

The purpose of this overlay district is to preserve the long-term capacity of Woodburn's I-5 Interchange with Highway 214, in coordination with the Oregon Department of Transportation (ODOT).

Preserving the capacity of this interchange is an essential element of the City's economic development strategy, because continued access to I-5 is necessary to attract and maintain basic employment within the Woodburn Urban Growth Boundary (UGB). This chapter complements the provisions of the Southwest Industrial Reserve (SWIR) Overlay District by ensuring that industrial land is retained for targeted basic employment called for in the Woodburn Economic Opportunities Analysis (EOA) and Woodburn Economic Development Strategy (EDS). This chapter also ensures that needed industrial, commercial and residential land within the IMA Overlay District is protected from commercial encroachment.

These goals are met by establishing trip generation budgets as called for in Transportation Policy H-7.1 of the Woodburn Comprehensive Plan. The parcel budgets are intended to be high enough to accommodate peak hour trips anticipated by the 2005 Woodburn Comprehensive Plan (WCP) and Transportation Systems Plan (TSP), but low enough to restrict unplanned vehicle trips that could adversely affect the interchange.

2.116.02 Boundary of the IMA Overlay District

The boundary of the IMA Overlay District is shown on the Woodburn Comprehensive Plan Map and Zoning Map.

2.116.03 Applicability

The provisions of *Section 2.116* shall apply to all Type II – V land use applications that propose to allow development that will generate more than 20 peak hour vehicle trips (based on the latest Institute of Transportation Engineers Trip Generation Manual) on parcels identified in *Table 2.116.1*. The provisions of *Section 2.116.07* shall apply to all properties within the boundary of the IMA.

2.116.04 Vehicle Trip Budgets

Section 2.116 establishes a total trip generation budget for planned employment (commercial and industrial) land uses within the Interchange Management Area – defined as the IMA Trip Budget, and a trip budget for each vacant commercial or industrial parcel – defined as the parcel budget.

The IMA District Trip Budget

A. The IMA District Trip Budget
The IMA Trip Budget for commercial and industrial uses identified on Table 2.116.1 is 2,500 peak hour vehicle trips. (An estimated 1,500 additional peak hour residential trips are planned within the IMA District.) The IMA Trip Budget will be allocated to parcels identified on Table 2.116.1 on a first developed – first served basis.

2005 (Initial) Vehicle Trip Budget by Parcel

The parcel budget for each vacant commercial or industrial parcel within the IMA Overlay District is shown on Table 2.116.1. Parcel budgets are based on 11 peak hour trips per developed industrial acre, and 33 peak hour trips per developed commercial acre.

- 1. The parcel budget for each parcel will be reduced in proportion to actual vehicle trips generated by new development on any portion of the parcel.
- 2. The City may allow development that exceeds the parcel budget for any parcel in accordance with Section 2.116.06(B).

Table 2.116.1. Vehicle Trip Budget by Parcel (Parcel Budget)

Assessor Map and Tax Lot Number	Applicable Comprehensive Plan Designation	Vacant Buildable Acres	Maximum Peak Hour Vehicle Trips
052W11 00300	SWIR	88	968
052W13 01100 052W14 01500 052W14 01600	SWIR	96	1056
052W14 00200 052W14 00600	SWIR	22	242
052W14 00800 052W14 00900 052W14 01000 052W14 01100	SWIR	109	1199
052W14 01200	SWIR	4	44
052W23 00100	SWIR	46	506
052W12AC 04301	Commercial	2	66
052W12C 00604	Commercial	1	33
052W12C 00605	Commercial	3	99
052W12C 02100	Commercial	7	231
052W12C 02200	Commercial	6	198
052W12C 02300	Commercial	7	231
052W12C 02400	Commercial	2	66
052W13 01600	Commercial	5	165
052W14 02000	Commercial	8	264

Assessor Map and Tax Lot Number	Applicable Comprehensive Plan Designation	Vacant Buildable Acres	Maximum Peak Hour Vehicle Trips
052W14 02100	Commercial	5	165
052W14 02300	Commercial	6	198
052W13BD 00900			
(westerly portion)			
052W13BD 01500	Nodal Commercial	9	207
052W13BD 01600		9	297
052W13BD 01700			
052W13BD 01800			

2.116.05 Administration

This chapter delineates responsibilities of the City and ODOT to monitor and evaluate vehicle trip generation impacts on the I-5 interchange from development approved under this section.

A. TIA (Traffic Impact Analysis)

A TIA is required for all land use applications subject to the provisions of *Section 2.116*. The standards for preparing a TIA are found in Exhibit Q, Transportation Impact Analysis Requirements. The TIA must meet City and ODOT administrative rule (OAR Chapter 734, Division 51) requirements and shall include an evaluation and recommendation of feasible transportation demand management (TDM) measures that will minimize peak hour vehicle trips generated by the proposed development.

B. ODOT Coordination in Land Use Reviews

For a land use application subject to the provisions of Section 2.116:

- 1. The City shall not deem the land use application complete unless it includes a TIA prepared in accordance with Exhibit Q, TIA Requirements.
- 2. The City shall provide written notification to ODOT when the application is deemed complete. This notice shall include an invitation to ODOT to participate in the City's facilities review meeting.
- 3. ODOT shall have at least 20 days to provide written comments to the City, measured from the date completion notice was mailed. If ODOT does not provide written comments during this 20-day period, the City staff report may be issued without consideration of ODOT comments.

C. City Monitoring Responsibilities

The details of City and ODOT monitoring and coordination responsibilities are found in the approved Woodburn – ODOT Intergovernmental Agreement (IGA).

- 1. The City shall be responsible for maintaining a current ledger documenting the cumulative peak hour trip generation impact from development approved under Section 2.116, compared with the adopted IMA Trip Budget.
- 2. The City may adjust the ledger based on actual development and employment data, subject to review and concurrence by ODOT.
- 3. The City will provide written notification to ODOT when land use applications approved under Section 2.116, combined with approved building permits, result in traffic generation estimates that exceed 33% and 67% of the adopted trip generation budget.

D. Vesting and Expiration of Vehicle Trip Allocations

This section recognizes that vehicle trip allocations may become scarce towards the end of the planning period, as the I-5 Interchange nears capacity. The following rules apply to allocations of vehicle trips against the adopted trip budget:

- 1. For commercial and industrial land use applications, vehicle trip allocations are vested at the time of design review approval.
- 2. Vehicle trips shall not be allocated based solely on approval of a comprehensive plan amendment or zone change, unless consolidated with a subdivision or design review application.
- 3. Vesting of vehicle trip allocations shall expire at the same time as the development decision expires, in accordance with Section 4.102.03-04.

2.116.06 Allowed Uses

A. Generally, permitted and conditional uses allowed in the underlying zoning district are allowed subject to other applicable provisions of the WDO and Section 2.116.

2.116.07 Comprehensive Plan and Zoning Map Amendments

This section applies to all Comprehensive Plan Map amendments within the IMA Overlay District. This section does not apply to Zoning Map amendments that result in conformance with the applicable Comprehensive Plan Map designation, such as Zoning Map amendments that occur when land is annexed to the City.

A. Transportation Planning Rule Requirements.

Applications for Comprehensive Plan Map amendments, and for Zoning Map amendments shall determine whether the proposed change will significantly affect a collector or arterial transportation facility, and must meet the requirements of Oregon Administrative Rule (OAR) 660-012-0060 and WDO Section 5.104.02-04.

B. Limitations on Comprehensive Plan Amendments.

To ensure that the remaining capacity of the I-5 Interchange is reserved for targeted employment opportunities identified in Chapter 4 of the Economic Opportunities Analysis (EOA) and needed housing, this section imposes the following prohibitions on Comprehensive Plan Map amendments within the IMA Overlay District:

- 1. Comprehensive Plan Map amendments that will increase the net Commercial land area within the IMA Overlay District shall be prohibited.
- Comprehensive Plan Map amendments that allow land uses that will generate traffic in excess of the IMA Trip Budget shall be prohibited.

2.116.08 Interchange Capacity Preservation (ICP) Standards

Land use applications subject to the provisions of Section 2.116 shall comply with the following:

- A. Cumulative Impact Standard. Peak hour vehicle traffic generated from the proposed development shall not, in combination with other approved developments, exceed the IMA District Trip Budget of 2,500.
- B. Parcel Specific Impact Standard. Parcel-Specific Impact Standard. Peak hour vehicle trips generated by the proposed development shall not exceed the maximum peak hour vehicle trips specified in *Table 2.116.1* for the subject parcel, EXCEPT:
 - 1. Development of uses listed in *Table 2.1.21* (*Section 2.114.03*, SWIR Zone Permitted Uses) *may* be allowed to exceed the maximum, *if* the development will contribute substantially to the economic objectives found in Chapter 2 of the Woodburn Economic Development Strategy (EDS).
 - 2. Residential development on a parcel zoned Commercial shall be allowed to exceed the maximum.
- C. Transportation demand management (TDM) measures shall be required to minimize peak hour vehicle trips and shall be subject to annual review by the City.

APPENDIX E

Intergovernmental Agreement

CVO\051450013

At the time of printing this IAMP, the Intergovernmental Agreement (IGA) between ODOT and the City of Woodburn was being negotiated. When executed, the IGA will be available as a separate document from the ODOT Region 2 Planning Manager.				

APPENDIX F

Public and Agency Coordination

F-1 CVO\051450013

Public and Agency Coordination

Introduction

This appendix summarizes the coordination with the public and agencies, including different committees that were formed for the Woodburn Interchange EA project, outreach that was conducted, and public meetings that were held. Meeting notes from the EA and Refinement Plan follow this summary.

Stakeholder Coordination

Stakeholder Interviews

The PMT developed an interview strategy to elicit information on project issues and general project approach from Woodburn/I-5 interchange project area stakeholders. Data from interviews were used to develop a public involvement and agency coordination plan to detail outreach activities that were conducted during the project. The plan defined activities to be conducted throughout the project, expected timing in relation to decision points and project milestones, and participating roles, commitments, and lead-time requirements for decision makers and other participants. Measures to evaluate the effectiveness of the public involvement activities were also identified. The plan provided recommendations concerning membership of the SWG.

Committees

Three committees were formed to provide direction and input on the project: PMT, the SWG, and the Local Access Committee (LAC). The PMT consisted of lead ODOT and consultant team staff assigned to manage the project components as well as FHWA, city, and county staff who are responsible for planning and transportation policy within their jurisdictions. PMT meetings were held the first Tuesday of each month during the project.

The SWG consisted of representatives from local business, emergency services, residential communities, cultural communities, outlying communities, and other appropriate interest groups. The role of the SWG was to be advisory to the PMT on values, ideas, and concerns of the broader community. SWG meetings were held as follows:

- SWG Meeting #1 Chartering, March 20, 2003
- SWG Meeting #2, April 10, 2003
- SWG Meeting #3, April 24, 2003
- SWG Meeting #4, May 8, 2003
- SWG Meeting #5, June 12, 2003

- SWG Meeting #6, June 26, 2003
- SWG Meeting #7, July 24, 2003
- SWG Meeting #8, April 22, 2004
- SWG Meeting #9, June 3, 2004
- SWG Meeting #10, February 17, 2005

The LAC functioned as a work group of the SWG. All property owners located immediately adjacent to the interchange and property owners who rely on access to or from Oregon 214/219 between Country Club Road and Woodland Avenue were invited to participate on the LAC. The purpose of the LAC was to recommend an access plan as a part of the recommended set of improvements to the Woodburn/I-5 interchange. The access plan together with the favored alternative was forwarded to the PMT from the SWG.

LAC meetings were held as follows:

- May 1, 2003—held jointly with SWG
- May 15, 2003
- June 5, 2003

Outreach

Newsletters/Postcards/Fact Sheets

A fact sheet was developed in March 2003. A project newsletter was distributed to all property addresses and property owners within the projects area in May 2003. Two project postcards were distributed to the same mailing list and through the informational displays—the first in late May 2003, and the second in mid-June 2003.

Informational Displays

To reach the traveling public, cultural communities, and the surrounding community, informational displays were constructed at locations within and around the project area, including the Woodburn Company Stores, Wal-Mart, the Woodburn Public Library, Woodburn City Hall, and the community center at Senior Estates. The informational displays were in both English and Spanish and included maps, background information, issues to address, how to provide input, and a schedule postcard for participants to take home.

Media

Press releases were issued that announced process steps and opportunities for involvement. Press releases were distributed through ODOT's communications office. Display ads were used to advertise public meetings in the *Woodburn Independent* and the City of Woodburn's *Quarterly Newsletter*. The *Woodburn Independent* covered the process on a regular basis, with articles appearing weekly. Public meetings were covered by the papers mentioned above, as well as by television media and the *Daily Journal of Commerce*.

Website

A project website was maintained that provided information on the status of the project, alternative development, upcoming meetings, past meeting notes, and contact information. The website address is:

http://www.odot.state.or.us/region2public/Woodburn_Interchange/

Public Meetings

Two public meetings were held to introduce the project to the public and discuss alternatives being studied, as follows:

Open House 1 – May 29, 2003, 4:30 PM to 7:30 PM – United Methodist Church, 700 North Cascade Drive, Woodburn

The purpose of this meeting was to provide participants an overview of the project. It also provided opportunity for the public to give input regarding issues that should be addressed in the project and potential ideas to be included in the alternatives. Thirty-six people signed as participants.

 Open House 2 – July 10, 2003, 4:30 PM to 7:30 PM – United Methodist Church, 700 North Cascade Drive, Woodburn

The purpose of this meeting was to provide maps of the alternatives under consideration, the recommendations from the SWG, and the project goals, and to gather input on outstanding issues to address. Forty-three people signed in as participants.

Woodburn Interchange Refinement Plan

Stakeholder Mini Meetings Meeting Summary December 21, 1999

Overview

Five meetings were held between October 28, 1999 and November 4, 1999 with small groups of community stakeholders regarding the Woodburn Interchange Refinement Plan. Of the 43 people invited, 25 people participated in the meetings. The participants were invited to attend specific meetings on the basis of common interest or focus area. Six follow-up meetings were also held with individuals who were not able to attend the group meetings from November 15, 1999 through November 18, 1999. ODOT and consultant staff presented information and provided handouts to stakeholders. Participant input was collected either on flip chart or via notepad. Summaries of each of the meetings are contained in later sections for each of the following stakeholder groups and individuals:

- City and County expanded staff (technical staff participates as an ongoing Technical Advisory Committee on a monthly basis)
- Public and Emergency Services
- Citizens
- Businesses
- Elected Officials
- Ken Hector, Silverton Mayor
- Tom Bolton, Mt. Angel Mayor (with Roberta Huddleston, Mt. Angel City Manager)
- Jack Reeves, Woodburn Schools Superintendent
- Dick Pugh, Woodburn City Councilor
- Mindy Mayer, Owner, Woodburn McDonalds
- George Brice, Local Businessman and Spokesperson for Concerned Business Owners on Highway 214

Each meeting was two hours in length and attended by Terry Cole, the Project Manager with Oregon Department of Transportation, Jay McRae, the consultant team Project Manager CH2M Hill, and Jamie Damon, the public involvement consultant with Jeanne Lawson Associates, Inc. The agenda, listed below, was the same for each meeting with a purpose of sharing the analysis to date and recording any concerns, input, and ideas about the project.

Agenda

718 C/100	i i	
Jamie	10min	Introductions
Terry	10min	Planning Process Overview
Jay	10min	Project Overview
All	15min	Process Questions
Jay	45min	Alternatives $1 - 3$, issues and questions
Jay	10min	Comparison Summary
All	15min	New ideas to consider? Preferences?
Jay	5min	Next Steps

Most or all of the stakeholder participants agreed that:

The interchange has been discussed to death with no improvement in sight.

Something needs to be done soon.

Unsure about ODOT's level of commitment for fixing the problems at the interchange.

The Partial Cloverleaf A concept showed the lowest level of impacts, lowest cost, and provides good traffic flow and was generally favored.

Standard and tight urban diamond have unacceptable impacts on Highway 214.

It would be good to extend improvements to Settlemier/Boone's Ferry.

Impacts to the business community to the east and the outlet mall to the west should be minimized.

Property access and local circulation issues need to be addressed.

There were two controversial areas where there was not agreement about the future of the existing interchange:

- The need and priority for a second interchange.
- Use of a raised median and implementing access control.

The meeting format was intended to generate open, informal discussion. During each successive meeting, opinions, statements, and ideas from previous meetings were shared at the beginning for the purposes of informing each group. Due to the nature of the meetings, the recorded information has been paraphrased and re-organized to capture the main topics, questions and responses, and other information so as to reflect the content rather than the flow of the meeting. The following pages summarize each of the five meetings.

Woodburn Interchange Refinement Plan Stakeholder Mini Meetings 11/99

City/County Expanded Staff Meeting

October 28, 1999 9:00am – 11:00am Woodburn City Hall

Attendance

John Brown, City of Woodburn Frank Tiwari, City of Woodburn Randy Rohman, City of Woodburn Bob Hansen, Marion County Cindy Schmitt, Marion County Mike Louie, Marion County Rich Barstad, City of Silverton

Comments in italics are by the ODOT and/or the consultant

General Issues

- How are community needs factored in? If the community needs are local circulation issues, how will that be accounted for in this focused approach to the interchange?
 - ✓ Scoping and inventory consisted of reviewing local policy, plans, and studies conducted in the Interchange vicinity including Woodburn's Transportation System Plan, Marion County TSP, Highway 214 Alternatives Analysis, Woodburn Company Stores Traffic Impact Study, etc. The travel demand forecast was based upon the City's Comprehensive Plan and existing land use zoning designations. In other words, the analysis was based on the total community/area travel demand.
- When was the interchange built?
 - ✓ The current interchange was designed in the mid 1960's and built in 1972.

Seismic issues need to be evaluated by today's standards.

- ✓ It meets today's standards and has a 97 percent sufficiency rating; the interchange has a clean bill of health structurally, but not operationally regarding lane width, shoulder width, and pedestrian facilities.
- The "97" sufficiency rating seems high. Because of the capacity problems, shouldn't it be lower?
 - \checkmark The sufficiency rating addresses the structural integrity, not capacity.
- Why are we looking at this interchange now when significant local improvements have just been completed, particularly to Arney Road?
 - ✓ Recent improvements are inadequate to address travel demand 20 years into the future.
- Has the analysis been conducted using origin and destination data? There may be a higher through traffic component than your future demand shows.

- ✓ This study has relied on the prior work performed for previous efforts. The growth rates were established by building on the work conducted by the County and City modeling efforts. These models are not integrated but gateway volumes were used in determining travel demand growth rates. These rates have then been used in this process and applied to recent counts collected for Highway 214 on the east side of I-5 and Woodburn Company Stores on the west side of I-5.
- Nobody has taken a 20-year system approach using a larger system model. Need to look at adjacent counties and interchanges. Local models currently in use don't integrate adjacent communities.
 - ✓ There is currently an effort underway to develop, calibrate, and produce model runs at a statewide and substate or regional level. This information is in the process of being developed and will be a supporting tool for the broader I-5 Corridor Plan. We know the congestion at Woodburn is bad now without the use of the model data. These models are expected to be available to examine a number of alternatives up and down the I-5 Corridor to address existing deficiencies and future needs. While the model used for this process did not specifically factor in adjacent communities, they were indirectly addressed by considering traffic growth rates on major roadways entering and exiting Woodburn and through the use of what are called "external stations." This is currently the standard practice used in local and regional transportation modeling and analysis.
- How would you approach the problem if you assumed that 30% of the traffic went away? Would it change the caliber of solutions needed at this interchange in the interim?
 - ✓ Diversion of 30% of traffic would only result in deferral or a delay in when most improvements would be needed, from a capacity standpoint (with the exception of the Northbound off-ramp which is currently failing). It could, however, be the equivalent of several years of growth in travel demand. Nonetheless, the interchange would still have the geometric problems that are inherent in the current design and would still eventually encounter the capacity problems that necessitate the improvements. Without significant reduction of development potential (i.e., down zoning) it would be difficult to imagine how trips could be reduced to that degree. Transportation demand management, system management, and land use measures do not normally achieve anywhere near a 30% diversion or reduction of trips, particularly for situations like we find at Woodburn where demand is significantly driven by regional commercial retail and industrial businesses and a great deal of remaining development potential near the interchange. The state's MPOs, which have much better public transportation and more aggressive demand management programs are having a difficult time showing that they can even achieve a 10% reduction in VMT. The interchange is a destination that will continue to attract traffic, regardless of alternative routes or other measures.

Circulation is a problem especially on the east side of I-5.

✓ Local circulation issues will be addressed in a separate process once the basic nature of the improvements to the interchange and Highway 214 are better defined and acknowledged in the local TSP and by the OTC. In this case, the specific local circulation issues (beyond acceptance of the principle that they are necessary to

protect the viability of the businesses and the function of the transportation facilities) will best be addressed in parallel with the environmental documentation phase, as some issues can not be resolved until a final design is selected and approved.

- How many lanes east on 214?
 - ✓ We are using the assumptions as outlined in the 214 study except where additional turning lanes are required to meet mobility or traffic flow requirements at the traffic signals. This means that there is a need for 4 through lanes and a turn lane with as much as an 8-lane cross section on a couple of the alternatives.

Why isn't there an opportunity for us to question the policy assumptions at the state level?

✓ Anyone is welcome to contact FHWA or the OTC and question their policy positions. FHWA establishes interstate access policy. The OHP establishes mobility, access management and investment policy. We are simply applying these policies to address 20-year travel demand forecasts resulting from local land use plans and background growth rates. This is our responsibility and assignment.

Woodburn has money from SDCs and wants to know how the city can have an impact on the outcome if they are going to help pay for it.

- ✓ Other cities and counties have had success in affecting projects. Usually, the time to implement can be reduced via funding for design, right-of-way or construction funding. The design features can be affected through participating in the project development process, as long as policy and safety design standards are achieved and exceptions approved.
- What is the time frame for implementation and money available for any improvements at the interchange?
 - ✓ Five years + to complete the environmental documentation, project development including acquiring necessary right-of-way, preparing final plans, and specifications for construction bidding documents all dependent on the funds being available and project funded in the Statewide Transportation Improvement Program. There would be another 2-3 years for actual construction.
- What about the acceptability of minor or phased improvements if the "big" money doesn't come through?
 - ✓ Assuming there is a longer-term solution in mind, it may be possible to implement in phases. This would depend on the alternative chosen.
- Have you considered all of the options for reducing demand at the interchange?
 - ✓ We have considered everything short of assuming down zoning the adopted comprehensive plans and implementing a community/regional transit system (none currently exists). The problem is big enough and concentrated enough that these measures would not eliminate the need for the interchange improvements. Assuming that you could snap your fingers and make it happen, it would just delay the capacity crisis and would do nothing to help the sub-standard roadway geometry. These measures

should be pursued in order to protect the investment and extend the life of the improvements, but they will not supplant the need for the improvements.

- Suggest that "no build" data is added into the evaluation table for comparison. What is the no build condition?
 - ✓ Existing mobility is in excess of 1.0 for the NB off-ramp. In 2020, the analysis show that all of the intersections except Woodland would have Volume to Capacity ration of greater than 1.0. This just means that almost all of the intersections would fail due to more demand than capacity.
- Woodburn is not supportive of tying the interchange up over several construction seasons.
- City of Woodburn emphasizes willingness to assess SDCs (system development charges) to help pay for the local improvements needed to support the interchange.
- There are a variety of land use forms and development patterns and Oregon has defaulted to one type. The "Paris Model" is where a larger system view is considered. This looks more like the "Moscow Model" where the interchange acts as a node and everything must pass through it because there are no other choices.
- If OTC policies were different and local comprehensive plans were different, the alternatives would be different. Woodburn/Marion County want to attend the OTC briefing.
- Emphasize to the additional groups that the City/County have met and have additional alternatives that they would like to have analyzed.

<u>Alternatives – Issues/Questions</u>

Split Diamond

- Did you look at putting in a split diamond that has a lot more space between the parallel facilities? We need more data about why a split diamond with more space would not work.
 - ✓ We looked at where the capacity problems are and how a distanced split diamond would tie back into the existing system. This option would add trip length, out of direction travel, and include issues of frontage road placement and a new overcrossing structure.
- The split diamond was not fully explored by the TAC.
 - ✓ The Split Diamond was screened and dismissed during a technical workshop where potential solutions were being identified. Split diamond interchanges usually are applied in large metropolitan areas like Portland where there is a well-developed local system grid and parallel facilities exist within ¼ mile spacing. In Woodburn, a split diamond was not considered a feasible solution due to the lack of a parallel facility in the proximity of Highway 214 and associated disruption to local residential properties to create one. Possibilities were explored to the north and south of Highway 214. The most promising opportunity disrupted WinCo Foods on the west and residential property on

the east side of I-5 to the south of Highway 214. The cost would greatly exceed other more promising alternatives.

Standard Diamond

- Arney Road impacts are unacceptable, the road was just completed.
- Impacts to car dealership and outlet mall are unacceptable.
- Impacts to businesses on eastside are unacceptable.

Tight Diamond

- Impacts to eastside businesses and Woodburn Company Stores are unacceptable
- If one of the goals is to preserve the existing structure, why is this alternative still on the table?
 - \checkmark The TAC dismissed this alternative at last meeting.
- Impacts to the eastside businesses are unacceptable.

Partial Cloverleaf A

- Cross-section impacts are better with this alternative.
- A ½ partial cloverleaf, ½ standard diamond hybrid alternative should be analyzed. Loop on eastside, diamond on westside. Have you done this?
 - ✓ No, but we could do so. The engineering layout would be a hybrid using the west side of the diamond and a variation of the partial cloverleaf on the east.

Second Interchange

- These alternatives are being pushed by ODOT. We need to analyze the interchange in conjunction with another interchange. This would allow lesser improvements at the existing interchange, shorter construction impacts, but it would only work with another interchange.
 - ✓ Due to the OHP Major Investment Policy, this study is first asking the question of whether the existing interchange can be improved to work. If not, then analysis of a second interchange and/or other new facility alternatives would be considered. With regard to what we are looking at with these alternatives, we are simply going from a two-lane to a four-lane basic cross section. This is the smallest increment of capacity that can be added since you cannot solve problems by building a half of a lane. Lesser improvements will simply not address the problems at this interchange. The improvements are based upon the existing local comprehensive plan and corresponding land use designations. Deferral of improvements may be possible with changes in land use designations to reduce the travel demand, but not for long—the problem (both physical and demand-based) exists now and will only get worse with time.

- The problem statement is not appropriate it is too narrowly focused on the interchange problems, not all local growth and circulation issues (there is just not enough access to I-5). The concern is this study will not address the need for a second interchange. Is the highway department taking a position and trying to justify improving the existing interchange no matter what or is this process designed to resolve real problems?
 - ✓ The existing interchange is a real problem. ODOT and consultant staff are applying transportation policy in accordance with FHWA and OTC directives in determining the extent of the problems at the existing interchange. According to the Oregon Highway Plan (OHP), investment priorities are to be focused on existing facilities and infrastructure prior to adding additional facilities. At this time there are at least three alternatives that will satisfy the needs at the existing interchange. There may be additional needs brought to light in the broader I-5 Corridor planning process where additional interchanges provide a transportation benefit.
- How does Woodburn make a case for a second interchange?
 - ✓ A second interchange would need to be evaluated using FHWA criteria and recommended by the OTC for approval by FHWA. The basic test, beyond meeting minimum design standards, is whether the new interchange would benefit the overall interstate system.
- The policy of handling future demand with the existing facility before building a new facility does not make sense. The long term cost effective solution might be to add another interchange to access other Cities in the region without having to go through Woodburn.
- Study this with an open mind. Consider a second interchange sometime in the future.
 - ✓ At this time, it is clear that there are solutions that will work at the existing interchange. It is Region 2 ODOT's position that ODOT staff would participate with the City and/or County as a technical advisory on any study involving state facilities, but a second interchange analysis would have to be initiated by the City or County.
- These alternatives are intended to disprove the need for a 2nd interchange.
- If you just do minimal improvements at the existing interchange, you can put the bulk of the money down the road in a new interchange.
 - ✓ Minimal improvements are what we are proposing—from two to four lanes and associated turning lanes. Anything less simply won't solve the problem, even with a 20 or 30% reduction or diversion of forecasted traffic. This kind of change is very unlikely given how far away a second interchange would have to be located and the existing and planned land uses around the interchange.
- The County TSP shows a long-term plan for a "beltline" type facility, which connects with a second interchange.

- ✓ We understand that, but a new facility would still have to meet the FHWA 3 to 6 mile spacing standard, assuming that you could show benefit and overcome the land use hurdles.
- Doesn't FHWA have a process to review and allow exceptions to the policies?
 - ✓ When the interstate was constructed, it was constructed as an access controlled facility with specific interchange access points. I-5 is a completed facility. Addressing the criteria established for interstate access really is using the exception process. Our absolute minimum standards are 1 mile urban and 2 miles rural—this sort of spacing exception would require extraordinary circumstances to justify it (and even 1 mile would be south of Butteville Road).
- Woodburn has the expectation that someone will get back to them with how much a second interchange will cost.
- The cost/benefit to reconfigure the existing interchange doesn't make sense. Question the policy of why the state would want to invest 100% for a lesser percentage improvement at an existing facility, then 100% for a 100% improvement. The decision making model as set forth in the OHP, does not make sense. You need to more clearly show return on investment at a system level rather than at a site location. This process does not reflect a return on investment approach.

Action Items

Provide more information about why split diamond was dismissed. Need more information about how it would work with more distance between the parallel facilities. Also need to address the hybrid diamond/cloverleaf concept offered by the City.

After this meeting, an extension of Parr Road to cross I-5 and connect with Butteville Road was looked at in brief. There would be 8,700 feet of new roadway and a new over crossing structure across I-5. There would also be more cost and operational problems connecting the frontage roads to the existing roadway network. Very preliminary costs without right-of-way and connections to the local system would amount to a minimum of \$16 million in addition to improvements (overcrossing and frontage roads) at the existing interchange.

As far as the hybrid diamond/cloverleaf is concerned, there would still need to be additional lanes on the eastside (7-lane cross section) for the development of left turn storage at the southbound ramp traffic signal. Traffic flow along Highway 214 would not function as well as any of the interchanges shown in the tables. However, there is enough of a buffer in capacity that this system configuration would probably still work, but not last as long into the future as any of the other alternatives presented.

Woodburn Interchange Refinement Plan Stakeholder Mini Meetings 11/99

Emergency Services/Schools

November 2, 1999 3:00pm-5:00pm Woodburn Family Clinic

Attendance

Bill Klein, Woodburn Fire District Kevin Hendricks, Woodburn Fire District Harvey Franklin, Chemeketa Community College Paul Null, Woodburn Police Department Mark Cotter, State Police Frank Tiwari, City of Woodburn

Comments in italics are by the ODOT and/or the consultant

General Issues

- Is the demand 20 years out based on a single interchange versus two interchanges?
 - ✓ The analysis does not assume a second interchange. Forecasts show that a second interchange doesn't alleviate the demand substantially at the existing interchange. The farther you get away from the existing interchange, the less impact a second interchange has on alleviating problems along Highway 214.
- Initial reaction when coming in is the second interchange is the answer. Once we understood the issues, where the traffic is coming from, we are convinced we need to fix current problem with the existing interchange. You need to get information out to the broader community about a second interchange's inability to solve our problems. The perception is that a second interchange is needed and easier to get than you are telling us.
- Widening along Highway 214, in conjunction with this project, should be all the way to Boone's Ferry, to include the fire station location.
- How would you compare the current traffic with what is proposed?

<u>Current</u> <u>Future</u>

Woodland .32 all over 1.0 except Woodland Southbound .62 Northbound 1.0

Evergreen .85

OR Way .72

- What do you gain for a \$20 million improvement today?
 - ✓ All intersections would operate at or better than OHP Mobility standards in 2020 with any of the three alternatives analyzed in depth.

- Is the existing volume to capacity number for Northbound off ramp 1.0?
 ✓ Yes
- A negative for the half-and-half concept is the left-turn on the structure. This is the only, southbound access for fire trucks. This condition is what is currently in place, and it needs to be improved.
- Optimum for fire access is no median.
 - ✓ Median proposed will beat least partially traversable by emergency vehicles.
- This is the most studied piece of road. We need action now. Stop spending money on studies/plans. State up front that this process is a necessary step along the way towards action and get on with designing and building the project.

Alternatives – Issues/Questions

Standard Diamond

- What happens to Arney Road?
 - ✓ Arney Road would be realigned to a new location to allow for the exit ramp to have the proper alignment for exiting from I-5, deceleration, and storage at the traffic signal at the end of the ramp. An exact location would have to be determined during project development.
- Appears to have a large impact on the businesses.

Tight Urban Diamond

- How does tightening the interchange benefit the area over the standard diamond?
 - ✓ Improvement of traffic flow on Highway 214 by having the ramp signals essentially work as one signal and reduced impacts to property was the aim with this alternative. However, in this case there was nominal improvement of traffic flow, if any, when compared to standard diamond. The ROW impact, because of the need to replace the overcrossing with a taller structure, is actually greater for Highway 214. Costs are also greater. TAC has decided to not pursue this alternative.

Partial Cloverleaf A

- Is the number of lanes on the overpass the same as the previous alternatives?
 ✓ No this alternative does away with the left turn lanes. It is a narrower structure.
- Need to be able to get equipment across the freeway. See more benefit from the Partial Cloverleaf A. Which alternative saves more businesses?
 - ✓ Partial Cloverleaf A although the half and half has not been completely analyzed.

Half Partial Cloverleaf/Half Standard Diamond

• Don't pursue it if there are no advantages.

Split Diamond/Second Interchange

- Another interchange would benefit Gervais/Donald more than Woodburn. Need to get the
 information out to the public about the hurdles involved in a second interchange and the 3-6
 mile separation requirement by FHWA.
- Wouldn't Molalla, Mt Angel, Silverton most likely always use the 214 interchange even with another ramp somewhere else.
 - ✓ Probably, unless significant highway improvements were built to support it

Regarding the split diamond and second interchange, where does the data come from regarding the trip diversion potential associated with a second interchange?

✓ Forecast information is based on land use assumptions from the adopted TSPs from Marion County and Woodburn, traffic analysis from the Highway 214 study, and the Woodburn transportation system model, as updated for the Highway 214 study. At a 2.5% growth rate traffic would double in about 30 years. The potential for trip diversion is not significant enough to alleviate problems at the existing interchange. The trip attractions and developable land use potential are already there.

Is there an opportunity to get a new interchange in the future?

- ✓ Money is tight hard to say where it would fall in the priorities. There are also significant land use issues that would need to be addressed.
- If the city really grows, what is the hope of getting a second interchange closer than 3-6 miles?
 - ✓ May be able to get an exception of a mile, if you were able to make the case that you were in an urban area with significant constraints—it would be highly unlikely. Most likely 2 miles out, at best, with the maximum exception. You would need to factor in considerable land use hurdles to site a second interchange outside of the UGB or to expand the UGB.

A CITY REPRESENTATIVE MADE THE FOLLOWING COMMENTS AT THE END OF THE MEETING:

- Need to assess the impact of putting in a median today. Make small incremental changes.
 See what the effect is. There is a need to see what affect it will that have on today's traffic.
 - ✓ The median won't cure the geometric problems with the physical and geometric problems that cause the congestion—it would help, but you still have a sub-standard 2-lane facility, in any case.
- Truck/freight lobby is strong. They will advocate for a second I-5 access.
- Was the \$600 million bond the impetus for this study?

- ✓ The timing is good, however, ODOT has needed to get an alternative on the table for the interchange and Highway 214 for some time. It is one of the top priorities for the area commission.
- City and county are going to pursue the second interchange. Believe that a greater amount of traffic will divert to second interchange than ODOT has stated. In the event of a disaster, one interchange will only provide one way onto the freeway. City believes second interchange is more desirable in light of major disaster.
- **Fire Department Comment**: Are you (city representative) saying that even if what the ODOT folks are saying is true and fixing the existing interchange is the cheapest and best way to go and the citizen's want it you will still do what you want? That is not appropriate. If a major disaster takes out the interchange we will bulldoze up a ram to get over it. That is not a problem. We don't want a second interchange because of more exposure to I-5 calls—it would double the runs we have to make and reduce our ability to serve the community. In light of major disaster, Woodburn would need to use alternate routes, not I-5. Wouldn't want to dump more onto a locked up freeway when there are other routes.
- City Police Comment: Second interchange doesn't really improve access to east and west Woodburn. We already have three accesses linking west and east across I-5.
- State Police Comment: Similar concerns and response as stated by city police. City and county need to coordinate with ODOT to address a second interchange as a separate issue.

Neighborhood Groups, Citizens, and Civic Organizations

November 2, 1999 7:00pm-9:00pm Woodburn Family Clinic

Attendees

Barbara and Max Lucas
Dave Christoff
Randy Westrick, Woodburn Rotary & Woodburn Parks Department
Beverly Koutny, Woodburn Downtown Association
Randy Rohman, City of Woodburn

Comments in italics are by the ODOT and/or the consultant

General Issues

- It would be nice to have a boulevard type approach to the community (planted median).
- Where is the plan on paper to show local circulation south of the interchange off of highway214? Need to improve the local circulation.
 - ✓ Resolving access and circulation issues, beyond the concept and recognition that it is needed to make the whole area function for businesses and travelers, is separate from this process. Because of the level of detail involved, the issues associated with ROW negotiations, and the dependency on the final design approved this issue is best addressed as part of the detailed project development process.
- Are there any possibilities for the traffic to exit into Wal-Mart area?
 - ✓ This is called a slip ramp –FHWA says "no" and so does ODOT. While slip ramps may exist elsewhere, this is not an acceptable interstate design primarily from a safety perspective.
- Impacts to businesses local circulation needs to be addressed because the businesses are either displaced or run out of business. On the other hand, they probably should have anticipated that this area would not stay the same. Ramps and medians just need to be accepted in order to solve the problem. It seems as though you could almost create "mini main streets" on the back part of the businesses. The street next to McDonalds is owned by McDonalds with a public easement. It is used like a public street and probably should be a public street.
- Do all of these questions (referring to local access and circulation) need to be answered in December?
 - ✓ No. Many of the specifics and details will not be resolved until the project development is completed and environmental document is approved.
- How far east will 214 need to be widened?

- ✓ We are showing Woodland to Oregon Way with this process, but there would also need to include transitions from the new sections to the existing parts of Highway 214 that would go a little beyond Woodland and Oregon Way.
- It would be nice to extend the widening to Boone's Ferry/Settlemier at least. Have you addressed the foot traffic at Boone's Ferry/Settlemier near the middle school?
 - ✓ No. However, that intersection is five lanes right now. The degree of problems with crossing wide facilities would be similar to the existing situation.
- The bigger problems are the crossings at the park where there is no traffic signal.
- Why did you consider the "half and half" (hybrid) concept?
 - ✓ Because it was suggested at an earlier meeting.
- It is good to consider all ideas, but don't study them more than is necessary to dismiss them.
- This project was started before the legislature passed the bill regarding the gas tax, so if the voters turn it down in the spring, this project will stay in the pipeline right?
 - ✓ Yes, if ODOT reinitiates a development program. Region 2 would like to continue to develop the project so that it is ready to go when money becomes available. It is one of Region 2's and the Area Commission's top priorities.
- Every time the citizens ask ODOT whether or not the traffic would increase if Woodburn never built another house or store ODOT responds with yes. Yet, ODOT continues to cite the local comp plan and problems because of Woodburn's poor planning. Locals are tired of hearing that it is a regional problem.
 - ✓ That is true and it is Region 2's perspective that pointing fingers about the past is not constructive at this time. It is a statewide and regional problem because traffic will continue to grow on I-5, but it is also a local issue associated with existing local development being a regional attraction and development potential for more trip generation and attraction. Our intention is to address the problems at hand rather than to worry or make accusations about a past that we cannot change.
- Is the gas tax the same as the bonding measure?
 - ✓ Yes.
- What is the gas tax going to be?
 - **√** 29 cents.
- At a meeting not too long ago statistics were cited that a 45-cent gas tax would need to be levied to address the safety problems in the state. Is that true?
 - ✓ The figure was probably higher than that, but it was based on a hypothetical exercise that asked how much it would cost to bring all roads, everywhere in the state up to current standards, regardless of demand. The reality is, however, that Oregon does have one of the lowest overall transportation tax burdens in the country, despite the relatively high gas tax, because of the low registration fees and the fact that virtually no other revenue goes to transportation (as opposed to states that use sales tax and other sources).

- What is the reason for the OTC briefing?
 - ✓ OTC asked for an update as part of their consideration of a related land use appeal, but we would have gone to them anyway as part of this process.
- Where is the Hwy 214 project in relation to other statewide priorities?
 - ✓ It is on the list of candidate bonding projects –however, much of the 214 improvements that is needed in the next 10-12 years would be addressed with an interchange project (the part from Woodland to approximately Cascade).

Alternatives - Issues/Questions

Standard Diamond

- Is there a minimum distance allowed between Arney Rd. and the off-ramp?
 - ✓ There needs to be a physical separation. The distance shown can be modified to some extent.

Tight Diamond

• The group felt that this concept was not worth discussing, due to the range of negative issues associated with it and its dismissal by the TAC.

Partial Cloverleaf A

- Why have foot traffic on south side of 214 when residential areas are on the north side?
 - ✓ In the final design, the sidewalk will be on both sides. In addition to it being required, it minimizes the number of intersection crossings needed by pedestrians and improves safety.
- The partial cloverleaf is the same basic plan presented to the community in 1987. It looked good then and still seems to. For 10 years the interchange has been studied, planned, and analyzed just fix it. There will be legislative pressure to build something like this.

Split Diamond/Second Interchange

• General feeling in community is to just put in a ramp or two at Butteville – "its easy." The need for a second interchange has come to light more vehemently over the past few years because the people here don't see any fixes on 214 and believe that ODOT is unwilling to solve the problem at the existing interchange. The popular perception is that it would be easier to just build a new interchange at Butteville Road.

Business Community

November 3, 1999 2:30-4:30 PM Woodburn City Hall

Attendance

Jane Kanz, Woodburn Chamber Mary Graves, Woodburn Company Stores Yolanda Byman, Chevron Jim Parker, WinCo Foods Ed McKenney, Mt. Angel Chamber Randy Rohman, City of Woodburn

General Issues

- Would like to get better versions of the small map plans to more clearly show the impacts.
 - ✓ Copies will be made available, but impacts shown should still be viewed as concepts. Alignments will likely shift during more detailed project development.
- Businesses are opposed to a median. Will businesses have right in/right out and/or U-turn capabilities?
 - ✓ U-turn may be possible away from the interchange, depending on signal phasing. Unsure about right in/right out due to grade, how signals work together, and available storage for turning movements. In any case, accesses will be controlled to eliminate left turns between the intersections from Woodland to Oregon Way. Right in/right out or right in only has not been evaluated in detail at this time. Without a median, no consideration will be given to right in/right out or right in only. We understand that this is a big change, but believe that it will benefit traffic operations and the businesses in the long run, as opposed to the chaos of an open 5-lane section.
- How far east/west on Highway 214 will the budget be able to fund?
 - ✓ First understand that the project is not funded if the bond doesn't pass. If the bonding package fails, then project selection into the STIP will be contingent upon existing funds and potential additional funds during the next legislative session. The cost estimates in the table reflect the project from Woodland Oregon Way, maybe a little beyond that.
- How much time will the total process take?
 - ✓ 5-6 years for the environmental documentation, right-of-way acquisition, and final design processes. Construction would be another 2-3 years depending on the alternative.
- Are there drainage concerns with all of the alternatives?
 - ✓ All add impervious surface area which fills up ditches faster, but Partial Cloverleaf A has slightly less surface than other alternatives. Drainage will be addressed in more detail in the project development process.

- There are several properties for sale in the area. What about that?
 - ✓ Unless there is a completed environmental document, ODOT is not in the position of being a potential buyer.
- Factory Outlet stores are opposed to having customers enter the back of their complex with the "T" Option of the Arney Road realignment.

<u>Alternatives – Issues & Questions</u>

Standard Diamond

- Is the digging out of I-5 necessary on all the alternatives?
 ✓ No, just this one of the three being evaluated for widening all to one side.
- What is the clearance between the bottom of the structure and I-5 at which you need to get a design exception.
 - ✓ 17' for an ODOT design exception 16' for an FHWA design exception from AASHTO standards.
- Northbound off ramp, would the grade be improved?
 - ✓ It would be flattened more, which would help with truck acceleration from a stopped condition.
- Why are the off ramps curved so much?
 - ✓ Primarily for the trucks allows them to stay in one lane when making a left turn. Could be tightened up some in the next iteration along with addressing other issues once we have collected all of the input from this round of stakeholder meetings.
- Businesses do not want as wide a road section as shown here.

Partial Cloverleaf A

- Does the design provide the length of ramps needed?_Market Street, for example, is inadequate.
 - ✓ Market Street is an example of a Single Point Diamond. At Highway 22 or Mission Street, the acceleration ramps are too short in combination with the loops and it is being reconstructed now to lengthen the ramps. With any of the alternatives developed thus far, ramps are lengthened for acceleration/deceleration, safe stopping distance, and storage requirements.
- What else do we gain with this alternative besides better truck movement?
 - ✓ Less cost, less ROW, more efficient traffic flow, and reduction of vehicle conflicts from left turns by converting them to right turning movements.

Woodburn Interchange Refinement Plan Stakeholder Mini Meetings 11/99

- Why can't we keep southbound off ramp out of the way of the Company Stores on the Partial Cloverleaf A?
 - ✓ The ramp length is determined by requirements for deceleration, safe site distance, and safe stopping distances. Some adjustment is possible from what is shown. There will need to be a physical barrier to separate the off ramp and Arney Rd.

Tight Diamond

Businesses do not want as wide a road section as shown here.

- What was the initial reason for pursuing this given all of the problems?
- \checkmark We thought there might be fewer impacts to property and operations might be better. As it turned out, the angle of the intersection with I-5 is skewed too much to realize a benefit and the impact and cost are greater.

Woodburn Interchange Refinement Plan Stakeholder Mini Meetings 11/99

Elected Officials

November 4, 1999 4:00pm – 6:00pm Woodburn Family Clinic

Attendance

Richard Jennings, Mayor of Woodburn Patrician Milne, Chair of Marion County Board of Commissioners Kathryn Figley, Woodburn City Council Randy Rohman, City of Woodburn

Comments in italics are by the ODOT and/or the consultant

General Issues

- Regarding land use and travel demand forecast, is the city TSP considered in these concepts?
 ✓ Yes
- How is the Refinement Plan related to the STIP?
 - ✓ The STIP is a programming document. Having an agreed upon Refinement Plan and an updated TSP in your local comprehensive plan improves the chances of a project being put into the STIP.

Many people think that the project is on the STIP, even though it is not.

- ✓ The interchange and Highway 214 improvements are on the bonding list. We encourage you to think about combining the projects into one because the first phase of improvements for Highway 214 is the same as the first phase of the interchange project.
- We need to get the interchange on the STIP so that it is eligible for federal funds. The projects under consideration for the bonding list need to be valid projects. There is a rumor that ODOT is moving away from supporting the projects on the bonding list.
 - ✓ The list was pulled together in a very short amount of time by ODOT staff in response to requests by the legislature. The list is now being analyzed on many levels and through the lens of several layers of policy.
- Woodburn does not want to see this project go down if the ballot measure does not pass. ODOT and the City need a contingency plan. The City will raise STDs to pay for their share. We trust that the City will come up with some of the money--don't trust that this discussion won't be scrapped, to be started over again five years from now. The community needs some assurances that ODOT is committed to do something at the interchange. City feels that they have lost state support Governor's comments, 1000 friends comments, and DLCD comments are ill informed and show a lack of support for Woodburn. The City feels like the community will be passed over because of old decisions and misinformation.

- MWACT needs to link Highway 214 and the interchange together, think of them as phase 1 and phase 2.
 - ✓ Region 2 is supportive of linking the projects to get the interchange and phase one of the 214 project first and the rest of 214 later.
- City was the one to separate Highway 214 and the interchange because they could raise a higher percentage of the funds for Highway 214. The city thought they could get the Highway 214 work done sooner than ODOT.
- The city needs to mobilize support for the ballot measure and support for the interchange. Are we wasting our money on the Highway 214 study?
 - ✓ No, the study is already completed. It helped to identify the cross section necessary to tie into the interchange.
- A city councilor does not see how the 15% intended for pedestrian/bike improvements is warranted. In the plan, you will need to emphasize that the law mandates bike/ped facility.
- People with motor homes are very upset about trying to negotiate the structure due to the grade.
- Who made the decision that the interchange is needs an urban standard of design instead of a rural standard?
 - ✓ The decision is not subjective in so far as someone deciding that it is rural verses urban. Rather, urban standards are appropriate when a certain level of activity occurs. Application of an urban standard is just a natural consequence of Woodburn's growth. It has more to do with traffic flow and design standards. It would not be prudent to design to a rural standard given the land use and growth, existing and forecasted, in this area.
- CBO214 is taking an inventory of which businesses would be willing to donate frontage understanding is that some widening would happen on both sides.
 - ✓ With the type of structure that we have in this location, it would cost less and result in fewer traffic delays if the structure were to be widened on one side or the other. Widening some on both sides may create more problems than it would solve for businesses, especially during construction.
- Regarding the realignment of Arney Road, people will be very angry when they realize that the new investments made were for nothing.
 - ✓ Keep in mind that Arney Road will be about seven plus years old, at best, by the time construction is complete. Having said that, it is true that new investments sometimes do fall victim to larger improvements that come along later.
- When it comes to engineering a design, the structure needs to be flattened out and have an overall lower profile. Will this project do that?

- ✓ The structure will not be lowered on the alternatives where it is retained and expanded. The grades will be flattened to the extent needed for safety in order to avoid unnecessary impacts to property.
- How can we better serve the traffic at the outlet mall during the holidays?
 - ✓ Your best bet is to coordinate with ODOT's maintenance and operations staff for developing a special event strategy.
- Has any thought been given to buying out Trailer World?
 - ✓ Yes, it appears that it would be significantly impacted and an estimate of the right of way costs is included in the table as part of the handout.
- How far do you go to the east?
 - ✓ This cost estimate is based on going to Oregon Way, although that is not necessarily the right idea. It may make more sense to go to Cascade or Settlemire/Boone's Ferry as suggested by others at these stakeholder meetings.
- CBO214 property donation inventory goes to Oregon Way. Some discussion has occurred
 about going further. However, a median has not been part of the discussion. We need to get
 the property owners together and talk about the amount of property needed. This has been in
 the back of people's minds, however they have very different ideas about the amount of
 property needed.
 - ✓ For ODOT purposes, property donation is only considered after the environmental document is completed. State and federal laws are stringent about how property rights are acquired as a means of protection to the property owners, so it would be premature for us to go too far in that direction.
- If the median is a done deal, there will be a lot of concern expressed by the residents about cut through traffic on Cascade and Oregon Way.
 - ✓ According to OHP Policy, access control that may include a median, but would eliminate private driveways in the vicinity of the interchange is required. In fact, in this situation, if our recommendations are accepted, the fullest extent of the policy would not be exercised otherwise Evergreen would be closed off as well. In addition to being policy, access control also makes good business and transportation investment sense as opposed to the safety and congestion problems that would occur if all driveways were left intact with twice as much traffic and twice as many lanes. This is why it is critical that off-highway circulation improvement be an integral part of this project.
- There is agreement that there is no reason to put in a second interchange if there is nothing to connect to it. We need an over crossing and some new highway east and west.
- We will need to get the policy information about interchange spacing, major investments, and access control and talk further with their constituents. It appears that we will need to accept the access control and median as a design feature in order to get past those hurdles.

Alternatives – Issues & Questions

Standard Diamond

No specific discussion other than concern about the 8-lane cross section.

Partial Cloverleaf A

- Is the \$16 million shown for the Partial Cloverleaf a Band-Aid?
 ✓ No, it is a full improvement that will work past the 20 year planning horizon.
- Pleased with no left turns on the structure with the Partial Cloverleaf.
- The partial cloverleaf is the most acceptable.
- The partial cloverleaf is a good place to start the conversation.
- Even though the TSP shows the split diamond, a second interchange, and the partial cloverleaf as possible solutions to the existing interchange, all are most supportive of the partial cloverleaf.

Tight Urban Diamond

• No specific discussion other than concern about the 8-lane cross section.

Split Diamond/Second Interchange

- The City needs another East/West arterial. Evergreen will be extended to Parr Rd. Doing nothing is not acceptable. Is the second interchange off of the table?
 - ✓ Not necessarily, it is a long-term proposition with many land use and other hurdles, but the city is welcome to pursue it. It should, however, be viewed as a separate issue or improvements to the existing interchange will get bogged down. You also need to understand that it will not be possible to locate a new interchange at Butteville Road. It is just too close, even for urban standards, which probably don't apply here anyway, unless your UGB is extended south of Butteville Road.
- The community is divided as to whether or not they support a second interchange. We are very concerned that the constituents are not on the same page as the city. The City's official position is minimal improvements to the existing interchange, use the balance of the money somewhere else. The City's TSP calls for an east/west arterial in the UGB connecting to a frontage road or something, need to consider a southern overpass connection to the interchange area.
 - ✓ We understand the concern about the second interchange, but it really will not solve your problems at the existing interchange. It will also be very difficult to achieve from a policy and standards standpoint. Linking a second interchange to this project will reduce

Woodburn Interchange Refinement Plan Stakeholder Mini Meetings 11/99

the likelihood for either project to occur and policy states that we have to improve what we have, if possible, before new facilities are considered.

- Can you show us where these policies are or send us copies? We are not interested in fighting battles we can't win.
 - ✓ Yes. Copies of the FHWA and OHP Policies and Standards will be sent to you.

Action Items

- □ The city needs irrevocable proof that an interchange at Parr Rd. is not feasible. Terry will get Mayor Jennings the OHP, TPR, and Federal policy.
- Get written materials to Commissioner Milne and the Council before their planning retreat (advance).

November 15, 1999 10:00am – 11:30am Portland Silverton Mayor Ken Hector

- I am personally a commuter and travel through Woodburn or use other interchanges everyday. Highway 214 improvements are needed.
- I see the ramps backup frequently onto the freeway during peak hour. When this happens, I avoid Highway 214.
- A second interchange would be nice. But, I can see why you are dealing with the existing interchange first. The process would stop if it were linked to a second interchange.

Regarding access management, there needs to be adequate access to businesses in the area. My experience has been that presentations by ODOT usually lack the "whys and because" explanations of access control. There needs to be more information about the tradeoffs between short-term changes and long term benefits with examples of where it has worked from a business owner's perspective.

- Buy-in is necessary to work through access circulation solutions.
- The partial cloverleaf looks to be the best alternative.

November 16, 1999 11:00am – 12:00pm Mt. Angel City Hall

Mt. Angel Mayor Tom Bolton and Roberta Huddleston City Manager

- How far east on Highway 214 would the project go?
 - ✓ We established the operational area of the interchange to Oregon Way for this project, but it probably wouldn't fully match back in to the existing cross section until about Cascade. Several have suggested it would be best to try and extend improvements to Settlemier/Boone's Ferry.
- We prefer the Partial Cloverleaf. It seems to be the most workable, especially with the phasing ability.
- Is there much opposition to the Partial Cloverleaf concept?
 - ✓ The Partial Cloverleaf is the best received of the three. Working with the property owners along 214 regarding the access issues is the most controversial aspect of the concept.
- This area (Mt. Angel) is a growth area, constantly processing requests for annexation.
- Concerned about impacts to Mt. Angel from Oregon Gardens, estimates are at 500+ more cars per day.
 - ✓ ODOT has not signed for the Oregon Gardens at the Woodburn interchange.

 Travelers from I-5 are directed through Salem and Brooks.

Partial cloverleaf is a must, the other alternatives are not workable. Get rid of the left turns, causes hostile drivers when so few cars make it through the intersections per cycle.

November 16, 1999 2:00pm - 3:30pm Woodburn School District offices Jack Reeves, Superintendent of the Woodburn School District

- Are there exceptions to the FHWA interchange spacing policy? Wilsonville has interchanges spaced fairly close.
 - ✓ Yes, there are a number of sub-standard situations that have been around for awhile, and they predate the existing policy or were given an exception for some reason when they were built. For Woodburn/North Marion County the closest potential location for a 2nd interchange would likely be at about St. Louis Road, which is about 3 miles to the south of the existing interchange. However, because it is in a rural area, this would also require an exception. The Wilsonville interchanges are actually about 3 miles apart and are entirely within their urban area, so they do meet the three-mile urban spacing standard.
- The Shell station is a particularly difficult access eastbound, can't make a left turn into the station. Westbound, can't get out.
- Pedestrian crossing of Partial cloverleaf loops can be hazardous.
 - ✓ They can be a little tricky, but there are ways this situation can be designed to minimize the potential difficulties. The rebuilt interchange in Wilsonville at Exit 286 is a good example of a safe pedestrian design for this type of partial cloverleaf.
- When would this interchange improvement occur?
 - ✓ If gas tax passes and the project is advanced by the OTC, it would be six or so years—if not, it could be 10-12 years, or more.
- What is the probability of the gas tax passing?
 - \checkmark Polls today show about 60% against, but at this point, your guess is as good as ours.
- The solution needs to address potential congestion that could delay bus schedules. Unrestricted emergency services access through the area is a must.
- I have not seen the traffic problems expected, related to the outlet mall. The city and state have done a good job.
- Keep in mind, with the comments being gathered, individuals don't speak for any mass of people. There are a lot of opinions about this topic in Woodburn.
- Given what you have said about cost and the way it works, the partial cloverleaf does seem like the best option.
- I cannot understand why the community isn't speaking with one voice to support rebuilding the existing interchange (as opposed to pushing for a second interchange).

November 16, 1999 Richard Pugh 4:00pm – 5:30pm Woodburn City Hall

- I am a proponent of the second interchange and the bypass concept, and am concerned that it doesn't seem viable.
 - ✓ It is not that a new North Marion County Interchange does not have merit—it may, we just have not assessed that. This issue in this case is that a new interchange would not solve the problems at the existing Woodburn interchange. If the City or County chooses, the second interchange concept should be pursued as a separate issue. Both from a land use and a transportation policy standpoint, a second interchange in this area faces significant obstacles.

Any improvements have been long in coming.

- How much traffic would be diverted onto a bypass?
 - ✓ The analysis indicated that 10-20% of the traffic might be diverted to a bypass. The numbers are low because the majority of the trips have a local (Woodburn) origin and/or destination and, east to west, Woodburn has really grown up around Highway 214. Additionally, there really is not a strong demand for through trips from St. Paul and vicinity to Mt. Angel and Silverton.

What is the spacing distance for a second interchange?

- ✓ 3 miles for an urban interchange, 6 miles for a rural interchange. Absolute minimums, based on OHP policy, are 1 and 2 miles, respectively, but exceptions to achieve these minimums would be needed.
- How close is the spacing in Salem?
 - ✓ In Salem the interchange numbers denote the miles between interchanges, for example, exits 256 and 258 are two miles apart.
- Federal spacing policy doesn't help solve Woodburn's problems.
 - ✓ Actually State land use hurdles are probably as high or higher than the Federal spacing policy. Getting exceptions to either is extremely difficult. However, in this case, we believe that upgrading the existing interchange best solves Woodburn's interchange problem.
- If there is no bypass a second interchange wouldn't help us anyway.
 - ✓ You also need to consider the total cost of a bypass and a second interchange. It will be difficult enough to get the funds to fix the existing interchange, a second interchange alone would probably cost 15 to 20 million just to connect to existing county roads (if that is even possible). If you add to that a legitimate state highway type "bypass" you would probably add another 20 to 30 million, depending on the

length. The entire state modernization budget is only 54 million per year. The probability of doing a project like this at this time, with the other needs that are already in the queue, is very, very low.

- The interchange project also needs to fall within the "six year rule" to qualify for the bonding list
 - ✓ It would be close with this project, but we think it is "doable."
- Will the project go to Park Street within six years?
 - ✓ Currently the project has been analyzed to approximately Oregon Way/ Cascade. This coincides with the "first phase" of the Highway 214 project (i.e., that portion of the 214 work that is needed in the near-term 10-12 year time frame). In that sense, it would be appropriate to view the interchange project and a first phase of the 214 project as one in the same.
- ODOT coordination with the outlet mall, with very little money, has been effective to move traffic through the interchange.
- Very opposed to a raised median "pro business."
 - ✓ We understand this concern because change is difficult, but we do firmly believe that the improvements simply will not operate with all of the driveways spaced so close on a high volume facility, immediately adjacent to an interstate interchange. People are already avoiding the area today because they can't get around and it will just get worse as more property develops and as background volumes increase on I-5. One factor that seems to have helped people understand the approach we are advocating for access control and system management is that the cost of this project must include whatever local circulation improvements are needed to support the area businesses. We believe that the worst thing you could do for businesses in the long run would be to improve the facility and leave unrestricted accesses intact. The facility would not operate well with so many conflicting moves, safety problems would increase and people would have even more cause to avoid the area than they do now. Look to the improvements that have just been completed in Wilsonville at Exit 283. The main roadway is access controlled and median separated and it works very well to support a level of business that is far greater than is possible with an open access situation like that in Woodburn.
- Concerned about access to Berry Inn in the Partial Cloverleaf alternatives and about adequate access for Hillyard.
- The fight with the median is that it kills the businesses without alternate access. Didn't understand that local circulation and access issues go together with the project or how that would work. Others are not aware of this and it would make a positive difference in how people see the issue.
- The partial cloverleaf is the best option because it has less impact on businesses.

• Local access and circulation needs to be addressed first, as a part of the project staging, before work on 214 or the interchange occurs. We need some concept maps to start to show how local circulation issues will be addressed. It will cost lot of money to have businesses "turn their faces around" to accommodate an alternate access.

ACTION ITEMS

- □ Dick would like a color copy of the concepts
- ☐ Terry and Jay will add an illustration that shows the local circulation needs as an integral part of the project on the maps.

November 16, 1999 6:00pm-7:30pm McDonalds Mindy Maier

- This is very frustrating to perpetually discuss the interchange.
- I own four stores, two in Woodburn, one in Canby, one in Silverton. Nine years ago the 214 McDonalds was the busiest store on I-5 in the state. Last few years business has dropped off dramatically. The traffic problems are affecting this business. This store has been here for 21 years, I have owned it for 9 years.
- Where else would ODOT get the money for improvements if the gas tax does not pass?
 - ✓ The next legislative session or possibly some federal consideration in the next federal transportation bill (in about 4 years).
- The number of accidents here over the past nine years that are not as high as the numbers cited in the statistics.
- I agree that the interchange does not work anymore. It was not designed to handle the volume of trucks and traffic on it today. If the existing interchange is good, why not just improve the existing interchange? A second interchange won't solve the problem here.
- I am very concerned with access management issues "a median will kill this business."
 - ✓ (ODOT offered the same basic explanation as was given to Dick Pugh about the access control measures being proposed really being the only way to keep businesses viable over time—we agreed to disagree)
- Customers are already using Evergreen as a local circulation route. It is problematic for the businesses. If there is no right turn at Lawson, the businesses in this area are dead.
 - ✓ The right-turn at Lawson is not completely out of the question. It is a design detail that will have to be considered during more detailed project development. It may create a weave conflict that would back traffic past the northbound ramp intersection It definitely would not be possible without a median.
- Current signal timing at Evergreen is causing backups on Evergreen and Highway 214
 westbound and Lawson and 214 eastbound. The backups on Evergreen are primarily on the
 weekends.
- Why can't five lanes work on Highway 214? It works in other communities with five lanes and no median.
 - ✓ Five lanes can work within the right conditions. People have told us left onto Lawson does not work now. The situation would be compounded with more traffic and more lanes. Lancaster in Salem does not work well because of similar reasons to this

segment of 214. With good circulation, signing, and alternative access this situation could function better for businesses long term.

• The businesses need local circulation dealt with as soon as possible. There are problems today that are hurting the businesses. The addition of I-5 directional signs at Lawson, Evergreen, and 214 would be of immediate help. There also needs to be the blue travel information directional signs that say "Taco Bell," McDonalds, etc.

ACTION ITEMS

□ Terry will bring the ODOT District Manager out on 11/19 to look at the signage and ask him to work with the City staff. Terry will also ask region staff to look into signal timing issues between Lawson and Evergreen.

November 18, 1999 10:00am – 11:30am George Brice and Christy Olson Wilsonville

- Is it mandatory to bring two alternatives forward or can one be brought forward into the EIS?
 - ✓ It really depends on the circumstances of each project and the kinds of differences that are inherent in the alternatives.
- Storm water drainage is a big issue in Woodburn particularly if the freeway is lowered.
 - ✓ Woodburn is very flat and that would be a big issue with the alternative that appears to require a lowering of I-5 (the standard diamond). Drainage is a design detail that, unless there is some very obvious like a "red flag" issue, is generally dealt with during the EA and detailed project development.

I offer a perspective from Concerned Business Owners on Highway 214 (CBO214) which originally came together with individual points of view, but they have come around to more of a group mentality. Of CBO 214, the Chevron and McDonalds are the most opposed to a median.

- There are median treatments in Florida that work very good. They can work in Woodburn if local circulation issues are resolved.
- The need to fix the existing interchange first and that the second interchange is really a separate issue and the reasons it should be addressed on its own terms is clear.
- The Partial Cloverleaf makes the most sense with the access control and local circulation improvements.
- I (Mr. Brice) offer my services to facilitate understanding of these concepts with CBO 214 members and to participate in more specific negotiations about the circulation plan and the support of CBO214 as an advocate for this project. The group needs to be called on to provide outside, private sector support to ODOT.
- There should be a less cumbersome process associated with getting something done.
- When will we study and resolve the local circulation issues?
 - ✓ As soon as we have agreement on the Refinement Plan concepts and principles with the City, County, and OTC, and get the go ahead for the environmental document, we should begin discussions with the City and businesses about circulation options. With any luck, that would be this spring. Finalizing some decisions may not be possible until the environmental document is finished, to the extent that they may depend on approval of the final interchange design. However, some issues further away from Highway 214 and the interchange may be resolvable earlier. In any case,

it will be absolutely necessary to have the local circulation plan completed and constructed before the interchange reconstruction begins.

- Who is going to study and design the specific components of the local circulation?
 - ✓ ODOT and the City will have to work together on planning and designing those improvements. We will have the services of our (ODOT) preliminary design group as we go through the discussions and negotiations to arrive at a final plan.
- CBO214 has worked with Thomas Mann (lobbyist from Silverton) to facilitate communications. CBO214 will continue to work with Federal legislators to try to acquire T21 funds to fill the potential funding gap for improvements at the interchange.

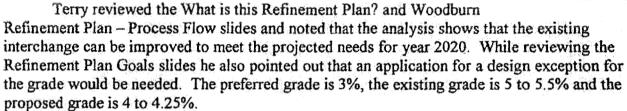
ACTION ITEMS

- ☐ Terry will provide George and Christy with extra sets of the informational packets and the color photos of the concepts.
- ☐ Jay will get George a brief outline of the EA/EIS process steps.

I-5 Woodburn Interchange Refinement Plan City of Woodburn Joint City Council/Planning Commission Workshop January 6, 2000 Summary

Mayor Richard Jennings called the meeting to order. He asked that questions be held until the presentation had been completed.

Terry Cole, ODOT and Jay McRae, CH2M Hill presented information on the study findings to date. This presentation was based on the attached slides (Attachment 1).



Jay reviewed the Problem Statement and Alternatives slides. The information on the Alternatives Information slide is based on format from AASHTO. Three alternatives were analyzed by the Technical Advisory Committee and reviewed at the stakeholder meetings. They are a Partial Cloverleaf Type A or Parclo A (similar to the interchange at Stafford Road), a Tight Urban Diamond (similar to the intersection in south Wilsonville) and a Standard Diamond (similar to the existing interchange).

While presenting the Alternative Evaluation slides Jay noted that costs identified for the Standard Diamond do not reflect digging out I-5 or widening on both sides of the structure as required to achieve design standards for vertical clearance between I-5 travel lanes and the bottom of the Highway 214 overcrossing structure.

For all alternatives, there will need to be local street access in all four quadrants. Terry said that the OTC has made it clear that the cost of the project will include making the system for local access whole. Responding to a question, Terry explained that the issue of right in/right out access has not been fully examined. That issue will be explored as the environmental process is initiated and before the environmental assessment is completed.

Jay continued presenting the Alternative Evaluation slides. He said that the Tight Urban Diamond was dismissed by the Technical Advisory Committee due to costs, impacts, and no operational advantages.

Jay explained that the Partial Cloverleaf Type A (Parclo A) means that the loop ramps of the cloverleaf are in advance of the structure. The diagrams he was using showed widening to the north, but it could be widened to the south or some combination of north and south to





accommodate this design. Local street system and access issues still need to be worked out in the hatch marked areas. Signal phasing would be two phase with no left turns for the Parclo A. The stakeholder groups preferred this alternative for the following reasons:

- Left turns were eliminated
- ♦ ROW impacts were reduced
- ♦ Lower cost

Although he did not have a diagram to share, Jay explained that a fourth alternative with a diamond design on the west and a loop design on the east was proposed at a stakeholder meeting. This design would have 2 through and 2 left turn lanes from the west and 2 through and 1 right turn lane from the east on the structure. The southbound ramp traffic signal would be 3 phase with left turns on the structure and 2 phase on Hwy 214 at the northbound ramp traffic signal. This design would not perform as well as any of the other three alternatives on Hwy 214 and would cost about the same as the Standard Diamond due to the costs of widening the overcrossing structure, addition of the loop ramp, and right-of-way acquisition. There were no clear advantages to this design and Terry indicated that it does not work as a long term solution.

Jay and Terry also explained that Randy Rohman and Frank Tawari had proposed adjusting the existing structure to accommodate five lanes by either eliminating the on stucture sidewalk or cantilevering sidewalks off of the existing structure. The travel lane configuration would consist of two through lanes eastbound and one left turn lane, one shared left/through lane, and one through lane westbound. Terry and Jay explained that mixed traffic flows in lanes, in combination with the split phase traffic signal circumstance that would be required would significantly impair traffic flow because east and westbound traffic on Highway 214 would not be allowed to move at the same time. The added delay would extend queuing and traffic would backup onto the local street system at Evergreen. The proposed five twelve-foot lanes would not leave space for shoulders or "shy" distances on the existing structure according to the 'as constructed' drawings. The team found no advantages to this design and a variety of disadvantages.

Frank Tawari stated that the impacts on the west side of the interchange were less to Arney Road and might allow for staged or phased implementation of the ultimate solution including consideration of a second interchange. He does not want to see this option eliminated without more consideration. Terry explained that ODOT is not dismissing a phased approach and that phasing will be investigated as part of the environmental assessment. He added that, the purpose of this project is to identify the best long-range course of action for dealing with the problems at the existing interchange How we get from here to there has not yet been assessed, but depending on funding, it may have to be more incremental.

Terry reviewed the Stakeholder Input Opportunities and Recommended Next Steps slides. He also distributed a handout titled, ODOT Objectives for Woodburn TSP Amendment (Attachment 2).

Frank Tawari gave a brief presentation on the design that he had proposed to the team earlier. He indicated that there was 71 feet on the overpass, if you count the current sidewalks.

He would like to see the cloverleaf in the southeast quadrant considered for a "quick fix". Terry indicated that taking it through the planning process would take about the same time as for any full alternatives. Frank said that the improvements to this interchange may not be needed if a second interchange is implemented. Terry reviewed ODOT and FHWA spacing standards for interstate access and said that a second interchange would not provide enough relief to the existing interchange to avoid making the level of improvements to the existing interchange identified in the Refinement Plan. The rural spacing standard is 6 miles and the urban spacing is 3 miles. Exceptions can be applied and the best that could be hoped for is a second interchange at St. Louis Road even if the exception criteria can be met. Further, the existing uses in the interchange are regional destinations in and to themselves that do not lend themselves to enough trip diversion to lessen required improvements to existing facilities. The fact of the matter is that today's traffic demands justify the addition of through lanes to Highway 214 without factoring in additional background growth in travel demand. Improvements as shown accommodate future travel demand forecasts for 2020 and beyond for 25 to 30 years assuming growth trends are as planned.

John Brown gave a brief response to what he had heard during the presentations. He felt that implementing the items in the ODOT Objectives for Woodburn TSP Amendment would tie the City's hands for the future. He does not want to see the door closed on the option of a second interchange. There is an opportunity for the City of Woodburn to fund short term changes to allow to planning for a second interchange.

John added that the Lands Committee has identified the need for 200 new acres in the southwest area for future development. Without the second interchange, this would be hard to accomplish. He felt that the presentation of the three alternatives at the stakeholder focus group meetings was really an exercise in identifying what they hated the least, not what they liked. A fourth alternative, like Frank's, should be considered. Terry reminded them that they did not need to avoid mention of the second interchange in their comprehensive plan. However, the need for a second interchange has to be expressed on its own merit and not as solution to the problems at the existing interchange.

ODOT's policy is to support existing comprehensive plans, but they would object to any land use or zoning amendment that can not be served by current facilities (see item 6 ODOT Objectives for Woodburn TSP Amendment). Members at the table expressed concern that making improvements to the existing interchange would make getting a second interchange more difficult. It was noted that DLCD and the City of Woodburn are planning an economic development study that may or may not call for a second interchange as a condition of urban expansion. The Mayor reminded everyone that the Oregon Highway Plan calls for improving existing facilities before building new ones and that doing nothing was not an option.

A city council member expressed concern the by looking for the "Cadillac plan" changes that could be made now are being overlooked. She feels that history shows that study predictions are usually inaccurate and understate actual growth. She is concerned that growth in surrounding communities and the region are not given due consideration in this study. Terry explained that outlying traffic and background growth are factored in and are usually pretty

accurate over 20 years. If the City believes that ODOT has underestimated the impacts of the outlying communities, that is even more reason to choose the alternative that operates best over the long-term, versus a more marginal, short-term fix.

John Brown doubts that the gas tax will stay in place and expects that there will not be enough money to implement the recommended alternative. There should be a plan in place to do some improvements with or without the bond.

Terry pointed out that Frank's recommended design has not been eliminated, as it actually combines elements of the two alternatives that are being considered. During the Environmental Assessment the issue of phasing can be addressed. There is stiff competition for STIP funds, but much of that competition is from high dollar projects. These high dollar projects will greatly exceed the available funds, making this project more attractive for the available dollars by comparison to other projects—it is at least not out of the question if the bond package fails. The Mayor pointed out that it is important to be as far along as possible in planning when competing for STIP funds.

The Mayor submitted a paper with citizen comments from Barbara Lucas into the public record (Attachment 3). The group requested more opportunity for general public input. The Mayor does not want a "show and tell", but true public input. Terry indicated that there would be many opportunities for public input when the project moves into the environmental assessment process.

Attachment 4 - Sign In Sheet

Name - Affiliation - Address

DIE DE	China and	MA Survey But here Carlo High
Richard Byeliand		505 hilson St, heartmen
ElleBankelow	City/Blanning	2340 Mules Farm Rd
Terrie Heer,	Planning 0	2340 Miller Farm Rd
Richard Gennin	e llayor room	Dia. A.
Don Thunne	Admin likebby	2022 A L 1 /
A ve Trice	12 margara	3733 Oakodge Lane 9703.
The Carlot	C. WWW.	Conveil words
All The	act 11	1180 Dell mor ways
Suara Situ	Mes '	" 270 montgomens We
Frank Tiwari	<u> </u>	
Royce R. Young	Plonning	1398 Dresmood Dr. NE Ken
Royne R. Young	Planning	1530 Rainier Rd Wdb.
NOHN BROWN	Amusmaron	970 Alas 220 Mars 4500
Barbara x Mayoru		214 E. Clackamar Cir.
		1.110 He Dan and Car.
		i 11smotte Aren Mongon - Sole
Secret Cocamina		Sdem
STEUR GERGERITZ	TLAWNING DESP	T wooding
BOB SHICLDS	CITT AMOIN	1) woods 41~
JEANINE HOHA	PO. BOX 96	MOODBURNI, OR 9707;
Utals Kenning	Steatesmen To	rul Selan
J	in the second of	

Woodburn Interchange Environmental Assessment

OPEN HOUSE SUMMARY

May 29, 2003

The first open house was held for the Woodburn Interchange Environmental Assessment on May 29, 2003. It was held from 4:30 p.m. to 7:30 p.m. at the United Methodist Church in Woodburn. Thirty-six people signed in as attending the meeting.

The purpose of the meeting was to provide participants an overview of the project and to hear their input regarding issues that should be addressed and potential ideas for the interchange. The open house included a PowerPoint presentation that ran continuously through the meeting (see attached). Four stations of information were available including:

- Welcome/sign –in
- PowerPoint slide show Overview Alternatives for the Interchange Goals and Objectives

Participants were asked to fill out a comment form, provide comments on the goals and objectives and ideas for the interchange on a map located on the back of the comment form (see attached.) Ten comment forms were collected. The comments are listed below.

WHAT COMMENTS DO YOU HAVE ON THE PROJECT GOALS DRAFTED BY THE STAKEHOLDER WORKING GROUP?

- I agree with the goals and have no further comments (4).
- I agree with the goals with the following additions (5):
 - The goals seem a bit confused with implementation plans, but there isn't anything outrageous in there.
 - Obviously businesses that are affected will be harmed. Please take steps to minimize problems.
 - This community *has* had goals for 20 years and has paid for many studies but there have not been any results. In the meantime, Woodburn has grown by leaps and bounds. If there is no start till 2007 or later, I'll never see it.
 - No commercial traffic on Oregon Way.
 - In my estimation, not enough emphasis on leaving (exiting) I-5 in both North and South directions. The existing off ramps are too short in length to absorb autos leaving I-5, considering that the second phase of Company Stores is upon us and the third phase will be in 3-4 years. Ongoing celebrations such as Tulip Festival, Octoberfest, Cinco de Mayo, and others in addition to the 4million cars anticipated by the Company Stores in the year 2004 will bring (has already brought) a nightly wave of traffic. Add in the environmental hazard of outrageously high noise decibels and you have a chaotic cacophony of shrill braking, rear-end collisions added to the fast lane whizzing and you have an ODOT nightmare!! If nothing else, try to elongate the exit ramps which will help eliminate rear-end collisions for both North and South.

DO YOU AGGREE WITH THE STAKEHOLDER WORKING GROUP'S RECOMMENDATION TO FORWARD THE PARTIAL CLOVERLEAF INTERCHANGE DESIGN?

- Yes (9)
- No (1). Please tell us why you disagree
 - In my estimation, not enough emphasis on leaving (exiting) I-5 in both North and South directions. The existing off ramps are too short in length to absorb autos leaving I-5, considering that the second phase of Company Stores is upon us and the third phase will be in 3-4 years. Ongoing celebrations such as Tulip Festival, Octoberfest, Cinco de Mayo, and others in addition to the 4million cars anticipated by the Company Stores in the year 2004 will bring (has already brought) a nightly wave of traffic. Add in the environmental hazard of outrageously high noise decibels and you have a chaotic cacophony of shrill braking, rear-end collisions added to the fast lane whizzing and you have an ODOT nightmare!! If nothing else, try to elongate the exit ramps which will help eliminate rear-end collisions for both North and South.
 - I am in favor of the partial cloverleaf interchange design but I feel that the interchange project is a stop-gap measure only addressing the worst of Woodburn's transportation/traffic problems and not looking at a long-term solution that identifies all the factors contributing to Woodburn's congested public right of ways. Woodburn needs to modify its TSP (Transportation System Plan) to address uninhibited flow of acrosstown traffic as well as traffic on Hwy 214 near the freeway. Part of Woodburn's problem is the lack of planning overall. The city has allowed rampant growth without having the infrastructure in place before it allowed new buildings. First plan the streets and sidewalks, and then put the buildings in. Don't overdevelop and then try to band-aid the problem. Woodburn needs to have a vision for its future and work from that, just upgrading the interchange isn't enough. Easier access will encourage new development and without long-term planning we'll be back in the same congested situation in less than 20 years.

ANY OTHER QUESTIONS, COMMENTS, AND ISSUES WE NEED TO BE AWARE OF?

- I applaud the work and thought of the Stakeholders Working Group. You have talented representation.
- I find that most people do not know that by federal law Woodburn cannot another exit off I-5 due to the 2-mile restriction. The State Rep. who lives in Woodburn says that law should be changed and urges us to write to Ron Wyden, Gordon Smith etc.
- My concerns are about increased traffic on Oregon Way, it needs better signage to indicate no trucks are allowed North or South, as well as enforcement of the trucks that are using Oregon Way. There also needs to be a speed-reader board on Oregon Way and a traffic count 3 or 4 times a year.
- It is too bad that it will take so long since it is already 20 years overdue.
- Hwy 214 is Silverton's main line to I-5. We would like to know how traffic is affected during construction so that we can plan accordingly.

Woodburn Interchange Environmental Assessment Local Access Committee Report

June 12, 2003

OVERVIEW

To aid in developing alternatives for local access circulation, A Local Access Committee (LAC) was formed. The LAC served as a work group of the Stakeholder Working Group (SWG). Property owners immediately adjacent to the interchange and properties immediately adjacent to or who rely on access to/from Oregon 214 up to Oregon/Country Club and Woodland received a letter (see attached) on April 20, 2003 encouraging them to participate. Over 150 letters were distributed to business and residential property owners and business managers.

The LAC met 3 times: May 1, May 15, and June 5, 2003. The first two meetings were held at the Crossing Shopping Center and the last meeting was held at the Woodburn Library. All meetings began at 5:30pm and ended at 7:30pm

The outcome of the LAC process is a recommended local access plan as a part of the recommended set of improvements to the I-5 interchange.

The following businesses, agencies and residents attended at least one of the meetings:

Kevin Baker, Baker & Baker Towing Dale Baker, Baker & Baker Towing Jerry Wheeler, Woodburn Chamber of Commerce Kristy Olson, Crossing Shopping Center Mary Graves, Woodburn Company Stores Willis Grafe, Woodburn Senior Estates Mindy Mayer, McDonalds Eric Smith, McDonalds Eric Olson, Elmer's Woodburn Barbara Lucas, 2146 Clackamas Circle Inger Stigerts, 966 Oregon Way John Reppeto, Winco Foods Theresa Belden, Country Club Road Randy Rohman, City of Woodburn Naomi Zwerdling, City of Woodburn Terry Cole, ODOT Dave Bishop, ODOT Abner Gallardo, ODOT Susan Vickers, ODOT Tom Hamstra, CH2M Hill Jay McRae, CH2M Hill Jamie Damon, JLA

MEETING #1 *MAY 1, 2003*

The purpose of the first meeting was to provide the LAC with a project overview, establish operating protocols (see attached), and hear about access issues that need to be addressed (see agenda attached.) The group worked with maps of the project area to highlight areas of concern and issues to address.

The group received a packet of information including:

- List of Stakeholder Working Group members
- Fact Sheet
- Flow chart of schedule steps
- Adopted Problem Statement
- Meeting summaries from SWG meetings

The group had the following questions and comments:

Concerned about impacts to Arney Road.

- Who will maintain Evergreen will it continue to be a city street?
- We need to keep as many driveways as possible open.
- Concerned about access Wells Fargo and Dairy Queen?
- What will happen to our existing access any chance we can be grandfathering?
- Will U-Turns be permitted?
- Need to keep Lawson open! Preferably a right in and right out. Important access for trucks and buses to the McDonalds, Burger King, Taco Bell, etc.
 Need more information about the city's role in improving the local circulation and redeveloping roads.
- What does "access 'round the back" really mean? Concern about having to reorient the front of our businesses. Particularly difficult for the Company Stores.
- Questions about future funding for the full project.
- Suggest that the exit ramps be "snugged up" to minimize impacts to the business community.
- Are there different construction impacts to the businesses with the two interchange options?
 - Concerned that the "unnamed" road behind McDonalds will become very congested.
- Need to improve the turning radius on Evergreen. Currently the trucks take up the whole width of Evergreen when turning.
 - Evergreen is a critical link that is heavily congested today.
- Concerned about putting all of the local traffic on Evergreen if all accesses along Oregon 214 are closed.

MEETING #2 May 15, 2003

The purpose of the second meeting was to provide detailed information about the access polices and parameters for the alternatives and to develop preliminary access alternatives. The SWG recommended the Partial Cloverleaf design for the interchange as the preferred design.

The group was walked through the Local Access Parameters presentation developed by members of the Project Management Team.

The group then worked with maps to draw alternatives for the local road network. The alternatives were forwarded to the Project Management Team to determine how options could work with the interchange design and to identify any additional constraints.

In addition to the ideas drawn on the maps, the group had the following questions and comments:

- Trucks use the commercial areas as customers for the restaurants and hotels and to bring deliveries. The local streets need to be easy for trucks to enter, exit, park and maneuver.
- Can the region access management team override the recommendation from the SWG and LAC? It is unlikely that they will override the recommendation because they already have provided the policy direction for the LAC to work within. ODOT's primary goal is to build a safe facility. During the Refinement Plan process, ODOT discussed the range of outcomes and impacts with the OTC. The OTC directed ODOT to minimize impacts to the business community as much as possible.
- Will the Partial Cloverleaf design allow Lawson to remain open? We are still unsure because of the "vertical profile" of the interchange structure how high the ramps are. We don't have enough detail about the design yet.
- The group discussed options for the median. It was explained that there is 600' between Oregon Way and Evergreen and that there isn't much room to provide a center turn lane once the left turn pocket is put in place.
 Can there be a cut in the median to allow access to the Crossing Shopping Center mid block? No. The shopping center has two-intersection accesses. We may be able to allow a right in/right out access mid block.

MEETING #3 June 5, 2003

The purpose of the third meeting was to show the group how their ideas have been turned into alternatives and to reach agreement on a recommendation to the SWG. The group had some discussion about the recent public meeting and the comments we have heard-to-date.

The group reviewed the map of alternatives. The following areas were highlighted:

Map 1 – widen north

Oregon 214 West

The loop ramp can be tightened to avoid impacting Arbys.

■ The power tower creates an obstacle – need more information.

Oregon 214 East

- Shows Lawson connected remember the 3 options (right in/out; right in only; no connection.)
- Raised median from Evergreen to Oregon right in/out to businesses no backage road.

The group had the following questions and comments about Map 1:

Why do we have to change Arney Road? Because the ramps need to be significantly longer than what is there today. Drivers currently adjust their speed while on the freeway rather than on the exit ramp. It is a safety issue.

How many lanes will be on Evergreen? We don't know yet. We do know we need double left turns.

There are too many driveways in the area of Taco Bell, Burger King. These accesses need to be cleaned up in order for the area to work better.

- What about a traffic signal at the "alley" and Evergreen?
 - The vacant lot on the backside of Exxon has recently sold to be developed as a fast food restaurant.
 - Can the shoulder widths be narrowed slightly east of Evergreen to avoid the two homes at Country Club and Oregon 214?
- Would a wall be built behind impacted homes? *Noise will be evaluated and noise walls are a possibility if it is deemed to be a problem.*
 - Concern about accessing the 76 Station and Arco. Can a gas station be viable if there access is changed significantly?

Map 2 – widen equally

Oregon 214 West

- Shows free flow left turn from Arney to Woodland. Northbound traffic on Woodland would need to stop.
- Same assumptions about ramps as outlined above.

Oregon 214 East

Shows new road connection in front of apartments.

Shows backage road idea

The group had the following questions and comments about Map 2:

- Concerned about the viability of Dairy Queen in any scenario.
- Many more impacts to businesses, not sure what we gain.
- What about having ODOT buy all the businesses and starting over?
- There is land that is still for sale at the Market Street interchange 10 years after businesses were bought out. Redevelopment can be slow.

Map 3 – widen south

■ This map has the same elements as seen in Map 1 and Map 2 except that it assumes that Oregon 214 is widened completely to the south.

The group had the following questions and comments about Map 3:

• The impacts are so great, we don't even want to consider it.

The following table illustrates the LAC's discussion regarding the impacts to businesses associated with widening north, south or equal:

Widen Oregon 214...

Associated impacts ("x" = complete take)	North	South	Equal
Residences	1	unsure	1
Ability to keep Lawson open	unsure	no	unsure
Construction phasing	good	difficult	difficult
Arco gas station	?	X	?
76 gas station	?	X	?
Shell gas station	X	X	X
Chevron gas station	?	X	X
Dairy Queen	?	X	Would take more frontage
Wells Fargo	?	X	Would take more frontage
McDonalds	OK	X	Would take some parking
Kentucky Fried Chicken	X	X	X
Country Cottage Cafe	X	X	X
Wendys	?	?	?
Pattersons	Some parking	OK	OK
Crossing Shopping Center	Some parking	OK	Some Parking

The group went around the table and answered the question – "should Oregon 214 by widened to the north, the south, or equally? And what other options should be considered"

- If a road behind Dairy Queen is built, make sure it is a cul-du-sac.
- Would like to keep both the "widen north" and the "widen equally" as alternatives to be developed further.
- The north is a 'tad' easier, although problematic for Brice's property.
- Keep Lawson open (all LAC members said this).
- Like the idea of a new local street behind the chevron to aid in redevelopment. The "widen north" option is the best (all LAC members said this)
- Concerned about access to Brice's property off of Evergreen (2 LAC members said this.)
 - Concern about losing so many gas stations and older established businesses. Need to work closely with the Chamber to bring gas stations back to Woodburn.
- Like the engineering arguments to widen north.
- The construction phasing is compelling. It will be a hardship on all of the businesses to have construction on both sides.
 - We don't want to lose gas station business to Brooks.
- Concerned about routing more traffic on Country Club, need to slow cars down.
- Widening north impacts fewer businesses.

LAC RECOMMENDATION

The LAC reached consensus on recommending the "widen north" option as their preferred alternative although they understand the merits of analyzing the "widen equal" alternative for comparison.

Woodburn Interchange EA Local Access Committee

OPERATING PROTOCOLS

5/1/03

PURPOSE

The Local Access Committee will function as a work group of the Stakeholder Working Group (SWG). We will invite participation from all property owners immediately adjacent to the interchange and properties immediately adjacent to or who rely on access to/from Oregon 214 up to Oregon/Country Club and Woodland.

The LAC will meet approximately 3-4 times, in the evening, at a location convenient to the participants.

Participants on the LAC need to commit to attending all three (or four) of the scheduled meetings, as information from one meeting will build on the next.

The outcome of the LAC process will be to come up with a recommended access plan as a part of the recommended set of improvements to the I-5 interchange. The access plan together with the preferred alternative will be forwarded to the Project Management Team from the Stakeholder Working Group.

Meeting Guidelines

- The LAC is an advisory group to the Stakeholder Working Group and will make recommendations on access alternatives.
 Meetings will be held at the Crossroads Shopping Center from 5:30pm 7:30pm on
- May 1, May 15, and June 5.

 Meeting materials will be distributed at the meetings.
- > Discussions will be facilitated.
- > LAC members will share the available speaking time, be respectful of a range of opinions, and focus on successfully completing the agreed upon agenda.
- > The LAC is encouraged to attend the SWG meetings scheduled for May 22 and June 12.
- > The LAC is encouraged to participate in scheduled public meetings to be announced.
- > The LAC is encouraged to talk with other businesses and community members about the process

LAC LETTER INVITING PARTICIPATION

April 14, 2003 (woodburn logo)

Dear {name},

The Oregon Department of Transportation, the city of Woodburn, Marion County and the Federal Highway Administration are preparing an Environmental Assessment for improving the Interstate 5 Woodburn interchange.

Proposed improvements include rebuilding the interchange and Oregon 214 from Oregon Way to Woodland Drive, and revamping local streets around Oregon 214 to improve access to nearby businesses.

The environmental assessment will:

- Study the impacts of different options to nearby businesses, residents and land.
- Identify ways to minimize those impacts.
- Recommend a preferred alternative the best solution to the FHWA.

A 15-member Stakeholder Working Group representing Woodburn and surrounding communities has been formed to help with the EA (see enclosed roster). The SWG is an advisory group that will recommend a preferred alternative to the city, state and federal governments.

Resolving local access and traffic issues along Oregon 214 is an important part of a solution that works well for the community. As a property or business owner, the SWG invites your participation on a Local Access Committee. This committee will meet four times during May to focus on how to provide local access while improving traffic flow on Oregon 214.

If you decide to participate in the Local Access Committee it is important that you are able to attend all scheduled meetings.

- The first meeting is on April 24 from 5:30 p.m. 7:30 p.m. at the Woodburn Library multipurpose room. You will be an observer of the SWG, hear their discussion about developing evaluation criteria, and have an opportunity to ask questions and learn about the project.
- The next two meetings, on May 1 and May 15, will be hands-on sessions to work through issues specific to each business, to the community and to the regional traffic that stops in the area
- The last meeting on May 22 will be another combined session with the SWG.

All meetings will be from 5:30 p.m. - 7:30 p.m. at the Woodburn Library multipurpose room, unless otherwise noted. When we know how many are participating, we will arrange to accommodate the size of the group.

Please let us know you would like to participate no later than April 23.Contact Diane Kestner by phone at (503) 235-5022 or by e-mail at dkestner@ch2m.com. For more information, enclosed are a fact sheet, the list of SWG members, and the Problem Statement. Please call anyone on the fact sheet if you have questions.

We look forward to working with you, Terry Cole Project Manager ODOT



Woodburn Interchange EA

AGENDA

Local Access Committee

Meeting #1

May 1, 2003 5:30 - 7:30 p.m.

Crossroads Shopping Center, in the Rose Room, 2221 Country Club Road.

Jamie	Welcome; Agenda Review
Jamie	Purpose of Meeting Committee start up
(5)	 Understanding of project
	LAC role
	• Access Issues
Jamie	Introductions
ľ	Name, business/address
(10)	
Terry	Background
(10)	 Steps leading to this process
,	Refinement Plan Overview
Jay (20)	Work-to-date: An Overview
	Issues
	Problem Statement
	Goals
	Evaluation Criteria
Jamie	Process Structure & LAC role/guidelines
(10)	 Project Management Team
` '	 Stakeholder Working Group
	 Local Access Committee
Jay	Access Issues Workshop
(60)	 Work in a small group focusing on one of four areas
	surrounding the interchange to identify access issues/questions
	 Report back to the large group
Jamie	Next Meetings
	LAC May 15 and June 5
(5)	SWG May 22
	Public Meeting May 29
	Close
	1



Woodburn Interchange EA

AGENDA

Local Access Committee

Meeting #2

May 15, 2003 5:30 – 7:30 p.m.

Crossroads Shopping Center, in the Rose Room, 2221 Country Club Road.

Jamie	Welcome; Agenda Review
Jamie (5)	Purpose of Meeting
Jamie (10)	Introductions for new participants Name, business/address
Jay (30)	Access Overview presentation Perimeters for the access alternatives
Jamie (5)	Issues from last meeting
Jay (60)	 Access Alternatives Workshop Work as a group to identify access alternatives
Jamie (5)	Next Meetings SWG May 22 Public Meeting May 29 June 5
	Close



Woodburn Interchange EA

AGENDA Local Access Committee

Meeting #3
June 5, 2003
5:30 - 7:30 p.m.

Woodburn Library multi purpose room

Jamie	Welcome; Agenda Review
Jamie (5)	Purpose of Meeting - Access Alternatives
Jamie (10)	Introductions for new participants Name, business/address
Jay/Abner (60)	Access Alternatives Review the mapped access alternative ideas Discuss refinements Recommend a set of alternatives to the SWG
Jamie (5)	Next Meetings SWG June 12 SWG June 26 Public Meeting July 10
	Close

Woodburn Interchange Environmental Assessment Stakeholder Working Group Meeting #1 March 20, 2003 Woodburn Library

MEETING SUMMARY

Attending

Kathy Figley, Mayor of Woodburn

Mary Graves, Woodburn Company Stores

Patti Milne, Commissioner, Marion County

John Reppeto, WINCO

Eric Smith, McDonalds

Mindy Mayer, McDonalds

Kathy Wadsworth, First Student Transportation

Willis Graffe, Woodburn Senior Estates

Harley Piper, Woodburn/Hubbard Area Advisory Committee

Scott Roerig, Woodburn Fertilizer

Patrick Vance, Woodburn Chamber of Commerce/Silverton Hospital

Cindy Woodley, Mayor of Mt. Angel

Dave Bishop, ODOT

Terry Cole, ODOT

Tom Hamstra, CH2M HILL

Jay McRae, CH2M HILL

Jamie Damon, JLA

Absent

None

Public

Eric Olson, Elmers

John Gervais, Woodburn Independent

Agenda

5:30 Welcome; Agenda Review

Introductions

Background and Coordinating Processes

Project Schedule Overview

SWG Meeting Guidelines and Protocols

Problem Statement

Issues

7:30 Next Meeting/Agenda

Welcome; Agenda Review

Jamie Damon convened the group at 5:40 and reviewed the agenda and meeting time. Dave Bishop welcomed the group, highlighted the role of the SWG as advisory to the Project Management Team (ODOT, City of Woodburn, Marion County, FHWA) and emphasized the importance of the group's input for a successful outcome that will work for the community. Jamie announced that George Brice had contacted her the day of the meeting to resign from the committee due to business conflicts. George said he would like to participate in the Local Access Committee.

Introductions

The project team members introduced themselves and their role on the project: Tom Hamstra is with CH2M HILL, and is the consultant team project manager; Terry Cole is with ODOT Region 2 and is the project manager;

Jay McRae is with CH2M HILL and is a senior advisor for the project; and Jamie Damon is with Jeanne Lawson Associates, Inc. and is the Public Involvement task leader and will facilitate the SWG meetings.

Jamie asked the SWG members to introduce themselves and complete the following sentence "at the end of this process I hope that…." Group members finished the sentence as follows:

We will have community consensus on an alternative that works for the community.

There is some movement towards a solution to the traffic problems.

We keep an open mind and realize that many interests need to be met.

I have a better understanding of the problems and solutions.

We will have devised a means for the agricultural community to get through the interchange.

The interchange flows! It needs to work for the outlying communities as well as Woodburn. We need to be mindful of the next step.

Small cities are proactive and get some benefit.

We have spent valuable time and that this committee makes a difference in the outcome.

We ensure that the business viewpoint is heard.

We achieve consensus on a viable solution that will work for the businesses and the broader community.

The outcome is doable and fundable.

We accomplish something other than "just another study."

Background/Coordinating Processes

Terry Cole gave an overview of the project background. The existing interchange was built in the early 1970's and the facility is nearing the end of its life span. ODOT, the City of Woodburn and Marion County began discussing how to improve the interchange in the late 1980's and early 1990's but the process was shelved due to budget constraints. The city, county and ODOT worked together on the Woodburn Interchange Refinement Plan, which laid the foundation for the Environmental Assessment work we are doing today. The purpose of the Refinement Plan was to answer the question – "can the

interchange in its current location be fixed?" The answer is "yes" and the Refinement Plan produced two viable alternatives, a Partial Cloverleaf (Parclo), and a Standard Diamond. These alternatives will be analyzed in greater detail, along with a "no build" alternative in the environmental assessment process.

Terry also highlighted several coordinating processes that are happening simultaneously with the EA. Both the city and the county are currently updating their transportation system plans and ODOT has received funding to move ahead on the right turn lane project for the northbound on ramp of the interchange. The right turn lane project will go to construction in 2004. As a part of the ramp work, some right of way will be purchased which will aid the future improvements at the interchange.

The group had the following questions (staff answers are in italics):

- When will the turn lane project start? *It will most likely go to bid in the winter of 03-04 with construction scheduled for the 04-construction season.*
- How fluid is the plan? How much room is there to change, alter, or otherwise influence the concepts on the table today, such as keeping Lawson open? There are basic design principles that may constrain us (tying the interchange in with the grade on Oregon 214 for example.) There is a lot of flexibility for designing the local road network and we are already being flexible on several policies (intersection spacing for example) to keep the businesses at the interchange viable. We need to have the discussion about Lawson the grade shown in the conceptual design suggests that Lawson would need to be closed, however with a closer look there may be some flexibility there we don't know yet. We can't superimpose all of the policies for the interchange improvements in this built environment but we will have less flexibility with the design of the interchange structure. The SWG and LAC have a lot of "influence" over the concepts and play a critical role in recommending a solution that will work for the community.

Project Schedule Overview

Tom Hamstra walked the group through a simple schedule flow chart of the technical process steps and the community involvement. The SWG will meet approximately every two weeks through June, possibly into July, for about 8-10 meetings. The LAC will start up in late April and meet opposite weeks from the SWG for approximately 3-4 meetings. There will be 2 rounds of public input including open houses, a project website, mailings, and public hearings at the end of the process. The result of the EA work could be a "finding of no significant impact" which will enable the city, county, state and federal government to seek funding to design and build the project.

The group had the following questions:

- How long range is this really? Thirty years is a long way out but how do we ensure that the solution works beyond that? Lets not repeat mistakes we made in the past.
- Can't we pull from previous work to help move us forward? We are pulling from previous work, particularly the refinement plan; this will help us move forward

- quickly. This process is about 6-8 months shorter than similar processes for other transportation projects because we have the refinement plan work to help us.
- Can't we buy more right of way sooner? We will buy some right of way as a part of the right turn lane project. We can't buy more right of way until we have a better idea of the footprint of the interchange improvements.

SWG Meeting Guidelines and Protocols

Jamie distributed a draft "Operating Protocols" for the group to discuss. The first question posed to the group was how to fill the vacant seat left by George Brice? Jamie emphasized that George was representing a north side business and that the group should consider a north side business owner as a replacement. Jamie also encouraged the group to think of other representation that is missing from the SWG. It was also noted that Eric Olson of Elmers (who was present at the meeting) has a strong interest in participating and we should consider Eric for the SWG as well. The group offered the following suggestions for additional SWG members:

For north side business representation

- Dale Baker or his son
- Kentucky Fried Chicken (if locally owned)
- Mr. Patterson
- Christy Olson

For additional business representation

Dairy Queen

- Eric Olson of Elmers
- Plush Pippen

The group also suggested someone from the neighborhood on the west side, they suggested we contact former mayor and MWACT member Dick Pugh.

The group focused on the draft operating protocols and agreed to the following:

Meeting Time and Location

> 5:30pm – 7:30pm on the 2nd and 4th Thursdays. The library meeting space is too small and the following suggestions were made for a new meeting space – the multi purpose room at the library, Presbyterian church on the corner of Boones Ferry and Oregon 214 (Harley will check into this space), the meeting room in George Brice's building near the Chamber, Senior Estates, PGE building.

Meeting materials

- > Should be emailed and mailed. The packets that were mailed to the SWG for this meeting did not arrive in time for the meeting. Check on this. We will strive for distributing materials one week in advance.
- ➤ Rough draft of SWG meeting summary distributed by email to the group early in the week following a SWG meeting.

Public Comment

> Public comment will be allowed at the beginning and the end of the meeting. We will check in with the public to see who wants to speak when. No more than 5 minutes at the beginning and 10 minutes at the end. The public will also have a comment card on which to make comments at any meeting.

SWG Expectations

The group had the following additions to the Responsibilities part of the draft operating protocols:

- > Attend the meetings.
- > Send comments in writing in advance if cannot attend.
- ➤ Contact Jamie, Tom or Terry if cannot attend.
- > Read materials and stay up to speed

Decision-making

- > Consensus based recommendations "what can you live with?"
- ➤ The group agreed with freezing decision points. Make sure the group understands the nature of the decision to be made is it part of a decision? An Interim decision? Can it be revisited?
- ➤ If no consensus, than a 2/3 majority with dissenting opinions forwarded.

Internal Communication

- > Develop an email distribution list for the SWG and email it to them.
- > Develop a link for internal communications to the website.
- ➤ Good to encourage us to talk with each other be careful not to create "sub groups" or "voting blocks."

External Communication

> SWG members can represent their own opinions to the media and are encouraged to direct the media to the project team leaders for more information.

Problem Statement

Jay McRae outlined the problem statement for the group. The problems at the existing interchange can be grouped into three categories of deficiencies: Geometric, Operational and Safety. The geometric deficiencies include the standard diamond configuration which does not work for the high volumes of traffic using the interchange, the vertical grade over the structure is too steep, the ramp lengths, and significant issues with the sidewalks. Operational deficiencies include insufficient capacity on Oregon 214, frequent traffic congestion, traffic stopped on off ramps, and insufficient notice for drivers making left turns. Safety deficiencies include ten locations in the top ten percent of state listings for comparable urban highway segments between the I-5 interchange and Evergreen. Travel forecasts indicate significant future interchange problems and continued congestion along Oregon 214. Jay discussed the next steps in the process to include developing goals and objectives and evaluation criteria. The goals and objectives will include the community's values such as "community livability." One member asked

what that means. Jay described it as what the community looks like, how inviting it is to travelers, businesses, and people who live in the community.

Issues

The group did not have time to discuss the issues list that Jamie distributed. The group is to review the list and send any additions to Jamie by March 27. The issues will be discussed at the next SWG meeting.

Next steps

What	When
SWG meeting summary emailed to SWG.	March 25
SWG input on problem statement and issues to Jamie by email jdamon@jlainvolve.com	March 27
Meeting location (Harley contact Jamie)	March 27
Contact additional SWG members (Jamie)	April 1
SWG meeting packet mailed/emailed.	April 1
Good quality map for SWG (Tom)	By next meeting? ASAP

Next Meeting

Thursday April 10, 2003 5:30pm – 7:30pm Location TBA

Agenda will include:

- > finalize the Problem Statement;
- > prioritize issues;
- begin drafting Goals and Objectives.

Woodburn Interchange Environmental Assessment Stakeholder Working Group Meeting #2 April 10, 2003 Woodburn Library

MEETING SUMMARY

Attending

Kathy Figley, Mayor of Woodburn

Mary Graves, Woodburn Company Stores

Patti Milne, Commissioner, Marion County

John Reppeto, WINCO

Eric Smith, McDonalds

Mindy Mayer, McDonalds

Willis Graffe, Woodburn Senior Estates

Scott Roerig, Woodburn Fertilizer

Patrick Vance, Woodburn Chamber of Commerce/Silverton Hospital

Cindy Woodley, Mayor of Mt. Angel

Eric Olson, Elmer's

Dick Pugh/Westside Neighborhood

Kevin Baker, Baker and Baker Towing

Terry Cole, ODOT

Tom Hamstra, CH2MHiLL

Jay McRae, CH2MHiLL

Jamie Damon, JLA

Absent

Kathy Wadsworth, First Student Transportation Harley Piper, Woodburn/Hubbard Area Advisory Committee Dave Bishop, ODOT

Public

John Gervais, Woodburn Independent Ed Schoaps, ODOT Anne Sienko, CH2MHill

Agenda

5:30 Welcome; Pizza; Agenda Review

Introductions – new SWG members

Public Comment

Problem Statement -revise/endorse

Issues Workshop

Goals and Objectives

Evaluation Framework

Local Access Committee

7:30 Next Meeting/Agenda

Welcome; Agenda Review

The group began the meeting by having pizza. Jamie Damon convened the meeting at 5:40 and reviewed the agenda and meeting time.

Introductions

Three newly appointed SWG members were present at the meeting: Dick Pugh, Eric Olson, and Kevin Baker. Jamie explained that at the last SWG meeting the group introduced themselves and were to complete the following sentence "at the end of this process I hope that...." Jamie asked Dick, Eric and Kevin to do the same. They finished the sentence as follows:

Consumers can travel fluidly through Woodburn.

- We can promote an interchange that fits the needs of the community and provides good access.
- The right turn lane project is completed!

Problem Statement

Jay discussed the draft problem statement page by page with the group. The group had the following input:

- Page 1 OK Page 2- OK
- Page 3 Clarify that the shoulder/bikeway is a combined total of 8 feet.
- Page 4 Clarify the "53% of crashes occurred at the intersections (McDonalds and Dennys.)" This information is from the 1997 1999 data, it needs to be updated with the 2000 2002 data, which will be available soon. Also, change the business names to the street name (Lawson) or milepost as a locator. There are minor editing changes to all the paragraphs in the second column, and add "Oregon Garden" to the list of local attractions in paragraph 4.

Other input included:

- Add the date/ year in the document.
- Ensure that all of the data is the most up to date.
- Note that the accident data is prior to the restricted left turn at Lawson.

Issues Workshop

The group reviewed the issues list and added their top five priorities to the list. There were also a few additional issues (see attached amended list.)

Goals and Objectives

The group then worked in groups of three to develop draft goal statements by completing the sentence "the Woodburn interchange needs to ..."

- Maximize available funds.
- Be under construction by '08.
- Minimize negative impacts to the business community and north Marion county residents during construction as well as after completion.

- Improve traffic flow through the area while maintaining high safety standards.
- Complete with the least amount of disruption to business and community activities.
- Provide visitors and travelers with a positive first impression of Woodburn.
- Safely flow traffic to and from I-5 while providing convenient access to adjacent commercial services without unduly impeding the movement of through traffic.
- Should be designed to provide the maximum positive aesthetic impact.
- Should be designed to provide the maximum flow anticipating future growth.
- Take the future into consideration as well as current needs with regard to the design (Diamond vs. Partial Cloverleaf.)
- Ensure minimal impact to access changes (local businesses.)
- Make sure that I-5 remains open at all times during the construction phase and emphasize coordination with local communities (seasonal events such as Oktoberfest.)
- Include the considerations of local businesses to keep Lawson open.
- Consider signage and ease of use in getting people to Mt. Angel, Silverton, etc.
- Consider that medians will make access of safety vehicles more difficult.

The next step for the goal statements is for Jay to combine the issues priorities with the draft statements and develop a working draft goals and evaluation criteria for the group to review and endorse.

Evaluation Framework

Jay presented information about the evaluation framework (see power point slide handout) and the threshold criteria (see handout.) The group will spend the next meeting focused on discussing and developing this criteria.

Local Access Committee

Jamie discussed the formation of the Local Access Committee and distributed a draft committee list and role. The first LAC will be combined with the next SWG. A letter to immediately adjacent businesses and properties will be sent the week of April 14 inviting interested participants to the SWG meeting on 4/24. The following LAC meetings will be 5/1 and 5/15. The last SWG meeting will be combined with the SWG meeting on 5/22.

Next Meeting

Thursday April 24, 2003 5:30pm – 7:30pm Woodburn Library Multipurpose room

Agenda will include:

- > Focus on Evaluation Criteria
- > Introduce Local Access Committee

WOODBURN INTERCHANGE EA

Issues List

Updated 4/10/03

Issues for this list have come from the Woodburn Interchange Refinement Plan; the Project Management Team Meetings; and fifteen stakeholder interviews. The numbers in parenthesis are from SWG meeting #2 and reflect the group's top five priorities. The list is organized in priority order. The items in italics are new issues added to the list at that meeting.

ACCESS (2)

- Impact to business community access changes. (7)
- Median or no median?
- Need to improve Evergreen intersection.
 - Need to keep Lawson open. (2)
 - Need better signage for the area, how to direct travelers to services.
- Medians and limited accesses can be difficult for emergency services access. (2)
- No Access West of Oregon Way (1)

TRAFFIC (2)

- Resolve traffic congestion and safety issues on Highway 214 at the interchange. (2)
- Resolve the traffic congestion on Oregon 214 all the way to the Boones Ferry intersection (2)
- Need improved traffic flow through the area. (4)
- Limit out of direction travel trucks and through travelers are using county roads not designed for high traffic volumes because of the problems at the interchange. (1)
- Build in commuter bus terminal.

SOCIAL/ECONOMIC (3)

- Concerned about economic impact to businesses of altering access. (3)
- Concerned about the viability of some businesses if only partially impacted. (2)
 Need to make this area a more attractive place for people traveling I-5 to want to stop.
- Difficult for outer area communities to move agricultural traffic through the interchange area.
- Keep in mind the needs of outer area communities who rely on the Oregon 214/I-5 Interchange for their access to I-5.

AESTHETICS (1)

- Make the interchange area the "gateway" to Woodburn. (3)
- Underground the utilities. (1)
- Nice signage, clean up the area.
- Need trees, plants, and tulips.
- Don't put in expansive concrete medians. (1)
- If medians are used, and planted, provide a way for the plants to be watered. Provide alternative traffic flow. (1)
- Raise the image of Woodburn.
- No planted median. (1)

CONSTRUCTION (2)

- Phasing.
- Noise/work hours. (1)
- Communication plan to through users "Regional Hub" nature of interchange.

Coordination with business district.

- Coordination with seasonal special events (Mt. Angel Oktoberfest for example.) (2)
- Critical to keep I-5 moving/open at all times. (2)

Need plenty of lead-time for business community.

 Summer is the busiest time for the area (seasonal events, agricultural traffic, through travelers) coordinate construction so it is not in the peak season.

Need to look at a parallel alternative to I-5 through this area for detours during construction.

Funding (4)

Bridging past work with this EA and link to future funding.

- Concerned about how to get the funding needed to design and build the improvements.(1)
- Need strong commitments from City, County, State and Federal Governments. (1)

Right of Way

- Right of way changes in the last 10 years new development around the interchange.
 The cost of right of way continues to rise.
- Coordinating with impacted property owners as soon as possible. (1)
 Determining the level of and how much to compensate property owners. (2)

SAFETY (1)

Pedestrian – sidewalks and safe crossings.
 Unsafe conditions mixing trucks and outlet mall traffic at the Arney Rd. intersection with Oregon 214.

ALTERNATIVE TRANSPORTATION

- Provide for commuter bus use—park and ride.
- Train service through to Salem Bicycle - need bike lanes.

COORDINATING PROCESSES

UGB expansion/comprehensive plan update timing and outcomes.

- A second interchange and additional access to I-5 is still an option in folks mind.
- Coordinating with the City and County Transportation Plans

INTERCHANGE

Where: the Woodburn United Methodist Church, 700 N. Cascade Drive When: from 4:30 p.m. - 7:30 p.m. July 10 - Public Meeting

Where: Woodburn Public Library , Multi Purpose Room, 280 Garfield Street When: from 5:30 p.m. - 7:30 p.m. Inne 26 - Stakeholder Working Group

Where: Woodburn Public Library, Multi Purpose Room, 280 Gartield Street When: from 5:30 p.m. - 7:30 p.m. June 12 - Stakeholder Working Group

> When: from 5:30 p.m. - 7:30 p.m. June 5 - Local Access Committee

Where: the Woodburn United Methodist Church, 700 N. Cascade Drive When: from 4:30 p.m. - 7:30 p.m.

May 29 - Public Meeting Where: Woodburn Public Library, Multi Purpose Room, 280 Garfield Street When: from 5:30 p.m. - 7:30 p.m.

May 22 - Stakeholder Working Group Where: The Crossing Shopping Center, Rose Room, 2221 Country Club Road When: from 5:30 p.m. - 7:30 p.m.

May 15 - Local Access Committee Where: Woodburn Public Library , Multi Purpose Room, 280 Garfield Street

When from 5:30 p.m. - 7:30 p.m. May 8 - Stakeholder Working Group

Meerings Opcoming

Calendar

Oregon Department of Transportation

4:30 p.m. - 7:30 p.m.

Public meetings are

5:30 p.m. - 7:30 p.m.

Activities

Calendar of

weenud nwes suc

All committee

Terry Cole 455 Airport Road SE, Bldg. B Salem, OR 97301

Postage

Woodburn Interchange EA

c/o Linda Girard, CH2M HILL 825 NE Multnomah, Suite 1300 Portland, OR 97232-2146

May 2003



Site

information contact:

For more

Terry Cole

Project Manager ODOT 455 Airport Road SE, Bldg. B Salem, OR 97301

(503) 986-2674 terry.d.cole@odot.state.or.us

Tom Hamstra

Project Team Leader CH2MHill 825 NE Multnomah, Suite 1300 Portland, OR 97232

(503) 235-5000 thamstra@ch2m.com

Jamie Damon

Public Involvement Task Leader Jeanne Lawson Assoc., Inc. 1110 SE Alder, Suite 301 (503) 235-5881 idamon@jlainvolve.com

Or Visit Our Web Site:

www.odot.state.or.us\region2public

Refinement Plan identified options to improve

Overview

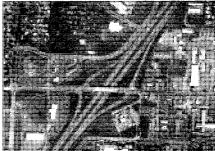
The Oregon Department of Transportation, the city of Woodburn, Marion County and the Federal Highway Administration are preparing an Environmental Assessment for improving the Interstate 5 Woodburn Interchange. The EA includes assessing the impacts of different options (to nearby businesses, residents and land, for example), identifying ways to minimize the impacts, and recommending a preferred alternative—the "best solution"—to the FHWA. The improvements would include rebuilding the interchange and Oregon 214 from Oregon Way to Woodland Drive, and improving local streets around Oregon 214 to improve the access to nearby businesses.

Background

In the early 1990s, the city, county and ODOT began discussing problems at the existing interchange. They started working together to identify possible solutions. Unfortunately, this work began at a time of limited statewide money for transportation projects. Therefore, the work was not completed. In 1999, the city of Woodburn finished a

study of Oregon 214 that looked at three options to widen the highway: to the north, to the south or equal widening on both sides. This work did not look at improvements to the I-5 interchange.

In 2000, ODOT, Woodburn and Marion County completed the Woodburn Interchange Refinement Plan. The the I-5 interchange and













Partial Cloverleaf Interchange

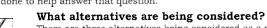
Upgraded Diamond Interchange

What are the problems to be resolved?

The I-5 interchange was designed in the late 1960s to handle traffic that was typical for a small city. Since then, the population in the area has more than tripled. Today, Woodburn is a more urban community, with large industrial, commercial and residential developments, and regional travel services near the interchange. Growing car and truck traffic has resulted in congestion and safety issues on Oregon 214 and on the I-5 interchange.

Why is ODOT preparing an Environmental Assessment?

When proposing major transportation improvements, the National Environmental Policy Act requires ODOT to study the potential impacts to the nearby community and land. When it is unclear what the possible impacts from a transportation project could be, an Environmental Assessment often is done to help answer that question.



There are three alternatives being considered as a result of the Woodburn Interchange Refinement Plan:

A Partial Cloverleaf Interchange

An upgraded Diamond Interchange

A "no build" alternative.

There is not a preferred alternative at this time. The EA will analyze and recommend a preferred alternative by fall 2004.

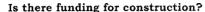
will the Environmental Assessment take?

The EA will take about two years to finish. If a "build" alternative is chosen, the next steps include drafting the final design, getting the required permits and buying the needed right of way. This will probably take another two years to finish. Rebuilding the interchange could start in 2007 or 2008, if funding were available.

Will a second interchange be considered?

The problems at the Woodburn interchange and on Oregon 214 need to be fixed even if a new I-5 interchange is added in the future. A new interchange in north Marion County continues to be of interest in the community. However, a new interchange will not solve problems at the existing Woodburn interchange. Woodburn and Marion County are updating their Transportation System Plans,

which will help identify future transportation needs for the area.



Not yet. The Environmental Assessment is funded. Funding to complete a final design and buy some of the right of way is proposed in the 2004-2007 Statewide Transportation Improvement Program. The EA will identify how to improve the interchange, which will lead to getting the necessary approval from agencies and completing the interchange design. This will increase the chances of securing funding for construction if a "build" option is chosen.

How can I be involved?

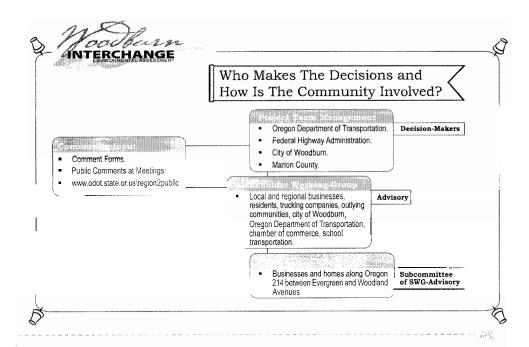
ODOT has a public involvement program to help you stay informed and involved through:

Person-to-person contacts.

A Stakeholder Working Group.

 Public meetings, workshops and hearings.

- Newspaper articles
- A project website: www.odot.state.or.us\region2public
- Project newsletters, postcards and updates



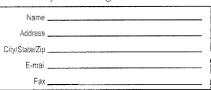
I've Got Something To Say What are your comments, suggestions, and/or We Would Like To Hear From You! Comments

duestions about the I-5 Woodburn Interchange and Environmental Assessment?

Let Us Keep You Informed

If you wish to receive information on this project by mail, fax, or e-mail, please fill out, stamp, and return this form to the address on the opposite side.

)	Add	me	to	your	mailing	list



Or Visit Our Web Site:



www.odot.state.or.us\region2public

Woodburn Interchange EA

Evaluation Framework Presentation SWG Meeting #2 April 10, 2003

> HOODBUSSE INTERCHANGE ENVIRONMENTAL ASSESSMENT

Process Overview

- Define the problem
- Establish the evaluation framework
- Identify new alternatives/options
- Apply threshold screening of alternatives/ options for fatal flaws
- Evaluate and rank alternatives
- Select study alternatives/options

Joodbern INTERCHANGE ENVIRONMENTAL ASSESSMENT

Establish The Evaluation Framework

- Evaluation framework includes two types of criteria:
 - Threshold screening of feasible from nonfeasible alternatives
 - Alternative evaluation of feasible alternatives



Identify Alternatives

Desired Outcome:

- All ideas are developed into alternatives/options with the best chance
- Check previously dismissed alternatives to validate cause for dismissal in light of changed conditions
- Define alternatives/options in such a way they can be directly compared one to another

Threshold Screening Process

Desired Outcome:

- Eliminate infeasible, unreasonable alternatives/options
- Spend resources evaluating alternatives/options that have realistic prospect of being implemented



Threshold Screening Criteria Should Be:

 Thresholds --- either a project meets the criteria or it does not

Easily measured --- no substantial data gathering necessary

 Non-judgemental --- not used to prejudge on criteria that require more analysis

> HOODBOURN INTERCHANGE ENVIRONMENTAL ASSESSMENT

Woodburn Threshold Criteria

Federal Policy

- Satisfies 20-year design life
- Meets interstate design and access policies
- Consistent with local plans
- Local system improvements support interchange investment

Woodburn Threshold Criteria

State Policy

- Supports safe movement of freight
- Satisfies defense highway design criteria
- Satisfies major investment policy hierarchy
- Meets access policy or can reasonably justify a deviation

Woodburn Threshold Criteria

Draft Local Project Criteria

Relatively similar impacts or distinct advantage over another alternative



Threshold Screening Caution

- In order to meet the schedule and budget commitments:
 - Anytime a fatal flaws is discovered for an alternative...it is eliminated from further consideration



Alternative Evaluation Process

Desired Outcome:

 Select alternatives/options for detailed evaluation in the environmental document

> HOODBURN INTERCHANGE ENVIRONMENTAL ASSESSMENT

Evaluation criteria should be:

- Comprehensive -- reflect the full range of stakeholder values
- Fundamental ---relate to topics that really matter
- Relevant ---help distinguish among alternatives
- Independent---don't allow double-counting of outcomes

Measurable---allow for clear comparison of alternatives

Well-defined---mutual understanding of meaning

Woodburn Draft Evaluation Categories

- Transportation & Safety
- Natural Resources
- Developed Environment
- Implementation and Costs

Joodbann INTERCHANGE ENVIRONMENIAL ASSESSMENT

Alternative evaluation process involves:

- Developing criteria categories
- Developing measurable criteria in each category
- Rating alternatives
- Weighting criteria
- Calculating rankings

Evaluation criteria may be either:

 Natural scales - easily understood measures (\$, acres, number of structures)
 Constructed scales - developed scales for less quantifiable measures (safety, bike/pedestrian connectivity)

Note: Criteria must reflect data availability and data collection budget constraints

HOOUBERN INTERCHANGE ENVIRONMENTAL ASSESSMENT

Rating Alternatives

Based on data collected for each criteria

Developed by staff

 Available for review and discussion by SWG

> HOODBURN ANTERCHANGE ENVIRONMENTAL ASSESSMENT

Alternatives will be <u>rated</u> for their performance against the criteria:

Alternative	Safety	# residential displacements
A -1	Poor	6
A-2	Exceptional	12
A-3	Above Average	9

Hoodburn INTERCHANGE

Evaluation Criteria will be weighted by the SWG to:

- Represent the multiple values of stakeholders
- Perform sensitivity analysis
- Calculate and visually display the trade-offs

Hoodburn ANTERCHANGE

Evaluate Remaining Alternatives

Factual rating against performance measures

Value weighting to reflect trade-off in values

Single score for each competing alternative

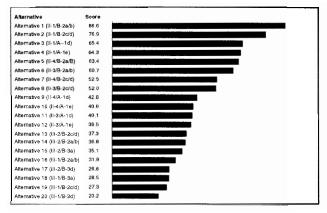
Criterion	Performance Measure	Rate x	Value Weight =	Score
		3	20	60
_		4	70	280
_		1	10	10
_		2	25	50
		Total Score		400



Rank Alternative

- Highest score represents highest value
- Scores are not "the answer" but provide a basis for informed discussion and justification of choices

Project Alternatives



Allows "apples to apples" comparison



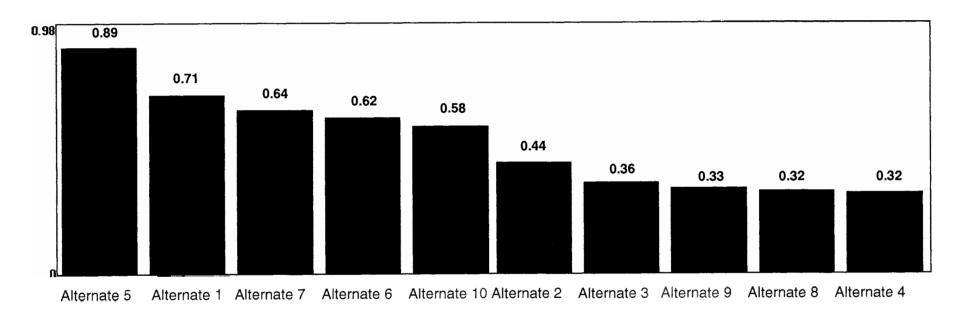
Sensitivity analysis will indicate:

 If a criterion has an influence on the results and how much

What change is required in the weight to produce a change in the results

HOODBURN INTERCHANGE ENVIRONMENTAL ASSESSMENT

Sensitivity Analysis -- Contribution by Criteria



Criteria Legend

Right-of-Way Impacts
Natural Environment Impacts
Community Livability Impacts

Transportation Performance

Cost

Evaluation Framework Summary

Well defined and structured criteria will:

- Provide a good basis for rating alternatives
- Provide the basis for weighting criteria
- Provide a focus for discussing community values rather than positions on particular alternatives
- Provide the information for decision-making

Woodburn Interchange Environmental Assessment Stakeholder Working Group Meeting #3 April 24, 2003 Woodburn Library

MEETING SUMMARY

Attending

Kevin Baker, Baker & Baker Towing Mary Graves, Woodburn Company Stores Patricia Milne, Marion County Commission John Reppeto, WINCO/OTA Dave Bishop, ODOT Region 2 Willis Grafe, Woodburn Senior Estates Mindy Mayer, McDonalds Eric Olson, Elmer's Woodburn Patrick Vance, Woodburn Chamber of Commerce Dick Pugh, Westside Neighborhood Scott Roerig, Woodburn Fertilizer Cindy Woodley, Mayor, City of Mt Angel Terry Cole, ODOT Tom Hamstra, CH2M Hill Jay McRae, CH2M Hill Jamie Damon, JLA

Absent

Kathryn Figley, Mayor City of Woodburn Harley Piper, Woodburn/Hubbard Area Advisory Committee Eric Smith, McDonalds Kathy Wadsworth, First Student Transportation Services

Public

Local Access Committee members present included: Jerry Wheeler Barbara Lucas Inger Stigerts Kentucky Fried Chicken owners

Agenda

5:30 Welcome – Agenda Review
Purpose of Meeting
Introductions
Public Comment
Goals & Objectives
Evaluation Criteria Workshop
Application of Threshold Criteria

Local Access Committee Access Management Overview Next Meetings Public Comment

Welcome; Agenda Review

Jamie introduced Anne Sienko, Environmental lead with CH2Mhill and Ed Schoaps, communications with the Oregon Department of Transportation.

Goals and Objectives

The group reviewed the draft goals and objectives and had the following clarifications, comments.

Concerned that the draft we see is not necessarily the same things we said!

- Clarify "20 years in future for safety" can we really project at that far? It is a State and federal requirement.
- Do we have the data for heavy truck traffic projections for 20 years out? The zoning drives the traffic mix and forecasts for heavy truck, vs residential/commercial.
- Concerned that current business use expansion may end up "land locked" in the future based on decisions we make today about what the interchange will look like.
- Wondering what Fed/ ODOT goals are that drive what the solution looks like.
- Need to be aware that the current interchange needs to be fixed.
- Disagree that a second interchange can't be done sooner than studies have shown.
- Where is the <u>maximize</u> available finding? Need to include this concept. Our intent with that statement is:
 - don't waste it when we get it
 - use it efficiently, effectively
 - different from securing
 - using resources available today to the extent possible do it right the first time to serve the needs.

Social / Economic

- Before construction> minimize impacts to existing residents / businesses
- Get rid of "remaining"
- After construction > add minimize impacts to business community
- Add the note of maintain traffic flow in OR. 214 during construction.
- Can there be an <u>incentive</u> to complete construction as quickly as possible? Minimize construction time, build it as quickly as possible.

Safety

- Add a second bullet that addresses an interchange configuration that performs at a high level of safety as composed to similar roads.
- ➤ Jay will review SWG comments w/ draft goals and make sure they are accurately captured,
- > SWG will review draft goals and get comments to us before next meeting.

Evaluation Criteria Workshop

Jay lead the group through a discussion of the evaluation criteria. The group focused on the following criteria:

B.3. Economic – accessibility change to businesses

Jay discussed that in some communities on other similar projects, the committee had developed measures to differentiate businesses impacts based on the type of access the business relied on. The group discussed the following questions in relation to business access:

Is access to the business more important than access from?

- Should all businesses be treated equally? (given the same weight).
- Are some businesses more reliant on access than others and should be given more weight.

Some members felt that access to the business was the most important and therefore certain businesses – fast food/gas stations, for example – should be given more weight if their access changed significantly. Other group members said it shouldn't matter because even if the access to the business was easy, if it was difficult for consumers to find their way back to the highway, they would be less likely to stop in the future. The group did acknowledge that ease of access for certain types of vehicles made sense, for example tractor trailers, school buses, and tow trucks in the process of towing. These vehicles are extra long and require different kinds of access than passenger cars. Although other group members pointed out that all businesses rely on tractor trailers to deliver goods to their business so ease of access for freight delivery is important.

> The group decided not to assign more weight to entrance access impacts as opposed to exit access impacts.

C.2 Land Use – conversion to transportation

Jay explained that this category means "loss of use of available land for purposes other than transportation." For example, if industrial zoned land was in short supply, a community may find it detrimental to convert valuable industrial zoned land to a transportation use. The group discussed how to measure this loss.

The group decided to measure the loss using property tax revenues lost.

C.3 Economic – displacements

Displacements mean the number of homes that would be removed.

> The group decided that the number of homes should be counted.

C.4 Economic – impacted businesses

The group had much discussion about this category and how it was different from access. The access category captures the business impacts do to access changes or removal. This category captures business impacts do to building or property impacts such as parking.

The group decided to measure the square footage of the impacts and whether or not a structure could remain if modified, or continue to be viable if significant property was lost (parking.)

D.1. Aesthetics – gateway creation

The group spoke in general terms about the kind of gateway they envision. Their ideas included: Welome sign or some kind of gateway structure/sculpture, plantings (trees, flowers), underground utilities, make business signs more consistent, There wasn't much time left in the meeting to adequately discuss this item, so the group decided to discuss it in more detail at the next meeting.

E. 3. Coordination – Constructability

Terry clarified that this item refers to an alternative's ability to be phased or otherwise be constructed in a manner to lessen impacts.

Application of Threshold Criteria

There was not time on the agenda to complete this item. The group agreed to move this item to the next meeting's agenda on May 8, 2003.

Local Access Committee

Invited participants in the Local Access Committee were asked to introduce themselves and given an opportunity to ask questions. LAC members in attendance included:

- Jerry Wheeler, Chamber of Commerce
- Barbara Lucas, Senior Estates
- Inger Stigerts , resident on Oregon Way
- Owners of the Kentucky Fried Chicken

Access Management Overview

The group decided to move this agenda item to the next SWG meeting on May 8, 2003.

Next Meeting

The next meeting of the SWG is on May 8,2003 from 5:30 pm - 7:30 pm in the multipurpose room of the library. Agenda items will include application of the threshold criteria and the access management overview.

Woodburn Interchange Environmental Assessment Stakeholder Working Group Meeting #4 May 8, 2003 Woodburn Library

MEETING SUMMARY

Attending

Kevin Baker, Baker & Baker Towing
Mary Graves, Woodburn Company Stores
John Reppeto, WINCO/OTA
Willis Grafe, Woodburn Senior Estates
Mindy Mayer, McDonalds
Eric Smith, McDonalds
Eric Olson, Elmer's Woodburn
Dick Pugh, Westside Neighborhood
Scott Roerig, Woodburn Fertilizer
Cindy Woodley, Mayor, City of Mt Angel
Terry Cole, ODOT
Tom Hamstra, CH2M Hill
Jay McRae, CH2M Hill
Jamie Damon, JLA

Absent

Kathryn Figley, Mayor City of Woodburn Harley Piper, Woodburn/Hubbard Area Advisory Committee Patrick Vance, Woodburn Chamber of Commerce Kathy Wadsworth, First Student Transportation Services Patricia Milne, Marion County Commission Dave Bishop, ODOT Region 2

Public

Barbara Lucas Inger Stigerts

Agenda

5:30 Welcome – Agenda Review
Purpose of Meeting
Introductions
Public Comment
Review Revised Goals and Objectives
Application of Threshold Criteria
LAC #1 Update
Access Management Overview
Evaluation Criteria – Focus on Aesthetics
Next Meetings

Public Comment

Welcome; Agenda Review

No new participants were in attendance.

Review revised goals and objectives

The group reviewed the draft goals and objectives and thought that the revised version better captured their intent.

Group members suggested that under "Access and Traffic Flow", the first bullet should include "Lawson Rd. and Arney Rd." in the parenthesis of possible street connections

There was a question about whether or not we can provide "convenient" access. Terry pointed out that these are goals and we should strive for convenient access.

Jay noted that there are no environmental goals. The group did not see any major environmental issues. Anne Sienko offered to draft a couple that made sense for this project.

Application of Threshold Criteria

Terry and Jay reminded the group that the threshold criteria is a pass/fail level criteria used to screen out non-feasible alternatives. The thresholds represent minimum conditions of acceptance encompassing federal, state, and local parameters. Alternatives that do not meet the threshold criteria are dismissed from further consideration. Feasible solutions are refined further to account for local site conditions as well as to minimize adverse impacts.

Jay used a slide show (attached) to point out that when the threshold criteria is applied, the Parclo and Standard Diamond emerge as the two viable alternatives. Group members asked the following questions and comments (comments in italics are staff answers):

- What is an example of a Single Point Diamond?
 - Market St. interchange in Salem
- What were the problems with a Split Diamond?

Higher cost; no operational advantage; difficulty with existing development (no easy way to connect through development.

- What is an example of a Folded Diamond? *Beltline in Eugene.*
- Does the ramp space on the Parclo that we see on the map show the full extent of land required?

There is still a decision to make about whether it is a slope or a wall. It partially depends on whether or not a slope or wall lessens impacts to existing businesses or affects the overall profile of the structure.

• Tighten the width over the top! It will be a better grade for truck movements.

• If the width is tightened over the top it will keep traffic flowing because trucks won't get caught up on the grade.

Jay asked the group if they thought that the both the Standard Diamond and Partial Cloverleaf had equal or similar enough characteristics that they should both be carried forward or does one alternative have distinct advantages over the other?

The group discussed whether or not to remove the Standard Diamond now or to forward it with the Partial Cloverleaf for full consideration in the evaluation criteria. The group discussed the pros and cons of the two alternatives:

Partial Cloverleaf Standard Diamond Pros Pros Similar to what is there now. ■ Less impact to the community – 4 lanes Works better for bicycle and on Ore. 214. pedestrians. ■ All right turns on the structure – safer. Better traffic operations. Cons Less expensive. The impacts to the community are More flexibility to widen Ore 214 to too great – 6 lanes on Ore.214. minimize impacts. Don't gain much more operationally for the money spent. It is more Cons expensive. More awkward for bicycles and Less flexibility for working with the pedestrians. configuration to minimize direct impacts and construction impacts. If all widened to one side there is a problem with the height of the freeway under the structure.

> The group made a consensus decision to remove the Standard Diamond from further consideration.

Access Management Overview

Jay gave the access management overview presentation (attached.) Terry emphasized that keeping Oregon Way, Evergreen, etc. open are deviations to the OARs (Oregon Administrative Rules that govern access standards in the state.) And that the state is prepared to seek deviations. Keeping Arney Rd. and Lawson Rd. open will most likely require design exceptions if it is possible. The group had the following comments:

 We need to develop some formula for providing access improvements to a business who has lost an access.

- Eric Olsen talked about how his Elmer's restaurant in Salem had 1 ½ driveways closed (one driveway became an "entrance only", not replaced, and experienced no reduction in business.
- What are the boundaries that the LAC is working within? 1320' away from the interchange (Oregon Way to Woodland Ave.
- The buses and trucks movement on Evergreen is a problem, the turning radius is horrible now. Evergreen may need to be widened to accommodate the longer vehicles.
- Could the potential new access behind Dairy Queen pose an problem for a new access on Ore. 214?

The access presentation will be given to the Local Access Committee at their meeting on May 12, 2003.

Aesthetics

Jay presented a slide show focused on Aesthetics to help establish the criteria related to aesthetics and better capture the community's intent. Group members talked about some of the same issues raised at their last meeting, including:

- Put utilities underground.
- Develop a gateway sign of some kind to let travelers know they are in Woodburn.
- Trees, tulips, some kind of planting that can be maintained.
- Use the theme of the tulips, berries, or trains as the symbol for Woodburn on the gateway.
- Landscaping can block business signs, lights, and directional signs.
- Need to be careful not to distract drivers.
- Don't plant trees that damage the sidewalks.
- Like the idea of a "vivid memory." Make sure people know they are in Woodburn, remember what Woodburn looks like. Create a lasting impression that is positive.
- Concerns about emergency services coordinating with a median.
- Woodburn is currently updated their sign ordinance, make a link with this project.
- If we have a choice between slopes vs. walls for the ramps, use the Highway 217 walls as an example. They are nice looking.
- Be mindful that while gateway signs like Wilsonville's look great, the concrete becomes water stained over time and ends up looking terrible.
- If a planted median coordinate with local garden clubs or other service organizations to maintain the medians. The planting along Woodland Ave. is maintained by community groups.
 - The group agreed that a "high, medium, low" rating for the "Character and Quality" criteria under aesthetics is sufficient.

Next Meetings

Jamie outlined the upcoming schedule of meetings as follows:

- ➤ May 15 Local Access Committee 5:30pm 7:30pm at the Crossing Shopping Center.
- ➤ May 22 Stakeholder Working group meeting 5:30pm 7:30pm at the Library
- ➤ May 29 Community Meeting/Open House 4:30pm -7:30pm United Methodist Church.
- ➤ June 5 Local Access Committee meeting
- > June 12 SWG meeting.

Jamie encouraged as much participation as possible from SWG members at the upcoming public meeting to help community members understand the process.

Woodburn Interchange Environmental Assessment Stakeholder Working Group Meeting #5 June 12, 2003 Woodburn Library

MEETING SUMMARY

Attending

Mary Graves, Woodburn Company Stores
John Reppeto, WINCO/OTA
Willis Grafe, Woodburn Senior Estates
Mindy Mayer, McDonalds
Eric Smith, McDonalds
Kathryn Figley, Mayor City of Woodburn
Patrick Vance, Woodburn Chamber of Commerce
Patricia Milne, Marion County Commission
Scott Roerig, Woodburn Fertilizer
Dave Bishop, ODOT Region 2
Terry Cole, ODOT
Tom Hamstra, CH2M Hill
Jay McRae, CH2M Hill
Jamie Damon, JLA

Absent

Cindy Woodley, Mayor, City of Mt Angel Kevin Baker, Baker & Baker Towing Eric Olson, Elmer's Woodburn Dick Pugh, Westside Neighborhood Harley Piper, Woodburn/Hubbard Area Advisory Committee Kathy Wadsworth, First Student Transportation Services

Public

Theresa Belden Inger Stigerts Ward Herschberger

Agenda

5:30 Welcome – Agenda Review
Purpose of Meeting
Introductions
Public Comment
Open House Report
Review LAC Recommendations
Preliminary Weighting of Evaluation Criteria
Next Meetings
Public Comment

Welcome; Agenda Review

Purpose of Meeting

The purpose of the meeting is to review the work of the LAC and begin applying weights to the Evaluation Criteria.

Public Comment

Inger and Theresa both commented on the good work of the SWG and how they appreciated being able to participate in the meetings.

Open House Report

Jamie distributed an Open House Summary (see attached.) The meeting was well attended with 36 people signing in. In general participants were supportive of the work of the SWG, the draft goals, and the alternative concepts.

LAC Recommendations

The LAC has completed their work in three meetings held on May 1, May 15 and June 5th. Fifteen business owners, residents, and agency representatives participated in the meetings. The LAC is unanimous in their recommendation to widen Oregon 214 to the north. The LAC also has a set of additional recommendations that Jay presented and are detailed by interchange area quadrant below:

NW Quadrant

- The region access management team (a sub group of the PMT) is leaning toward allowing a right in only for Arney Road.
- ODOT is 99% sure that we can design around the Arby's drive through to avoid any impacts.
- The detail regarding the BPA tower will be fleshed out at the design level.
- Need to assess how a free left from Arney to Woodland (heading to Oregon 214) could work. LAC was concerned about ability for Woodland residents to get out because it is difficult already and everyone has to stop.

NE Quadrant

No changes

SE Quadrant

- LAC recommending a right in and right out at Lawson.
- The region access management team thinks a right in is a good idea for Lawson. It will help minimize the back up that will occur while waiting at the light at Evergreen. This decision is fully supported by the technical team and will become a base component of the design.
- Also considering a dedicated right turn lane need to look at this further.
- Need to configure the parking lots to make it clear how cars will exit.

SW Quadrant

- LAC recommends not connecting a new road through the parking lot along the backside of the apartments that face Country Club Ct. Country Club Ct. is already a residential/commercial street because of the access to the motel property.
- The LAC recommends a median from Evergreen to Oregon Way to allow mid block right in/right out accesses to the businesses.
- The LAC recommends trying to keep as many accesses along Evergreen open as possible.

The SWG had the following questions/comments:

- How do you model to show more cars on two lanes? We use a computer model that forcasts traffic volumes for the next 20 years and factor in signal timing.
- The city will need to buy the property behind McDonalds in order to turn it into a city street.
- Need good signage! Concerned about how to make it clear that when departing from McDonalds, the way back to I-5 is via Evergreen.
- Concern about the loss of gas stations.
- Need to recruit gas stations to come to Woodburn as a part of the redevelopment.
 - What is the volume of the South Wilsonville Road exit? Speculate that it is similar to this area with more volumes to the west. The traffic volumes on I-5 through the Wilsonville section are about 10,000 ADT higher. Day to day volumes are probably the same as in Woodburn but Woodburn volumes are significantly higher during special events.
 - > The SWG reached consensus to move forward with the LAC's recommendation.

Preliminary Weighting of the Evaluation Criteria

Jay reminded the group of the evaluation criteria process and why we assign weights. The weights help to establish the value and priority for the given criteria from the stakeholders. Jay distributed six different colored sheets with the major criteria categories listed on the first sheet and the sub criteria within the categories listed on the remaining five sheets. The group was asked to work independently and assign a point value (0-100) for each of the "bubbles" on the sheet so that the total points per sheet did not exceed 100. The numbers on the sheets will be calculated into weights for each criteria for discussion at the next SWG meeting.

Next Meetings

Jamie outlined the upcoming schedule of meetings as follows:

- > June 26 SWG meeting.
- ➤ July 10 Open House.
- > July 23 SWG meeting.

Woodburn Interchange Environmental Assessment Stakeholder Working Group Meeting #6 June 26, 2003 Woodburn Library

MEETING SUMMARY

Attending

Kevin Baker, Baker & Baker Towing
John Reppeto, WINCO/OTA
Willis Grafe, Woodburn Senior Estates
Mindy Mayer, McDonalds
Eric Smith, McDonalds
Dick Pugh, Westside Neighborhood
Scott Roerig, Woodburn Fertilizer
Terry Cole, ODOT
Tom Hamstra, CH2M Hill
Jay McRae, CH2M Hill
Susan Vickers, ODOT
Randy Rohman, City of Woodburn
Jamie Damon, JLA

Absent

Cindy Woodley, Mayor, City of Mt Angel
Mary Graves, Woodburn Company Stores
Eric Olson, Elmer's Woodburn
Harley Piper, Woodburn/Hubbard Area Advisory Committee
Kathy Wadsworth, First Student Transportation Services
Kathryn Figley, Mayor City of Woodburn
Patrick Vance, Woodburn Chamber of Commerce
Patricia Milne, Marion County Commission
Dave Bishop, ODOT Region 2

Public

Theresa Belden Inger Stigerts Joyce Fischer Renee Hayes (Rick?) Desantis

Agenda

5:30 Welcome – Agenda Review
Purpose of Meeting
Introductions
Public Comment
Review ratings and finalize weighting of the evaluation criteria

Review alternative ranking results Next Meetings Public Comment

Welcome; Agenda Review

Purpose of Meeting

The purpose of the meeting is to review the outcomes of applying the evaluation criteria and discuss the weighting and ranking.

Public Comment

There was no public comment at the beginning of the meeting

Review Ratings

Jay explained the weighting handout (attached) from the Project Management Team. Each category had a PMT lead who applied a maximum and a minimum rating based on the technical information available and their expertise in the area. One category was added "Project Staging" from the last time and Jay would like the group to weight that category. It is important to remember that "5" is better than "O". There is also one error on the handout – Under category B – Access and Traffic Flow – B2. Business accessibility out of direction travel to/from access of travel service businesses (gas, food, lodging, etc) – the numbers should read: minimum – 46,000 and maximum – 51, 395.

The group had discussion about the conflict between traffic flow and access. Terry explained that traffic flow in this discussion means the flow of the intersections. Intersection operations serve as a main access to everything surrounding the interchange.

Jay explained that there are several categories that are not differentiators between alternatives and gave the group the opportunity to reallocate their original weights to those categories that do make a difference. Those categories included Aesthetics and Bike Safety. The group also applied weights to the new Staging category. Jay offered an opportunity for the group to change their weights and factored in those weights for SWG members who were absent at the last meeting.

The group discussed the new Staging category and had questions about what Staging means. They wondered if adding the most weight to the Staging category means that they support reduced construction time, ease of construction, etc. Terry confirmed that is what Staging means however we need more information about both of the alternatives with regard to Staging. One alternative may be more complicated to stage, which may mean more construction time – but we don't know that.

When the new weights were applied, the results showed that the "Widen Equal" alternatives rose to the top followed closely by "Widen North" alternatives. The group was disappointed in the results and wondered how that could be when they clearly have a preference for Widen North? Jay explained the differences between the two alternatives

and what made the difference in the evaluation model. The Widen North alternatives involve 3 more displacements of businesses/residents and as such will cost approximately \$4.3 million more in ROW costs. When a lot of weight is put on the cost, less impact on business and ease of construction – it pushed the Widen Equal to the top. The importance of the exercise is to understand why the group prefers a particular alternative. The evaluation model is simply a tool to help evaluate what is important to the SWG. The model does not dictate which alternative is the preferred alternative.

It appears we have a clear decision on Arney Road remaining right in/right out – as all of the top four alternatives include that option. We may want to bring the top four alternatives through the environmental document to analyze further because the ratings are so close and we need more information. The most sensitive factor in the model is auto safety. The big trade off is impact to businesses through displacements vs. impact to businesses through construction.

- Q. What about Lawson? It is assumed that Lawson will remain a right in as part of all alternatives under consideration.
- Q. Why did you ask the group to re-weight the categories? It seems like we should have went with our original weights. Because we added a category and found that several categories did not make a difference.

The group expressed concern and frustration about reapplying the weights and felt it was not necessary. They were worried that somehow the outcome of the model will be used to dictate the outcome and not the discussions of the group. Jay reminded the group that the model is a tool. Jamie summarized the group's recommendation to the community for the Open House on July 10 as follows:

- > Prefer Widen North
- > Arney Road right in/right out
- > Lawson open right/in as part of all alternatives

The outstanding questions for the community are:

- Should we continue to assess widen equal?
- What do people think about the backage road behind Dairy Queen and Wells Fargo?
- Should Woodland be realigned?

The group agreed with the summary and questions for the community.

Next Meetings

- > The second open house is scheduled for July 10 from 4:30 7:00 at the Woodburn Methodist Church on Cascade Ave.
- ➤ The next meeting of the SWG is July 24, 2003, 5:30pm 7:30pm at the Woodburn Library

Woodburn Interchange Environmental Assessment Stakeholder Working Group Meeting #7 July 24, 2003 Woodburn Library

MEETING SUMMARY

Attending

Kevin Baker, Baker & Baker Towing
John Reppeto, WINCO/OTA
Willis Grafe, Woodburn Senior Estates
Mindy Mayer, McDonalds
Eric Smith, McDonalds
Eric Olson, Elmer's Woodburn
Kathryn Figley, Mayor City of Woodburn
Scott Roerig, Woodburn Fertilizer
Terry Cole, ODOT
Tom Hamstra, CH2M Hill
Jay McRae, CH2M Hill
Susan Vickers, ODOT
Randy Rohman, City of Woodburn
Jamie Damon, JLA

Absent

Cindy Woodley, Mayor, City of Mt Angel
Dick Pugh, Westside Neighborhood
Mary Graves, Woodburn Company Stores
Harley Piper, Woodburn/Hubbard Area Advisory Committee
Kathy Wadsworth, First Student Transportation Services
Patrick Vance, Woodburn Chamber of Commerce
Patricia Milne, Marion County Commission
Dave Bishop, ODOT Region 2

Public

15 residents from Panor 360 condominiums on Evergreen John Gervais, Woodburn Independent

Agenda

5:30 Welcome – Agenda Review Purpose of Meeting Introductions Public Comment Update since last meeting

- Open House July 10
- SWG communications

Updated Maps

- Constructability questions
- Next steps for the technical work

Next Meetings and ongoing communication Public Comment

Welcome; Agenda Review

Purpose of Meeting

The purpose of the meeting is to focus on the updated maps and discuss constructability issues.

Public Comment

Approximately 15 residents from Panor 360 condominiums came to the meeting with concerns about the proposed backage road. The condominiums had held a special meeting earlier in the week to discuss the project. Terry Cole explained that the idea for the backage road had come from the Local Access Committee as a way to provide better access to the Dairy Queen and Wells Fargo bank. The residents are very concerned that one drawing of the backage road showed the removal of several garages and the potential for removing a corner of the condominiums. Terry explained that the idea has been tightened up and will not impact the condominiums, may impact a garage or two (which would need to be replaced) or may not impact them at all if a shared driveway approach is developed. Terry committed to keeping the condominium association informed and may speak at one of their regularly scheduled meetings in the coming months. At the end of this discussion, all of the residents left the meeting having had their questions answered.

Update Since Last Meeting

Open House

The second Open House was held on July 10, 2003 at the United Methodist Church on Cascade in Woodburn and was attended by approximately 50 people. Jamie distributed an Open House summary of the comments received. The comments continue to be supportive of the project in general. There was no strong preference from the attendees regarding widening Oregon 214 equally or to the north. Most people said they would support what ever the business community wants. There were concerns raised from the condominiums regarding the backage road similar to the public comment listed above. There was also discussion about a noise study and sound walls for Senior Estates particularly now that the project area is extended to include the curves on Oregon 214 to the fire station.

SWG Communications

Jamie reported that a combination of Terry, Jay and Jamie had met with SWG members who had been absent from the most recent SWG meetings. The purpose of the meetings was to bring SWG members up to speed so everyone could be on the same page and continue to move forward together. The SWG members were not asked to apply new weights but were briefed on the outcomes.

Updated Maps

Tom discussed the information he has gathered regarding staging. A sub group of the Project Management Team met with Tom and found that there was a negligible difference between the two alternatives with regard to staging. Tom pointed out that because the existing bridge structure will be used – the widening will occur outside the current travel lanes and traffic will be minimally disrupted. The group had the following questions and comments:

- Will the grade allow the existing structure to be used? *Yes*.
- When will the disruption occur? We don't know the details yet. We will make sure that traffic moves through the interchange during Christmas and other known high traffic times of year.
- Will the businesses be coordinated with during construction? Yes. We will make sure we know when deliveries occur, coordinate with special and seasonal events like the Tulip Festival and make every effort to minimize impact on the businesses during construction. It will most likely be a two-season job. We will be looking for input from the SWG on the kinds of coordination issues and conditions that need to be included in the bid for services to ensure that a potential contractor knows what to expect.
- Can we build in incentives for the contractor to finish early? *Possibly. We will need to look into that.*
- What is the best-case scenario for when construction would begin? 2006
- What happens to the electrical towers on the west side? *They stay where they are.* We have been able to design the ramp to miss the towers.
- Will the utilities go underground along 214? We need to work with the city, ODOT, and the utility companies to negotiate this.
- It is the city's intent to get the utilities underground.
- There is a safety facto of potentially hitting the poles they need to go!

Terry summarized that both the widen equally and widen north alternatives – together with the backage road vs. no backage road options and the Arney road right in/right out, would be forwarded into the environmental documents for further analysis. ODOT needs to better assess the right of way assumptions and costs.

- What is to be gained by not keeping right/in and right/out at Arney road? We are not looking at any other option for Arney. We assume Arney will be right/in and right/out on all of the options.
- Why can Arney be right/in and right/out but not Lawson? Because of the queuing distance needed between Evergreen and the northbound off ramp. It helps minimize queuing to have Lawson open as a right in, but it would compound the problem to allow traffic to get out into the queue.
 - What are the numbers for traffic flow at Arney vs. Lawson? How do they compare? Approximately 25,000 on Lawson and 10,000-15,000 on Arney. Significantly more traffic at Lawson.

 Need to put a stop sign at the intersection of old/new Arney. That is a level of detail we can discuss after the project is built.

Next Steps for the Technical Work

Terry highlighted the kinds of issues that the technical reports will cover. He emphasized that there are no "smoking gun" environmental issues. The most complicated issue will be regarding property ownership and business ownership.

Next Meetings and Ongoing Communication with SWG

Terry explained that the technical reports will begin in August and be completed in early spring. Jamie outlined a plan for ongoing SWG communications as follows:

- > Monthly email updates to SWG.
- > Bring the SWG together for a meeting if something unexpected is discovered and we need to discuss it.
- ➤ Plan on having SWG meeting #8 in approximately March 2004 prior to public hearings.
- > Public hearings in April 2004 or May 2004.
- > SWG meeting #9 in June 2004 for the final recommendation to the PMT.

Jamie also emphasized that project managers may speak to community groups to keep the community updated in the interim and that an article in the city newsletter would be placed to let folks know what is happening.

Closing

The SWG had a "mini celebration" of the work completed-to-date including a cake and homemade cookies (by Terry!) Terry thanked the group for their hard work and commitment to the process, the project and the community objectives.

Woodburn Interchange Environmental Assessment Stakeholder Working Group Meeting #8 April 22, 2004 Woodburn Library

MEETING SUMMARY

Attending

Mary Graves, Woodburn Company Stores
Patricia Milne, County Commissioners
Scott Roerig, Woodburn Fertilizer
John Reppeto, WINCO/Willis Grafe, Woodburn Senior Estates and Golf Club
Kathryn Figley, City of Woodburn
Willis Grafe, Woodburn Senior Estates
Eric Olson, Elmer's Woodburn
Terry Cole, ODOT
Brian Mostue, IDC
Tom Hamstra, CH2M Hill
Jay McRae, CH2M Hill
Randy Rohman, City of Woodburn
Jamie Damon, JLA

Agenda

Welcome; Agenda Review Public Comment Technical Update Gateway/Aesthetics Workshop

Technical Updates

Tom H. presented an update on the technical work from the "Summary of Alternatives Impacts and Mitigation Summary" table (see attached.) Basically the outcome of the technical work has not produced any surprises. We now have more detail about the level of impacts for the widen equal and widen north alternatives that are outlined in the summary table. The table attempts to boil down many documents into a simple format for comparison.

One element that has not been discussed in great detail at the SWG in the past is the addition and location of sound walls. The updated map shows the approximate sound wall locations.

Q: Will the sound wall be part of the free right turn lane project currently in progress? A: No. The free right turn lane project is an independent project with independent utility that buys additional capacity out of Oregon 214 for the short term. When the interchange is rebuilt, the free right turn project will be underneath the rebuilt interchange and the sound walls are a part of the interchange project.

The technical reports are complete and the draft Environmental Assessment document needs to be reviewed by the Project Management Team and internal ODOT staff. After the internal review, the SWG will have an opportunity to review the document. A public hearing will be held on the EA in late July/August and will be coordinated with the process to update the City's comprehensive plan.

The meeting schedule for the SWG will include:

- Meeting in May or June to discuss the gateway concepts.
- Meeting in July to discuss, review the EA and public hearing.
- Meeting in September to develop a recommendation from the SWG.

Gateway and Aesthetics

Brian Mostue, a landscape architect with IDC walked the SWG through a presentation regarding gateway and aesthetic issues and ideas. Brian started with reminding the group what they had said was important to them at a previous meeting, these values include:

Make the interchange area the "gateway" to Woodburn.

- Underground the utilities.
- Nice signage, clean up the area.
- Need trees, plants and tulips.
- Don't put in expansive concrete medians.
- If medians are used, and planted, provide a way for the plants to be watered.
- Raise the image of Woodburn.

Brian presented a power point presentation detailing current pictures of Woodburn and ideas for the future (see attached power point presentation.)

The SWG had the following comments:

New Signs

- The city has developed a new sign ordinance which was supported by the business community who recognized that a sign ordinance was necessary.
- Approximately 50% of what is on the east side are not in compliance with the city's new sign ordinance. The west side is either in compliance or grandfathered.

Utilities

- Cities have more leverage than ODOT in encouraging the utility companies to underground the utilities as part of a construction project.
- The utility will "relocate" the poles, which usually don't mean relocating underground. The city needs to pay for undergrounding.
- It can be part of the project construction but not added to the state's cost. There are costs to the utility to relocate but it is more expensive to come back later and underground than it is to coordinate on the front end.
- The city, the business community and the SWG is very much in favor of putting the utilities underground as a part of the interchange construction.

Urban Renewal

- The area is currently in an urban renewal area-although the intent was for some of the funds generated to be used elsewhere.
- Don't think most people have given much thought to what the new road would look like
- Need to engage the broader community about the issues involved in the design of the road.
- ODOT is looking for some direction from the SWG on general concepts for design as placeholders in the EA document. This will give the community a place to start during the design phase and ensure that these issues are carried through to construction.
- Need to articulate to the broad community what the steps are in finding creative funding sources to put more money into gateway and aesthetic options. Used The Dalles gateway under Interstate 84 as an example of how a community came together and found many funding sources.

Sound Walls

- Like idea of incorporating images into expenses of concrete- whether it is for sound walls or medians, etc.
- Could we have flower baskets incorporated as part of the decorative streetlights. Flower baskets have been an important part of Woodburn's image.
- If the poles go-we need to keep our baskets!
- Need to make the concrete more graffiti resistant.

Images

- Silver falls makes sense because Oregon 214 is the silver falls tour route.
- Have an area that has seasonal plantings-in a limited area-contained, maybe on the corners of the embankments for example.

Gateway Concepts

- Like the idea of using the interchange itself as a gateway to Woodburn.
- Like the idea of incorporating art, a similar look and feel across the interchange that is echoed on Oregon 214 and throughout the community.
- If we only widen north, than it may be difficult to change the signage/underground on the south side if they are not disrupted. We need to think about the issue of aesthetics as it related to the two alternatives.
- Develop little pockets of plantings that are "adopted" by local growers who will plant and maintain.
- Potentially have a local competition to design art for the overpass.
- Don't want to put in place anything that will be higher maintenance in the long run.
- Interested in a unified effect for the landscaping along 214. Developing guidelines for businesses. They would like low maintenance, native plantings.
- Woodburn likes color-we would like character for the different areas.

Next Steps/Next Meeting

- > Brain will come back next time with follow -ups from the ideas discussed. More graphic examples of the ideas.
- > Terry will follow up regarding the stop sign at Arney and allowing a free right turn suggested by Eric O.
- ➤ The next meeting of the SWG will be June 3, 2004 from 5:30pm 7:30pm at the Woodburn Library.

Woodburn Interchange Environmental Assessment Stakeholder Working Group Meeting #9 June 3, 2004 Woodburn Library

MEETING SUMMARY

SWG Attending

Mary Graves, Woodburn Company Stores Patricia Milne, County Commissioners Scott Roerig, Woodburn Fertilizer Willis Grafe, Woodburn Senior Estates Eric Olson, Elmer's Woodburn John Reppeto, WINCO/Willis Grafe, Woodburn Senior Estates and Golf Club Kathryn Figley, City of Woodburn Mindy Mayer, McDonalds Dick Pugh, Westside Neighborhood Brian Mostue, IDC Tom Hamstra, CH2M Hill Randy Rohman, City of Woodburn Susan Vickers, ODOT Terry Cole, ODOT Jeanne Lawson, JLA Kristen Kibler, JLA

Guests Attending

Kristy Olson, Woodburn Crossing (LAC member) John Gervais, Woodburn Indpendent (media)

Agenda

Welcome; Agenda Review
Public Comment
Gateway/Aesthetics Concepts
Technical work and schedule update

- Coordination with Transportation System Plan
- EA document review process
- Public Hearing schedule

Gateway/Aesthetics Concepts

Brian Mostue reminded the group of the ideas discussed at the April SWG meeting and presented some concepts for the group to discuss.

The group had concerns that the some of the design elements increased impacts to the businesses. Some members of the group were concerned that the alternatives have changed. Terry Cole clarified that the alternatives are the same as last fall and that we are focusing on what aesthetic designs can be incorporated into the alternatives at this stage.

Terry rolled out the maps from last fall to show that the width of the road widening for the alternatives are the same as shown in the last meeting.

Brian noted the following comments and concerns from the discussion:

Signage

- Business signage (food, lodging, fuel) along I-5 in advance of exits and directional signs at the exit come with a cost.
- Businesses along freeway rely on tall signs to orient visitors who don't know the area.
- Businesses are concerned about having their identity signs too small.
- It may be necessary to vary the signage standards along the road (i.e. make compromises) to make sure that businesses remain viable.

Landscaping along Roadway

- Businesses are concerned about being hidden behind landscaping. Goal: maintain visibility for freeway oriented business.
- Eliminate any planters that would affect the vitality of local businesses; why spend <u>more</u> money?
- It may be necessary to vary the landscape treatment along the road (i.e. make compromises) to make sure that businesses remain viable.
- Safety concerns can arise if tree plantings become too closely spaced and the resulting line of tree trunks hides pedestrians and driveways. Carefully consider choice of tree species and spacing.
 - Suggested that the broad community wants the entry to be more attractive and, at the same time, maintain visibility for businesses.
- Supportive of aesthetics, but also supportive of businesses and making sure they are protected; still don't want a mass of concrete.
- Making the roadway attractive can happen after the business viability issue is settled.
- Perhaps modify the amount of landscaping to minimize the amount of ROW needed. Minimize impacts to the businesses as much as possible.

Medians

• The Highway 99E solid concrete median is hideously ugly. The gateway to our community should have plantings or more artistic surfaces.

Flexibility of proposed solutions

- Suggested that the treatment be varied to address concerns on case-by-case basis.
- Suggested that, at the earliest stage possible, changes are needed to save business first, then incorporate landscaping as appropriate and supported.
- Flexibility may vary from element to element. For example, little to no flexibility in ADA, bike lanes; more flexibility with planting strip width and placement.

Suggested follow-up to SWG concerns

Arrange for presentation on bike lane rules, options, cross sections, widths of road etc.

Prepare additional visualizations that explore a range of possibilities (for example, streetscape with and without planting strips.)

Next Steps/Next Meeting

Reconvene the SWG when we know what the public hearing schedule is and the status of the Transportation System Plan. This might be in the fall or early in 2005.

Woodburn Interchange Environmental Assessment

OPEN HOUSE SUMMARY

July 10, 2003

The second open house was held for the Woodburn Interchange Environmental Assessment on July 10, 2003. It was held from 4:30 p.m. to 7:00 p.m. at the United Methodist Church in Woodburn. Forty-three people signed in as attending the meeting.

The purpose of the meeting was to provide participants an overview of the project and to hear their input regarding issues that should be addressed and potential ideas for the interchange. The open house included a PowerPoint presentation that ran continuously through the meeting (see attached). Four stations of information were available including:

Welcome/sign -in

- PowerPoint slide show Overview
- Alternatives for the Interchange
- Goals and Objectives

Participants were asked to fill out a comment form and provide comments on the ideas for the interchange (see attached.) Seven comment forms were collected. The comments are listed below.

WHAT ARE YOUR COMMENTS ABOUT THE TWO PROPOSED ALTERNANTIVES – WIDENING OREGON 214 TO THE NORTH OR WIDENING OREGON 214 EQUALLY?

- As a resident of 950 Evergreen I find either project's impact on our property intolerable no garages and a busy street under my window. (1)
- Dollar wise, which is most disruptive to existing business? Which way provides best Woodburn traffic flow between I-5 and 99E? (1)
- Which ever is faster.(1)
- Take the cheapest alternative. (1)
- Good idea, long overdue. (1)
- Selfishly I'd prefer North only as it would not impact the parking and viability of our midvalley bank branch. However, examining the criteria indicates more businesses and jobs would be lost by this option, which is bad for our city and our local bank, therefore we will do what is best for the majority – we'll find a way to keep a branch in West Woodburn. (1)
- I am concerned about how much of my lot at 2112 Rainier Rd. will be taken and whether a sound wall will be erected. (1)

WHAT OTHER COMMENTS/QUESTIONS/CONCERNS DO YOU HAVE ABOUT ANY OF THE PROPOSED BASE SET OF IMPROVEMENTS?

- Traffic calming on Country Club Road. (1)
- Off ramp at Crosby from I-5. (1)
- Glad to see we are on ODOT's "list" congrats to city & staff. Hope the affected businesses get a fair shake the chamber will be watching. (1)

WHAT DO YOU THINK ABOUT THE ACCESS OPTIONS FOR THE BUSINESSES ON THE SOUTH SIDE OF OREGON 214 BETWEEN EVERGREEEN AND OREGON WAY?

- Very good. (2)
- Go to the near --- don't put any access off Hwy 214. (1)
- If we don't have a right turn only into our MVB bank (@ corner of Oregon Ave.) then the only other access is right on Oregon & immediate right into the bank. It would have an even more adverse affect on our competitor to the west, Wells Fargo-perhaps a joint curb cut? (1)

DO YOU HAVE ANY OTHER QUESTIONS, CONCERNS, OR COMMENTS THAT YOU WOULD LIKE TO SHARE WITH THE PROJECT TEAM?

• Keep Lawson two-way to Mc Donald's drive. Right in okay off 214. (1)

No	Comment	Commentor	ODOT Response to Comment
1.	If R/W extended to Broughton intersection, additional 5 homes would lose back yards.	Senior Estates Golf and Country Club	The EA discloses estimated impacts for right-of-way and other environmental issues. The final right-of-way impacts would be determined during preliminary and final design and through the right-of-way process with affected property owners, which would occur after the EA is signed by FHWA. Final right-of-way impacts could be less than those identified in the EA.
2.	Future widening of Oregon 214 between Broughton and Astor Way from Widen North Alternative would reduce 8 homes' back yards.	Senior Estates Golf and Country Club	The alignment for any future widening along Oregon 214 is not addressed in the EA, as future widening is not part of the Woodburn Interchange Project and would be speculative at this point. Future projects may have additional right-of-way impacts that would require separate environmental review, right-of-way, and public involvement processes.
3.	Senior Estates quality of life seriously reduced and interrupted and cannot be mitigated. Value and marketability of homes hugely impacted.	Senior Estates Golf and Country Club	Some property acquisition directly adjacent to Oregon 214 would result from either the Widen Equal or Widen North alternatives. Those properties would be adequately compensated for through the right-of-way process. Sound walls proposed by the project would mitigate noise levels in residential areas adjacent to Oregon 214. ODOT cannot speculate on housing value and marketability, however,
			improvements resulting from this interchange improvement project should improve livability within and adjacent to the project area.
4.	Impacts to up to 32 of Senior Estates homes could reduce membership dues and assessments for Senior Estates	Senior Estates Golf and Country Club	ODOT cannot speculate on nor analyze Senior Estates' membership dues and assessments and how property values may or may not be affected by the Woodburn Interchange project. However, the 1 to 5 property owners that would be displaced by right-of-way impacts (depending on the alternative selected) would be compensated for their losses through right-of-way negotiations. In addition, sound walls proposed by the project would reduce noise levels and help to buffer adjacent residents from any additional noise generated from Oregon 214. In addition to the overall traffic improvements to the highway, the remaining surrounding areas could be benefit by these improvements.
5.	Widen Equal would have much less R/W costs, human and quality of life costs than Widen North	Senior Estates Golf and Country Club	The right-of-way costs for Widen Equal and Widen North are fairly similar (see EA page 4-36). Widen North would result in more homes (up to 2) displaced than Widen Equal, but how each alternative would affect human and quality of life is difficult to determine. The overall traffic improvements to the highway and sound walls that would reduce noise levels to adjacent residences would be designed to improve the immediate project area and Woodburn in general.
6.	No reason given for not exploring Widen South	Senior Estates Golf and Country Club	The Stakeholder Working Group validated that the possibility of widening Oregon 214 to the south entirely would not be feasible, as was also concluded by the City of Woodburn's July 1999 Highway 214 Study. That study incorporated public comment through meetings with adjacent property owners, an Open House, and a City Council briefing. Widening south would displace almost all of the businesses located on the south side of Oregon 214, adding costs for right-of-way acquisition, without providing any additional transportation benefit beyond what Widen Equal or Widen North would provide. Using a one-to-one comparison for feasibility with each of the other alternatives, the Stakeholder Working Group, recommended by consensus, that a Widen South alternative for Oregon 214 should not be explored or evaluated further. The EA document did not contain text about a possible Widen South alternative; however, the Revised EA (REA) has new text to address Widen South (to be developed).

November 10, 2005

No	Comment	Commentor	ODOT Response to Comment
<u> 40 Per</u>	Senior Estates Board of Directors is strongly opposed to Widen North Alternative	Senior Estates Golf and Country Club	Comment does not require response by ODOT.
8.	Suggests alternate roadway modifications to improve traffic flow see comment and provided 11x17 map	Keith C. Woollen	Comment relates to issue outside the study area, but which is addressed in the City of Woodburn's recently updated Transportation System Plan. Comment does not require response by ODOT.
9.	Provide a noise wall for 8 homes on King Way or extend sound wall north to the Senior Estates RV storage lot.	Rosemary and Gerald Reilly; Bill J. and Jean T. Reed; Rose Brown; Phillip Bartlett; Phyllis Robertson; Sharon Wilkerson; Barbara Lucas; Gary Bowers; Sharon	The King Way neighborhood is located approximately 1/2 mile north of where the northbound on-ramp merges with I-5. Since the noise impact on the neighborhood is not directly related to this project, mitigation cannot be included as part of the interchange reconstruction. Because King Way is located outside of the project limits, improvements would need to be a separate project. For a wall to be constructed, it must be shown that it can provide a noise
		Wilkerson; Lincoln Pearson	reduction according to ODOT and Federal standards. This needs to be done through acoustical studies conducted by a specialist.
			If a wall would prove to be effective in meeting these standards, it would have to be funded by the property owners (at 25%) the local agencies (at 25%) and ODOT (at 50%). The ODOT share of the cost would need to successfully compete for funding with many other regional needs.
			A noise wall should be pursued through the Mid-Willamette Valley Area Commission on Transportation (MWACT).
10.	Opposed to project if ingress and egress to Chevron Station is changed or negatively affected.	RJ Barman	Ingress and egress to/from Oregon 214 would be difficult to accommodate with the present station configuration due to the revised grade of Oregon 214, which will be raised. The change in grade and other access factors may make the station economically infeasible, which could result in acquisition and/or reconstruction to the south. The ingress and egress to Oregon 214 would be affected by both the Widen Equal and Widen North alternatives.
			The Access Option discussed in the EA would provide access to the Chevron site from Lawson.
	Favor Widen Equal Alternative	Brice Corporation; Mayor of Woodburn; E.W. and Janet Street; John Pilafian; Jeff Gray (Kentucky Fried Chicken)	Comment does not require response by ODOT.
12.	Agree with most of report's conclusions	James A. Cox	Comment does not require response by ODOT.
13.	In favor of proposed sound walls	James A. Cox	Comment does not require response by ODOT.

No	Comment	Commentor	ODOT Response to Comment
14.	Support sound wall behind Commercial Office zone property. Costs of acquisition for sound wall not in report, but should be minimal.	James A. Cox	Comment does not require response by ODOT.
15.	Businesses between I/C and Oregon Way/Country Club Road would be severely impacted by project from R/W impacts, new access and turning limitations.	James A. Cox	For both the Widen Equal and Widen North alternatives, right-of-way acquisition and/or access control would be necessary. ODOT would work with each property owner to receive adequate compensation for any right-of-way acquisition or provide alternative access to the properties. This is part of the right-of-way process that would occur after the EA is complete and signed by FHWA.
16.	From Oregon Way/Country Club Road to Broughton, strongly favor Widen Equal.	James A. Cox	The alignment configuration east of Oregon Way/Country Club Road can be different than the alignment to the west, although there needs to be connectivity at the intersection. The alignment configuration east of Oregon Way/Country Club Road can be different than the alignment to the west, although it still needs to tie into the chosen alignment at the intersection. The alignment east of Oregon Way/Country Club Road (regardless of alternative chosen) would be optimized to minimize the overall right-of-way impacts between the backyards of the homes along Rainier Road and the commercial buildings south of Oregon 214. This optimization of the alignment would occur with either the "widen north" or "widen equal" alternatives.
17.	Residential properties impacted by Widen North from Country Club Road to Broughton will lose at least 50% of market value and suspect these impacts were not considered in estimating R/W costs in EA. Properties to south could tolerate R/W takes without such big losses.	James A. Cox	The right-of-way estimate considered that some of the parcels would be needed in full (total acquisitions) and that others would only be partially acquired for the improvements. The estimate used in the EA is based on minimal roadway design without the development of right-of-way plans or property specific appraisals. As ODOT moves forward with the project and selects an alternative for final design, the alignment in this area will be optimized with input from the community. This will include input on planting strip width and buffer area to the noise wall. When those details have been worked out, each property affected would be appraised based on the present value and the value after the acquisitions have been made. The property owner would be compensated for the difference. If the remainder is not deemed usable, ODOT would acquire the entire parcel, compensating the property owner appropriately.
18.	Widening along Oregon 214 should not have to be the same the entire route - Widen North west of Oregon Way and Widen Equal east of Oregon Way.	James A. Cox	The alignment configuration east of Oregon Way/Country Club Road can be different than the alignment to the west, although it still needs to tie into the chosen alignment at the intersection. The alignment east of Oregon Way/Country Club Road (regardless of alternative chosen) would be optimized to minimize the overall right-of-way impacts between the backyards of the homes along Rainier Road and the commercial buildings south of Oregon 214. This optimization of the alignment would occur with either the "widen north" or "widen equal" alternatives.
19.	When and how will the final design be made as to how the roadway will be widened?	James A. Cox	The decision on the alternative to move forward in the design will be made by the Oregon Department of Transportation (ODOT) and approved by Federal Highway Administration (FHWA) as the next step in the project development process. ODOT will be looking to the Stakeholder Working Group and Project Management Team to provide input in making the decision.

November 10, 2005 3

No	Comment	Commentor	ODOT Response to Comment
20.	Why not add a clover-leaf at Crosby Road NE and I-5 and use this as an alternate route for trucks instead of improving the Woodburn I/C or widening 214? Traffic going to outlet stores would exit there, avoiding 214/219. Or add off ramps at Butteville Road.	Robert M. and Cecelia R. Hartsook; Gertrude Canham; Jesse Canham; Stanley Hiller	There are three main reasons why adding new interchanges or ramps to I-5 instead of modifying the Woodburn Interchange is not feasible. The Revised EA will include a brief discussion of these reasons: First, ODOT is bound by Policy 1G in the Oregon Highway Plan (OHP). That policy requires ODOT to maintain and improve operations prior to making a major investment. Improvements to the existing interchange (Woodburn Interchange) are required prior to expanding the facilities elsewhere (Crosby Road NE, Butteville Road, etc.). A second challenge is access and interchange spacing per Oregon Administrative Rules (OAR 734-051). The spacing between the Woodburn Interchange and any potential interchange built at Crosby Road NE or Butteville Road would require a variance from the law. ODOT would need to provide compelling proof that no other viable alternatives exist prior to construction of a new interchange that does not conform to the administrative rule. Finally, the location of a new interchange at Crosby Road NE would physically conflict with the Woodburn Port of Entry (southbound) and the weigh scale (northbound) causing additional cost to construct auxiliary lanes and/or relocate the facilities.
21	What are the exact addresses of the houses to be displaced?	Wes Bakken	ODOT does not know the exact houses that would be needed from either alternative because that would be determined after preliminary and final design of the selected alternative and right-of-way process. Through that process, ODOT would work with the affected property owners to determine whether a full or partial acquisition of the properties is necessary and would adequately compensate property owners for their losses.
22.	Error on page x of Executive Summary - Under heading of Potential Environmental Impacts, Alternative 2 should be (Widen North) [in the paragraph]	Wes Bakken	Comment noted. A correction will be made in the Revised EA.
23.	Text on page 4-50 describing sound wall location does not match maps	Barbara Lucas	Comment noted. The text is correct and Figure 4-10 has been modified to show the sound wall extending to Astor Way along the north side of Oregon 214.
24.	Please close all driveways on the south side of Oregon 214 between Evergreen and Oregon Way	Barbara Lucas	For both the Widen Equal and Widen North alternatives, ODOT would reduce access along the south side of Oregon 214 between Evergreen Road and Oregon Way to right-in and right-out only. Exactly where that would occur is unknown at this time and would be determined through the right-of-way process.
25.	Woodburn I/C badly needs cloverleaf or partial cloverleaf interchange	Art Kohn	Comment does not require response by ODOT.
26.	Area from I/C east to Oregon Way should be 4 lanes	Art Kohn	Comment does not require response by ODOT.

4 November 10, 2005

No	Comment	Commentor	ODOT Response to Comment
27.	Do not widen the road from Oregon Way to Boones Ferry/Settlemeir - not necessary and waste of money	Art Kohn	The additional lanes that are provided east of Oregon Way/Country Club provide a transition from the five-lane section west of the intersection (at Oregon Way) to the existing three-lane section in the vicinity of Broughton Way. This transition section brings the through-lanes past the "S" curves and then makes the lane-drop transitions where there is adequate sight distance for the motorist. This is the safest method of dropping the lanes given the alignment in the area.
			A separate process and project is currently planned to start in 2008 and will evaluate widening along Oregon 214 east to 99 East. This separate NEPA process would analyze impacts for that project at that time.
28.	Was given different explanations why another exit could not	Art Kohn	There are three main reasons why adding new interchanges or ramps to I-5 instead of modifying the Woodburn Interchange is not feasible.
	be built so trucks can get to 99E easier at Parr Road just south of Woodburn. Much cheaper to have exit at Parr Road to 99E		First, ODOT is bound by Policy 1G in the Oregon Highway Plan (OHP). That policy requires ODOT to maintain and improve operations prior to making a major investment. Improvements to the existing interchange (Woodburn Interchange) are required prior to expanding the facilities elsewhere (Crosby Road NE, Butteville Road/Parr Road, etc.)
			A second challenge is access and interchange spacing per Oregon Administrative Rules (OAR 734-051). The spacing between the Woodburn Interchange and any potential interchange built at Crosby Road NE or Butteville Road/Parr Road would require a variance from the law. ODOT would need to provide compelling proof that no other viable alternatives exist prior to construction of a new interchange that does not conform to the administrative rule.
			Finally, the location of a new interchange at Crosby Road NE would physically conflict with the Woodburn Port of Entry (southbound) and the weigh scale (northbound) causing additional cost to construct auxiliary lanes and/or relocate the facilities.
			It would not necessarily be cheaper to have exits at Parr Road. That would require major local arterial improvements to Parr Road, substantially driving up the costs for construction and right-of-way acquisitions.
29.	Choose Widen North Alternative	Mindy Mayer; Eric Smith; Philip Hand; Lucien Klein	Comment does not require response by ODOT.
30.	Widen North Alternative is vital to health of my business	Eric Smith;	Comment does not require response by ODOT.
31.	Good idea - those of us at Senior Estates really need Oregon 214 changed for the better.	C.E. Young	Comment does not require response by ODOT

No	Comment	Commentor	ODOT Response to Comment
32.	Woodburn needs adequate visual improvements such as landscaping, underground utilities, that will create a more inviting environment for quality commercial development	Mid-Valley Community Church	The Woodburn community intends to include aesthetic improvements to the interchange area, as noted in the goals section of the Purpose and Need Statement included in the EA and REA documents. During the preliminary and final design phases of the project, various aesthetic improvements will be developed with the community using context sensitive design approaches.
33.	Very happy to see the improvements to get to Cascade Drive	Margaret and Larry	Comment does not require response by ODOT.
34.	Project needs to be done soon, regardless of alternative chosen.	Mayor of Woodburn	Comment does not require response by ODOT.
35.	Remember this is the North Marion County I/C - growth in Woodburn has not only caused this need	Mayor of Woodburn	Comment does not require response by ODOT.
36.	Low, uniform ground cover at a minimum should be included in the design for both sides. Low cost, low maintenance landscaping helpful to east side.	Mayor of Woodburn	The Woodburn community intends to include aesthetic improvements to the interchange area, as noted in the goals section of the Purpose and Need Statement included in the EA and REA documents. During the preliminary and final design phases of the project, various aesthetic improvements will be developed with the community using context sensitive design approaches.
37.	What time of day and what locations were used for the noise tests performed? Please provide a copy of the Noise Technical Report.	Pat Taylor	Noise tests were performed at approximately 18 locations and ranged in time from morning to mid-afternoon. A copy of the Noise Technical Report has been mailed.
38.	A sound wall would be wonderful at our location (2112 Rainier Road)	E.W. and Janet Street (both commentors)	ODOT evaluated noise impacts from the proposed alternatives in the EA. Based on projected noise levels and criteria established by ODOT and FHWA, ODOT proposed sound wall locations that meet these criteria. If a sound wall was not proposed in a certain area, then that means that a sound wall would not be able to be constructed for that particular area and still meet the FHWA and ODOT criteria.
39.	Thank you for the open house	Virginia Langen	Comment does not require response by ODOT
40	What effects from widening to Senior Estates Golf Tunnel? If tunnel widened, would that widening take other property north or south?	Dick Koesgel	ODOT is committed to widening the Senior Estates Golf Course Tunnel as part of project construction and is committed to maintaining its use. The design of whichever alternative gets selected is not complete yet, however. Exactly how and when the Golf Tunnel would be widened would be determined during the final design phase of the selected alternative.

No	Comment	Commentor	ODOT Response to Comment
41.	Save the trees along Evergreen Road in front of Panor 360 (condos) at 950 Evergreen Road.	Panor 360 Condos	The design of how Evergreen Road would be widened is still yet to be conducted and would likely be a part of the final design phase for the selected alternative. ODOT would make every effort to preserve existing trees and landscaping as part of the design.
42.	Regardless of option chosen, please make decision quickly and consider effects on my property extensively.	Sonnie Shaw	ODOT intends to select the alternative to move forward with right-of-way process and final design as quickly as possible.
43.	Stopping the 4-lanes to 2-lanes at Broughton Avenue to the old church is a tremendous mistake.	Harry Clark	The widening included in this project is to make the Woodburn Interchange functional through the 2020 planning horizon. A separate process and project is currently planned to start in 2008 and will evaluate widening along Oregon 214 east to 99 East. This separate NEPA process would analyze impacts for that project at that time.
44	There should be an overpass over 214 at the High School to avoid back-ups on 214 and make it safe for the kids	Harry Clark	The widening included in this project is to make the Woodburn Interchange functional through the 2020 planning horizon. A separate project for further east along Oregon 214 is currently planned to start in 2008. Under that project, other issues in that area can be raised and considered in developing alternatives. Those issues would be addressed under a separate NEPA review process.
45.	This project needs to be on the front burner	Harry Clark	ODOT is actively moving forward with the analysis and design of the Woodburn Interchange project.
46.	We need a traffic light at Astor Way and 214	Virginia Phipps	The Woodburn Interchange Transportation System Plan (TSP) identified various transportation improvements needed in order to better improve the function of the Woodburn Interchange. The TSP did not identify a need for a traffic light at Astor Way and Oregon 214. In order for a traffic light at Astor Way and Oregon 214 to be considered, a separate project would need to be added to the Statewide Transportation Improvement Program (STIP), a four-year transportation project scheduling and funding program. The STIP is updated every two years and is developed with ongoing public, local government, and transportation stakeholder involvement. Participating in the STIP update process through the public involvement process would provide the opportunity to identify a new and separate project for ODOT to undertake. STIP information can be found at the following web site.
47.	Don't have a preference, just pick one alternative	Sonnie Shaw	Comment does not require response by ODOT.
48.	City and residents of Woodburn should pay whatever it costs to put utilities underground	Gerald Collins	Utility undergrounding costs are not an allowed expense for ODOT funding, but the City of Woodburn could evaluate and fund.

No	Comment	Commentor	ODOT Response to Comment
49.	The widening from Oregon Way to Boones Ferry Road is unnecessary	Art Kohn	The additional lanes that are provided east of Oregon Way/Country Club provide a transition from the five-lane section west of the intersection (at Oregon Way) to the existing three-lane section in the vicinity of Broughton Way. This transition section brings the through-lanes past the "S" curves and then makes the lane-drop transitions where there is adequate sight distance for the motorist. This is the safest method of dropping the lanes given the alignment in the area. A separate project is currently planned to start in 2008 and will evaluate widening Oregon 214 east to 99 east.
50.	With funding shortage, can we look at this project as parts instead of doing it all together? Such as from Evergreen to Woodland?	Jeff Gray, Kentucky Fried Chicken	This project would be very difficult to break into parts, since all the parts really need to work together to provide an improvement over the present situation. For instance, the new ramps could be built separately from the improvements to Oregon 214/219; however the steep approach grades to the interchange, capacity constraints, and congestion along Oregon 214/219 would keep the ramps from working optimally. Additionally, the complete ramps could not be built because of the steep approach grades that presently exist along Oregon 214/219.
	Object to not moving the BPA tower near Arney Road, since that would reduce impacts to my property	Warde Hirshberger	ODOT will not know the exact right-of-way impacts until final design. The project team determined that it was most cost effective to not move the BPA tower and local property effects could be mitigated more efficiently. Moving a BPA tower has ripple effects to adjacent BPA towers, substantially increasing the total costs to move the lines.
52.	Make sure whatever landscaping or medians added to project do not affect my business by having the view of my business diminished or taken away.	Mindy Mayer	ODOT makes every effort to avoid impacts to businesses when developing landscape designs and works with each affected property owner to develop and finalize the landscape plans.
53	Make sure that any loss of parking stalls doesn't hurt my business too much	Mindy Mayeı	ODOT makes every effort to avoid impacts to parking for businesses when developing the final design and works with each affected property owner to develop and finalize designs.
54.	Make sure my drive- through can stay viable	Mindy Mayer	ODOT makes every effort to avoid impacts to local businesses when developing the final design and works with each affected property owner to develop and finalize designs.
55.	Widen Equal would affect my parking, signage, drive- through, and overall business	Eric Smith	ODOT makes every effort to avoid impacts to local businesses when developing the final design and works with each affected property owner to develop and finalize designs.
56.	Decrease the buffer zone (landscape buffer) from 6 feet to 3 feet or something less than 6 feet to lessen impact on businesses (or have no buffer zone at all)	Eric Smith; Philip Hand; Lucien Klein	The design that has been completed to date is only about 5 percent complete. With this level of design, the landscape buffer that has been shown is a uniform six feet for all areas of the project. As the design continues following the completion of the Environmental Assessment, ODOT would have continuing discussions and workshops with the community during the design regarding areas where design standards allow flexibility and community input. Theses areas include the width of buffers, type of landscaping provided, impacts to existing trees, and the detailed location of noise walls, as well as other aesthetic elements of the project. The landscape buffer that has been shown on the plans is the "worst case" that can be expected.

No	Comment	Commentor	ODOT Response to Comment
57.	Concerned about impacts to business parking (McDonalds), we plan to expand parking to the east side of our building.	Eric Smith	ODOT makes every effort to avoid impacts to local businesses when developing the final design and works with each affected property owner to develop and finalize designs.
58.	How much of my back yard will be taken? Will a fence be put in	Bonnie Jorgensen	ODOT makes every effort to avoid impacts to local residents and businesses when developing the final design and works with each affected property owner to develop and finalize designs.
59.	Will the traffic lights be reworked as part of this project?	Bonnie Jorgensen	Yes, the new traffic signals would be traffic-actuated and designed to allow for efficient vehicle progression along Oregon 214/219, as well as access to the side streets.
60.	As an affected property owner, I was never put on any kind of committee or mailing list.	Philip Hand	Affected property owners were invited to participate in the Local Access Committee (LAC), which held a series of workshops to address property access issues for affected property owners. At the time the LAC was established, the project area's eastern limit was at Oregon 214 and Oregon Way. After the LAC had completed their series of workshops, the project area was extended eastward to Cascade Drive.
			ODOT will continue to solicit input from affected property owners through the completion of the project.
61	Concerned about any of 214 moving closer to building on south and how it will affect tenants in building (doctors and dentist)	Lucien Klein	The alignment east of Oregon Way/Country Club Road (regardless of alternative chosen) would be optimized to minimize the overall right of way impacts between the backyards of the homes along Rainier Road and the commercial buildings south of Oregon 214. This optimization of the alignment would occur with either the "widen north" or "widen equal" alternatives. As the design continues following the completion of the Environmental Assessment, ODOT would have continuing discussions and workshops with the community regarding areas where design standards allow flexibility and community input. Theses areas include the width of buffers, type of landscaping provided, impacts to existing trees, detailed location of noise walls, and impacts to existing signage, as well as other aesthetic elements of the project.
62.	Do not continue sound barriers to our property (Cascade - south of 214), as they affect signage	Mick DeSantis	As the design continues following the completion of the Environmental Assessment, ODOT would have continuing discussions and workshops with the community regarding areas where design standards allow flexibility and community input. Theses areas include the width of buffers, type of landscaping provided, impacts to existing trees, detailed location of noise walls, and impacts to existing signage, as well as other aesthetic elements of the project. If a property owner does not want sound walls, ODOT would be open to further discussions on that issue. In cases where multiple properties share a sound wall, the elimination of a sound wall from one property may affect others. In those cases, the decision about sound walls would need to be a joint one by the affected property owners.
63.	Widen to north and extend into vacant property that exists to north so that the Scurve be extended	Mick DeSantis	The alignment configuration east of Oregon Way/Country Club Road can be separate and different from the alignment to the west, although it still needs to tie into the chosen alignment at the intersection. The alignment east of Oregon Way/Country Club Road (regardless of alternative chosen) would be optimized to minimize the overall right of way impacts between the backyards of the homes along Rainier Road and the commercial buildings south of Oregon 214. This optimization of the alignment would occur with either the "widen north" or "widen equal" alternatives.

November 10, 2005 9

No	Comment	Commentor	ODOT Response to Comment
64.	6-foot curb section (landscape buffer) should be sidewalk to keep the sidewalk away from our building	Mick DeSantis	As the design continues following the completion of the Environmental Assessment, ODOT would have continuing discussions and workshops with the community regarding areas where design standards allow flexibility and community input. Theses areas include the width of buffers, type of landscaping provided, impacts to existing trees, the detailed location of noise walls, and impacts to existing signage, as well as other aesthetic elements of the project.
65.	The roadway centerline and R/W are not the same, as I've been told. The road is closer to us, so centering the widening on the R/W instead of roadway would help move the roadway north away from us.	Mick DeSantis	As noted in the response to AV-3, the design would be optimized to minimize the overall impacts. Similarly, the right of way centerline that would serve as the basis of right of way acquisitions would also be optimized. The location of the roadway centerline and future right of way centerline can be independent of each other.
66.	We should be able to vote as a stakeholder since the project fronts our property	Lucien Klein; Mick DeSantis	Project stakeholders are part of a Stakeholder Working Group (SWG) that is a consensus-based group that does not include voting per se. The SWG provides recommendations to the Project Management Team (PMT) which is made up of federal, state, county and city representatives. The PMT, in coordination with FHWA, ultimately makes the decisions, while taking into account the SWG's recommendations, about the project. All affected property owners are invited to speak to the SWG to discuss their property concerns by contacting them directly.
67.	If our property is not taken (Country Cottage), we'd prefer a retaining wall.	Joyce Fischer (Country Cottage)	If access is provided to the restaurant (via Lawson as documented by the access option), the northbound I-5 off-ramp, including retaining walls, would be designed so that an acceptable number of parking stalls remain for the restaurant to remain viable.
68.	If our property is taken (Country Cottage), make sure that we are moved to a better location	Joyce Fischer (Country Cottage)	When businesses need to be acquired because of project impacts, ODOT would provide relocation assistance in accordance with Federal guidelines.
69.	If our property is not taken (Country Cottage), we're very concerned about the entrance to get in and out, either from Stacy Allison or Lawson	Joyce Fischer (Country Cottage)	If access is provided to the restaurant (via Lawson as documented by the access option), eastbound customers would have access via Lawson. Customers coming from the east (westbound) would need to access the restaurant by coming along Evergreen, Stacy Allison, and Lawson.
70.	People coming from the east can't get in to our property (Country Cottage). Can ODOT do something about that?	Joyce Fischer (Country Cottage)	If access is provided to the restaurant (via Lawson as documented by the access option), customers coming from the east (westbound) would need to access the restaurant by coming along Evergreen, Stacy Allison, and Lawson.
	Would sound walls be 12 feet from current elevation or elevation of finished roadway? The answer affects how much noise I hear.	J. Lorraine Cox	Sound wall top elevations would be placed to provide noise attenuation as documented in the EA. The height cited by the EA is the approximate height above ground at that wall location. There may be locations where the wall heights are adjusted up slightly to prevent dips or sags for localized ground undulations, but generally they would be approximately 12 feet higher than the ground at their base at the completion of the project.

No	Comment	Commentor	ODOT Response to Comment
72.	How will stormwater be handled during construction? Want to avoid standing water and erosion.	J. Lorraine Cox	During construction, stringent requirements would be implemented so that stormwater from the project site would be collected, treated, and discharged to appropriate and approved stormwater treatment locations. Concentrated flows of stormwater would not be allowed to run from the project impervious areas onto private property. Non-paved (pervious) project areas would be graded so that flows would be similar to the existing terrain. ODOT will work with property owners to address problem drainage areas.
73.	Glad to hear demolition will occur soon at the Park and Ride area - it will be a real asset for Woodburn. Would like to have a SMART stop between Salem and Portland, too.	J. Lorraine Cox	Comment does not require response by ODOT.

CVO\053150002

Technical Ratings Methods and Measures

Technical Ratings Methods and Measures

The following methods and measures were used for technical ratings of alternatives for the Woodburn Interchange Environmental Assessment.

A. Safety

A1. Truck Safety and Operations

Measure

High, medium, low ratings for functional operations and safety

Method

Based on comments that have been brought out in the discussions to date, the quality of truck safety and operations will include these factors; turning movements at ramp terminals, city street intersections (turning radii), vertical clearance and freedom of truck movement to businesses. Each subcategory will be normalized on a ten point scale with the low of zero and a high of ten for each subcategory. The subcategories will then be added up for a total score in this overall category. Therefore, the range of points for truck safety and operations is from a low of 0 points to a high of 40 points.

Ramp terminals – The vertical grades degrade the travel flow of the trucks through the interchange area. It is assumed there will be some improvement and some level of design exception granted. The degree of improvement may relate to the widen north, widen equal or widen south along Highway 214. The alternatives will be evaluated on the basis of grade improvement from existing to full standards with full standards receiving maximum points and existing receiving minimum points. The actual points assigned will be determined by prorating to the vertical grade of improvement to the standard for each ramp terminal with a total maximum score of 10 points. (e.g. if the improvement is from 5% to 3.5% with a standard of 3% for both intersections the score would be 5 points/2% X 1.5% improvement toward standards X 2 intersections or 3.75×2 intersections = $7.5 \times 1.5 \times$

City Street Intersections -The purpose of this measure is to determine the quality of truck operations in the interchange area on the street system. For the purposes of this measure, off-tracking into the incorrect lane will be used as a impedance to the quality of truck operations causing slow down and potential conflicts. A two-way four leg intersection has four right turns and four left turns for a total of eight points maximum. For each turning movement that crosses into an adjacent lane, a point will be deducted. No scores will be tabulated for accesses to private property. Three leg intersections would have a total of six points and follow the same pattern. The scores will be normalized for each alternative with the low having zero points and the best having ten points.

Vertical Clearance – Vertical clearance from the freeway mainline to the lowest girder under the overcrossing is important. The widening options are thought to have an affect on the vertical clearance. Alternatives that maintain the 17' standard will receive 5 points and less than 16' will receive 0 points. Each 0.2' will be worth a point. The scores will be normalized for each alternative with the low having zero points and the best having ten points.

Business Access – Trucks accessing local businesses along city streets is necessary for business for deliveries, lodging, fuel, and food. Local businesses are concerned that improvements will dramatically degrade the ability of trucks to circulate in the area. It is assumed based on LAC and SWG comments that the real issue is not delivery but rather, the ability to accommodate trucks for food and lodging accommodations as a rest stop. Therefore, the purpose of this measure is to determine the number businesses that a truck can exit the street system and return to the street system as a pull through movement without backing up. The scores will be normalized for each alternative with the low having zero points and the best having ten points.

A2. Pedestrian Safety and Operations

Measure

High, medium, low ratings for functional operations and safety

Method

Results are based on a qualitative assessment of the degree to which each alternative would enhance pedestrian connectivity, intersection crossing safety, and improve safety with conflicting vehicular movements. Very little mention has been made of pedestrian buffer to traffic and not likely to become an issue relative to the three issues identified herein.

Each of these subcategories will be normalized on a ten point scale with the low of zero and a high of ten for each subcategory. The subcategories will then be added up for a total score in this overall category. Therefore, the range of points for pedestrian safety and operations is from a low of 0 points to a high of 30 points.

Continuity – Currently there are street segments without sidewalks on both sides and numerous utility poles and mailboxes placed in the sidewalk eroding sidewalk widths to a distance of 2 feet in width. High ratings are assigned to alternatives that improve pedestrian systems, including width and suitable grades for wheelchairs, with usable sidewalks, pathways, and crosswalks, without creating barriers or require inconvenient re-routing. The measure for continuity will be the distance of new sidewalk created divided by the number of barriers remaining. A barrier is defined as a location where the pedestrian must be "extra aware of vehicular traffic" or is prevented from continuing progress along a relative straight line (e.g. lack of a buffer between curb and sidewalk along Ore. 214, crossing public streets at uncontrolled intersections like the loop ramps or Lawson, etc.). It is assumed that all options and alternatives will included sidewalk on both sides of the street. The scores will be normalized for each alternative with the low having zero points and the best having ten points.

Intersection crossings – This measure favors short and perpendicular crossing distances of public streets and may be in direct conflict with truck operations. The greater the distance,

the greater the pedestrian/bike exposure to motor vehicles. High ratings are assigned to alternatives that have the potential to provide protected facilities (i.e. mid-crossing islands designed for pedestrian refuge) and protected crossings of the roadway while considering the scale of the roadway. The alternatives will indicate the total distance of pedestrian crossing exposed to vehicle travel. If certain pedestrian movements are precluded, it is counted as a barrier in the subcategory above and the extra distance traveled will be counted to continue on the same route will be counted in this subcategory. The scores will be normalized for each alternative with the low having zero points and the best having ten points.

Vehicle conflicts – This measure favors consolidation of accesses to increase uninterrupted pedestrian facilities. High ratings are assigned to alternatives that minimize the locations of potential conflicts with vehicles. This measure will focus on the product of the number of private access times the adjacent traffic volume potentially using the access. For example, only traffic in one travel direction will be counted with a raised median whereas, two way traffic will be counted without a raised median. The scores will be normalized for each alternative with the high having zero points and the best or low having ten points.

A3. Bike Safety and Operations

Measure

High, medium, low ratings for functional operations and safety

Method

Results were based on a qualitative assessment of the degree to which each alternative would enhance bicycle safety and operations. The quality of safety and operations of bicycle facilities are a function of the speed and traffic volume of the vehicles adjacent to the bicyclist. Separate facilities are perceived to be the best with shared facilities being somewhat less desirable depending on the speed and traffic volume.

- High ratings will be assigned to the distance of bike facilities added that are separate from motorized vehicles, meeting bicycle design standards.
- Medium ratings will be assigned to the distance of bike facilities added that provide a bike lane for motor vehicle speeds greater than 25 mph or shared travel lane with motor vehicle speeds less than 25 mph and low volumes. It is assumed that facilities will meet bicycle design standards for this condition.
- Low ratings will be assigned to the distance of bike facilities that do not meet bicycle design standards.

All segments of improvement will be classified into high, medium, and low categories above and total distances of each category will be identified in feet. High ratings will be quantified as the product of three times the distance of high rated treatments, medium ratings will be quantified as the product of two times the distance, and low ratings will be simply the distance of the low rated category. The score of each alternative will be totaled and divided by the distance to create a factor that is normalized to eliminate the bias of quantity and focus on the quality of bike facilities. The scores will be normalized for each alternative with the low having zero points and the best having ten points.

A4. Auto Safety and Operations

Measure

High, medium, low ratings for functional operations and safety

Method

The primary focus of this measure is safety. Operations in terms of mobility will be accounted for in a separate category. It is assumed that signage and traffic signal operations will be optimized and not be a qualitative differentiator for safety at this level of design. Should there not be improvements to the interchange, it is likely that the character of crashes will change dramatically in the future towards the transition zones from high speed freeway movements to lower speeds of urban travel. A no build will not be addressed in the evaluation screening.

It is anticipated there will be justification for design exceptions and deviation to the access management standards based on cost and incremental improvement to the transportation system overall resulting in a build solution that can be supported locally. These exceptions will be focused primarily on Ore. 214 due to the relatively close spacing of local street connections. The spacing is less than desirable so, when an incident does occur, the system will be less resilient to handle the related congestion. Therefore, the safety and operations will also focus on Ore. 214.

This measure will be simply based on the number of vehicular conflicts along Ore. 214. This will take into account the potential of connections with Arney and Lawson as no connection, right-in only, and right-in/right-out as well as the various alternatives from Evergreen to Oregon Way. The scores will be normalized with the highest number of conflicts receiving zero points and the lowest number of conflicts receiving a score of 10 points.

Note: The perceived positive benefits of Arney and Lawson access to businesses will be accounted for in a separate measure. SWG will be asked to weight these separately to reflect the value of safety, the value of access as well as all of the other performance measures.

B. Access and Traffic Flow

B1. Mobility – Traffic flow at intersections

Measure

Volume to capacity ratio

Method

Volume to capacity ratio results will be reported for two intersections; one state/regional and one regional/local to indicate travel performance (e.g. NB ramp terminal and Evergreen). The reported measure will be the average of the two.

B2. Travel Time Delay - Traffic Flow Along Oregon 214

Measure

Cumulative travel time of ten movements weighted by volume, sum of interchange intersection system delay in seconds.

Method

This measure was originally believe to relate most closely with the decision of which interchange form would be selected. The analysis methods and software tools will not be sensitive enough to differentiate between the various configurations along Ore. 214. This measure is no longer relevant when comparing build alternatives.

B3. Business Accessibility

Measure

A. Out of direction travel to/from access travel service businesses (gas, food, and lodging) in distance.

B. Out of direction travel to from access non-travel service businesses in distance.

Method

This method addresses affects to existing businesses resulting from changes in access. These changes could include restricted turning movements and/or use of access management measures to improve travel flow.

The measure will be in lineal feet of travel factored by the importance of the directional distance to and from the freeway to existing, remaining businesses in the interchange vicinity. Businesses generally believe the shortest distance to their access is much more important than the distance returning to the freeway from their access. The highest score will receive a zero and the lowest score will receive ten points to be normalized on a high, medium, and low basis.

Travel patterns were assessed in directions to and from the freeway. The ease of travel from the freeway to the business was considered to be twice as important as the ease of travel from the business back to the freeway. Therefore, the distance from the freeway access to the business was multiplied by a factor of 1.0 and the distance from the business to the freeway return trip was multiplied by a factor of 0.5. Wal-Mart and Woodburn Factory Stores are currently outside of the Interchange Area but, they are considered major destinations and will be considered. The calculation will be made as follows:

New distance to business (feet) * Directional Factor (1.0)

- + New distance from business (feet) * Directional Factor (0.5)
- = Result (in linear feet)

Intersection options would require an ODOT approval for a deviation to OAR Division 51 governing access management. Deviations are approved on the basis of operations and

safety performance and are implemented through an Interchange Access Management Plan to be implemented jointly with ODOT and the local jurisdiction.

C. Social/Economics

C1. Land use - Conversion to Transportation

Measure

- A. Area converted to transportation use by type of loss (reported in acres)
- B. Value in dollars

Method

Each design alternative will have an area or footprint associated with it. The areas will be calculated in square feet by parcel, summed and converted to acres for reporting purposes. Displacements will not be treated differently than non-displacements for the purposes of land conversion. The R/W set back assumptions will be consistently applied from one alternative to the next based on the level of design at this time. For example, the right-of-way line will be assumed to be the slope line intersection point with natural ground plus one foot. Actual right-of-way calculations used during negotiations will be different than those used during evaluation screening. The actual areas to be used during negotiations will based on additional design detail considering the site specific values of acquisition, slope easements, retaining walls, etc.. Additional precision and accuracy will occur at future design phases.

Right-of-way value in dollars will be as determined by Region 2 Right-of-Way section according to liaison estimating methods currently in practice at the time of the evaluation.

C2. Displacement Impacts to Adjacent Properties

Measure

- A. Number of residential displacements
- B. Number of business displacements
- C. Number of jobs lost resulting from business displacement

Method

Calculating this measure requires an inventory of the potentially displaced residences and businesses for each alternative. Potentially displaced businesses were determined by overlaying the right-of-way footprint for each alternative on a parcel map of the affected area. The determination of whether a potentially impacted business would be displaced was based on whether the essential functions of the business would be lost, on the requirements of the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended, and on ODOT relocation precedent.

The number of jobs lost was based on making up to three telephone calls placed to each affected business with self disclosure of the number of employees. If there is no report after

the third call, an estimated value will be used based upon similar businesses in an interchange area.

D. Aesthetics

D1. Gateway Creation

Measure

High, medium, and low

Method

Visual character and visual quality are the most likely to be addressed as part of the evaluation screening process, although not completely. Elements of character are assumed to be incorporated into what defines quality. Quality will be judged on the potential for achieving high scores in three categories; vividness, intactness, and unity.

However, each alternative will be rated with the following ratings for each of the attributes of character and quality:

- high (3 points) very much improved over existing,
- medium (2 points) improved over existing, and
- low (1 point) the same or no detectable difference over the existing conditions.

The score will be a sum total of the points accumulated for each alternative.

Note: The design process could be enhanced through the use of a charrette to better define the local intent of the project aesthetics.

E. Implementation

E1. Total Construction Costs

Measure

Total construction cost in dollars (includes order of magnitude estimates for construction and mitigation costs)

Method

Estimates of construction costs were based on planning level engineering drawings and calculations for each interchange and intersection using historic trends of construction prices. For the purposes of this analysis, the same bid item unit cost was used for all alternatives independent of contractors and their preferences. Construction costs, construction engineering, and contingencies were calculated at 60% of bid item subtotal for the interchanges and 40% for the local road system, reflecting the relative uncertainty of the design at this level.

E2. Right-of-Way and Engineering Costs

Measure

Total estimated costs to acquire right-of-way and perform engineering, permitting, and construction contract management.

Method

Preliminary engineering is assumed to be 10% of the cost estimate for construction. Right-of-way costs are estimated at a planning level based on Region 2 Right-of-way Liaison procedures for this level of design. Actual costs for right-of-way are subject to legal procedures, as defined by the Uniform Relocation and Assistance Act.

Cost estimates for demolition of buildings and hazardous materials cleanup were not included. Utility costs have not been included and will be significant at \$80,000 per overhead tower.

E3. Coordination - Constructability

Measure

High, medium, and low

Method

This measure pertained more to the interchange form than to the treatments along Ore. 214 although the affects are certainly to those using Ore. 214. The number of construction seasons, maintaining I-5 traffic flow, and access to regional events. Includes impact to commerce during construction.

F. Environment

F1. Water quality

Measure

Total square feet of impervious surface

Method

The total area of new impervious surface (pavement and structures) for each alternative and intersection was calculated as part of the engineering cost estimate (measure A1). The results are reported in square feet of impervious surface.

F2. Hazardous Materials

Measure

The # of parcels with impacted with known contamination

Method

There will be a number of potentially hazardous sites impacted by the project. The purpose of this measure is to create an inventory. Based on the results of the inventory, there may be a site that should be avoided or would have a significantly greater cost to clean up that would need to be factored into the right-of-way cost estimate. This item is intended to control one of the large variables for the project by defining the number of contaminated parcels. It is not likely that this measure would be a differentiator on it's own.

The following resources will be used to identify any potential hazardous material sources: 1) historic records search, 2) aerial photography, 3) Sanborn Fire Insurance Maps, 4) Reverse Directories, 5) Environmental Records, 6) Federal Databases (National Priority List, CERCLIS, RCRA, TSD, CORRACTS, ERNS, etc.), 7) State Databases (ECSIS, OSF, Solid Waste Landfills, LUSTS, and ISA checklist).