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*Final Draft*



# Interchange Area Management Plan

Prepared for  
**Oregon Department of Transportation**

July 2005

Prepared by

**CH2MHILL**

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# **I - 5 / B E L T L I N E INTERCHANGE PROJECT**

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## SECTION 1

# Background

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## Introduction

Interstate 5 is designated as an international trade corridor and freight route. I-5 provides north-south access controlled movement of interstate goods, services, and passenger travel between Mexico and Canada, through California, Oregon, and Washington. Thus, the I-5/Beltline Interchange is one key element of a comprehensive transportation network serving interstate, regional, and local travel demands in the Eugene-Springfield area.

Changes in land use over the years have affected the function of the interchange and the surrounding transportation system. The interchange opened in 1968, serving a predominantly rural area. Land uses are now urban, which has affected the function of the interchange and surrounding transportation system.

To address the issues, the Oregon Department of Transportation (ODOT) first completed an interchange refinement plan to determine the appropriate course of action. Building on the understanding gained during that process, ODOT developed and evaluated alternative actions through an Environmental Assessment (EA) for the project. The proposed project is the selected alternative for the I-5/Beltline Interchange project, as described in the Revised EA (REA).

It is anticipated that the I-5/Beltline Interchange project would be constructed in three phases over a period of several years (approximately 2006-2022) to match available funding. An intergovernmental agreement (IGA) executed between ODOT and the City of Springfield includes traffic monitoring requirements, the results of which would trigger actions consistent with the three phases (Appendix A.) Funding for the first phase of the project has been programmed by ODOT. Release of funds for construction is being deferred until this Interchange Area Management Plan (IAMP) is approved by the Oregon Transportation Commission

## Purpose and Reasons for Preparing the IAMP

ODOT is required to prepare an IAMP for the I-5/Beltline Interchange as a means to ensure that the interchange will function acceptably through the 20-year planning horizon. This requirement stems from Oregon Administrative Rule (OAR) 734-051 and commitments made in the REA, IGA with Springfield, and Statewide Transportation Improvement Program (STIP) footnote for the project's Phase I. The IAMP will ensure that the improved interchange functions safely and efficiently after construction.

ODOT and local governmental agencies are encouraged by Oregon Highway Plan (OHP) policy and administrative rule (OAR 660-012, 731-015, 734-051) to collaboratively address land use and transportation issues, especially 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 I-5/Beltline Interchange project has been developed in cooperation with the City of Springfield and the City of Eugene. Both cities support the project. The full construction of improvements approved by ODOT and the Federal Highway Administration (FHWA) for the I-5/Beltline Interchange project is anticipated to maintain highway performance and improve safety. This IAMP will:

- Protect the function of the interchange by maximizing the capacity of the interchange for safe movement from I-5 to Beltline Highway/Road
- Provide safe and efficient operations between connecting roadways
- Minimize the need for additional major improvements of the existing interchange

## Description of Planning Area

The interchange is located at milepost 195 on Interstate 5 near the northern limits of the Eugene-Springfield area, which is one of Oregon's three largest urban areas. Figure 1 defines the area of influence for interchange operations and traffic impacts for this study. This study area was defined by considering the relevant Oregon Administrative Rules, existing and planned land use, transportation facilities and traffic, and natural and cultural resources.

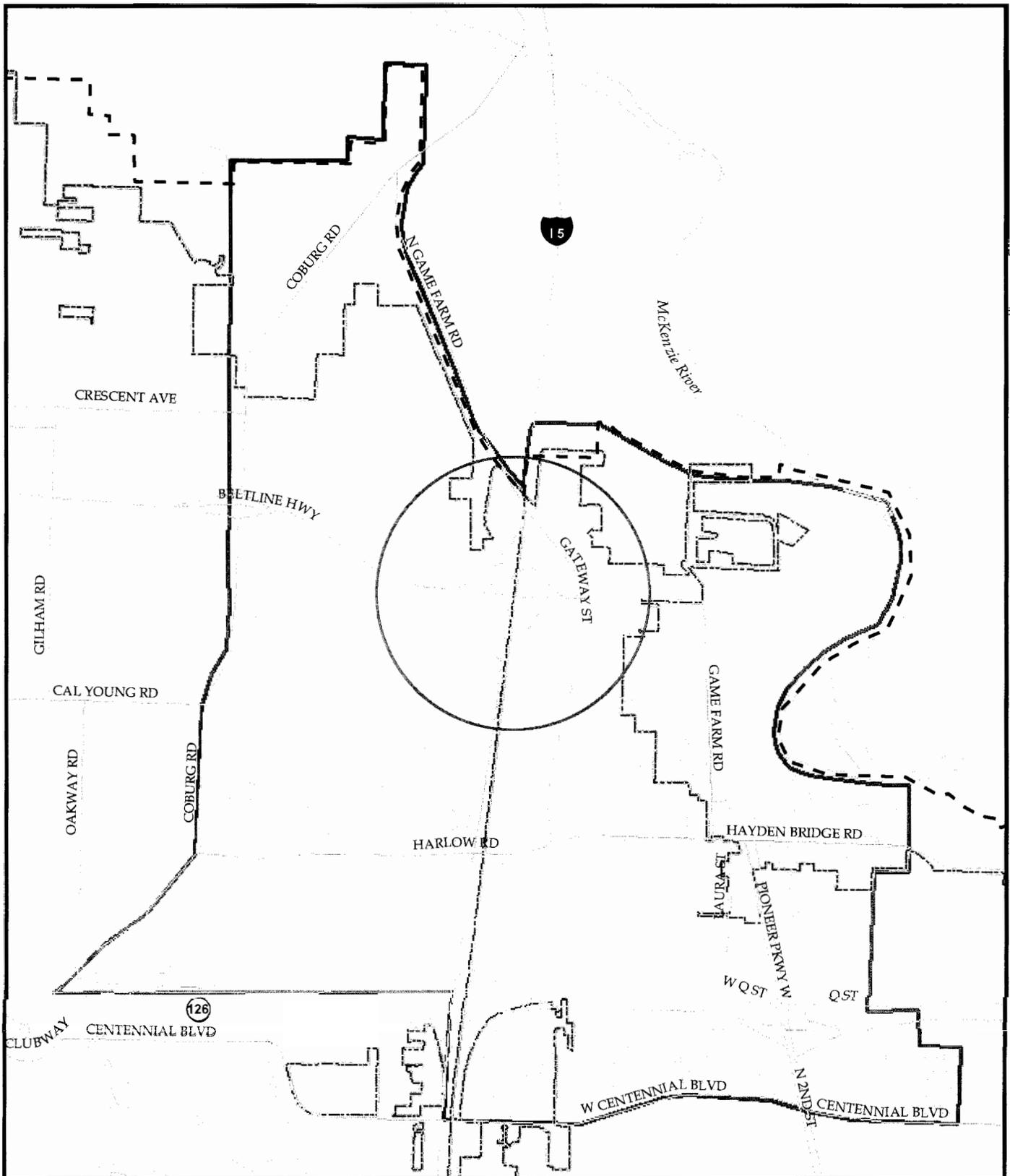
Appendix B includes maps depicting the lane configurations, traffic volumes, and queuing lengths for the proposed project. Land use planning maps serving as the basis for the EA's analysis and proposed project are included in Appendix C. These maps depict existing land use, undeveloped and agricultural lands, comprehensive land use plan and zoning.

## Other Work Products

Related work products contributing to the development of this IAMP are listed in Section 10, References. Review of these documents provides a history of the project. In the spring of 1996, ODOT began a facility plan for the I-5/Beltline Interchange project, with the first steering committee meeting held in June 1996. A facility or refinement plan provides public participation before allocation of funds. This facility plan included analysis of transportation issues, traffic forecasting, concept designs, and location and refined solution costs. Creation and analysis of the design concepts was completed by November 1999.

In the year 2000, ODOT began a highly structured public and agency project evaluation screening process to identify a range of alternatives for improving the Beltline Interchange. This process led to the selection of environmental study alternatives for documentation in an EA. This effort produced alternatives considered and dismissed, as well as those carried through the EA.

The EA for the project was released in May 2002. It included a No-Build Alternative and a Beltline Interchange Build Alternative with three Gateway/Beltline Intersection Options. A public hearing was held and a decision to choose the selected alternative was made in November 2002. A REA was completed in June 2003, followed by a Finding of No Significant Impact by the FHWA in July 2003.



**Legend**

- Interchange Management Area (Half-mile radius)
- Project Influence Area
- Urban Growth Boundary
- City Limits
- Waterbody
- Roads

N

0    1,000    2,000    4,000  
 Feet

**Figure 1**  
*Project Influence Area*  
 Interchange Area Management Plan  
 I-5 Beltline Interchange

**I-5 / BELTLINE**  
**INTERCHANGE PROJECT**

Source: LGOG, 2001

## Interchange Classification and Function

Interstate 5 (“Pacific Highway”) is classified as a National Highway System (NHS) freeway and part of the Strategic National Defense Highway Network (STRAHNET). The OHP designates I-5 as a highway of statewide importance and a Statewide Freight Route. It is the highest order highway in ODOT’s functional classification. The interchange management area is within the Urban Growth Boundary (UGB) of both the City of Springfield and the City of Eugene; the posted speed for I-5 is 60 miles per hour. The interstate segment is the demarcation line running north-south between the two cities. The interstate would be considered urban with respect to the spacing to the next adjacent interchange 1.2 miles farther south. The cross road is OR 69 (“Beltline Highway”) which, to the west of I-5, is a State Level highway and part of the NHS. On the east side of I-5, a one-quarter-mile stretch of OR 69 is a Region Level highway. Beltline Highway becomes “Beltline Road” at milepost 13.0, which is the intersection with Gateway Street. State control of the highway ends at Gateway Street, which is 0.22 miles (1,162 feet) east of I-5. Beltline Highway has an operating speed of 45 and 55 mph, while Beltline Road has a posted speed of 35 miles per hour.

The primary function of the I-5/Beltline Interchange is to facilitate statewide travel and secondarily local travel. The function of the Beltline Highway is to serve regional travel and provide access between the local transportation system and the higher-order state highway facilities. Although the interchange provides access to travel-related services (e.g., restaurants, lodging, and gasoline), provision of services to I-5 travelers is a secondary function of the interchange. The interchange also provides access to industrial complexes, both manufacturing and campus industrial (e.g., The Register Guard, Levi Strauss, Symantec, Royal Caribbean), the Gateway Mall, the RiverBend Medical Center Campus and associated development, and local residential neighborhoods. The Gateway Mall area is in the City of Springfield. The mall is serviced primarily by the I-5/Beltline Interchange, which provides access from the north from Beltline at the intersection with Gateway Street. Beltline Highway is constructed to freeway standards and serves as a principal arterial in the City of Eugene; Beltline Road presently serves as a minor arterial in the City of Springfield.

Today, about 18 percent of the total motor vehicle trips through the interchange on I-5 are statewide trips; that is, they begin and end outside both Eugene and Springfield city limits. Another 44 percent of the trips that traverse the interchange are regional and originate or end within the combined city limits. Finally, about 38 percent of the trips using the interchange are local, both beginning and ending within the combined city limits. In the Eugene-Springfield area about 14 percent of all trips are non-auto.

## SECTION 2

# Problem Statement, Project Purpose and Need, and Project Goals

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## Problem Statement

Traffic increases through the interchange area have resulted in three related transportation problems at the intersection of I-5 and the Beltline Highway.

The I-5/Beltline Interchange is a cloverleaf with circular loop ramps in all four quadrants, which functioned well in a low traffic volume rural environment. Current traffic volumes of 93,000/day result in vehicle conflicts in the weaving areas on both I-5 and Beltline Highway. In the next 15 years, average daily traffic will increase to 120,000. Operational and safety problems will worsen. The loop ramps create transition problems because of the differential between freeway speeds and speeds of the merge/diverge movements of the lower speed loop ramps. The operational deficiencies parallel the geometric deficiencies and include the interchange and the Beltline/Gateway intersection, resulting in delays and congestion during peak commuter periods.

During the 4-year period from January 1994 through December 1998, more than 175 crashes in the I-5/Beltline Interchange area were reported to ODOT. The EA (2002) for the project notes that this interchange area's crash rate<sup>1</sup> is in the state's highest 10 percent of all crash locations.

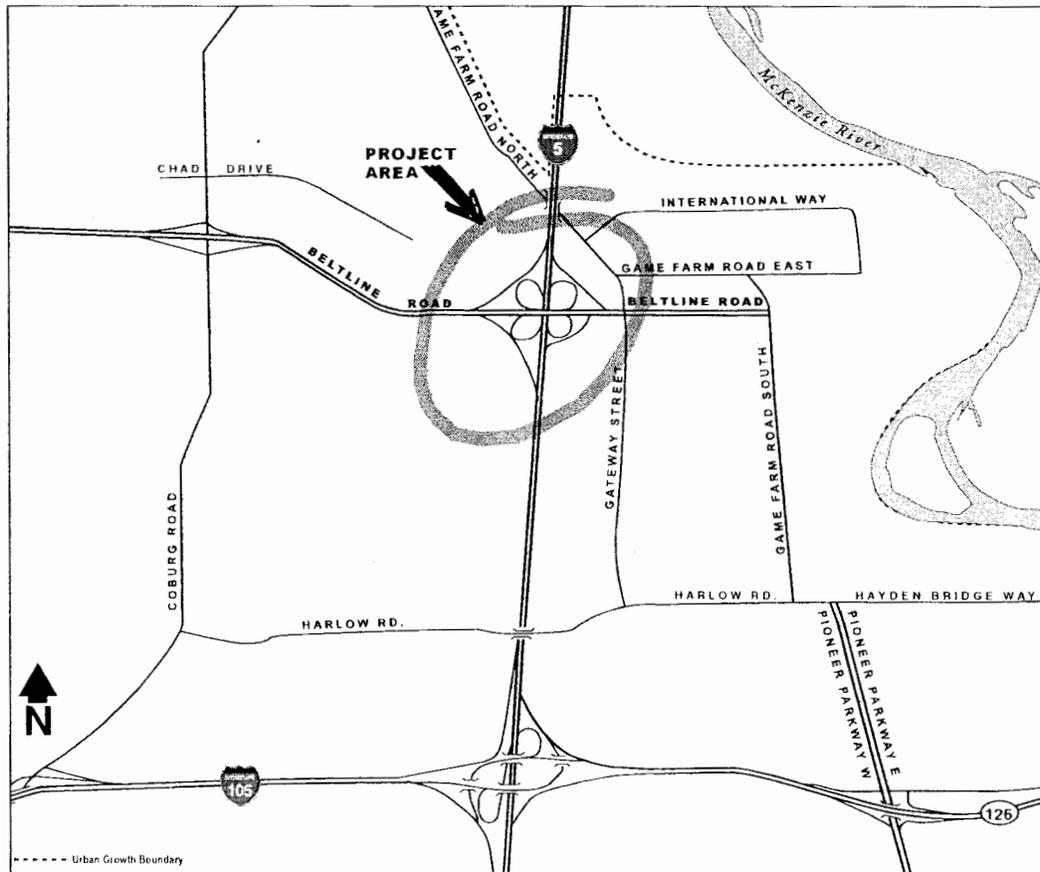
## Purpose and Need

The purpose of this project is to correct the operational and safety deficiencies of the existing I-5/Beltline Interchange and the Beltline/Gateway intersection. Improvements would meet current and projected traffic demands, support community vitality and livability, provide improved bicycle and pedestrian connectivity, and minimize impacts to the natural and human environment

Interstate 5 provides north-south access controlled movement of interstate goods, services and passenger travel in California, Oregon, and Washington. The I-5/Beltline Interchange connects I-5 to the Beltline Highway. The interchange is located at the northern boundary of the Eugene-Springfield Metropolitan Area.

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<sup>1</sup> The crash rate takes into account the number of crashes, traffic volume, and facility type based on the crash history of a specific roadway segment in urban or rural conditions.



*This interchange area's crash rate is in the state's highest 10 percent of all crash locations.*

The interchange opened in 1968, serving a predominantly rural area. Land uses are now urban, which has affected the function of the interchange and surrounding transportation system. The interchange provides access to travel-related services such as restaurants, lodging, and gasoline, access to industrial complexes and the Gateway Mall, and access to local residential neighborhoods.



*In 1968, nearby land uses consisted primarily of farms and pastures.*



*Traffic-generating land uses have developed over the last 30 years in the Gateway area.*

Local businesses and residents have concerns about the ability of the existing interchange to adequately serve existing businesses and future development. There is also concern for increased congestion negatively affecting residential neighborhoods.

There is a need for a greater connectivity between neighborhoods west of I-5 and the Gateway area east of I-5, particularly with respect to bicycles and pedestrians. The size and character of the Gateway/Beltline intersection currently discourages bicycle and pedestrian use.

## Project Goals and Objectives

The goal of the I-5/Beltline Interchange project is to help create a fully integrated, multi-modal transportation network in the Eugene-Springfield metropolitan area; a network to support planned growth and a reduction in total vehicles miles traveled. In particular, this project's goal is to enhance the operations and safety of the interchange and local connections for the 20-year planning period. The project's improvements would meet current and projected traffic demands, support community vitality and livability, provide improved bicycle and pedestrian connectivity, and minimize impacts to the natural and human environment.

Threshold and evaluation criteria were used for alternatives development and analysis. As summarized below, these criteria form the basis for the project's objectives:

- Interchange and intersection form consistent with American Association of State Highway and Transportation Officials (AASHTO) interchange geometric design forms
- Compliance with applicable design standards and applicable OHP policies (or concurrence on deviations by ODOT or FHWA, as appropriate)
- Improved safety for all modes of transportation
- Phased implementation
- Improved bike, pedestrian, and wheelchair accessibility and safety
  - Accommodation of transit
  - Mobility at intersections and ramps, and less delay
- Minimum impacts to air, water, threatened and endangered species, and wetlands
  - Deferral of residential and business property impacts
- Accommodates access to businesses
- Minimum loss of potentially developable properties and historic properties
- Maintains or enables neighborhood cohesion
- Limits noise and light impacts

## SECTION 3

# Existing Plan and Policy Review

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This section identifies the existing policy relationships and plans that have guided the development and selection of the build alternative for the I-5/Beltline Interchange Project and interchange area management strategies.

Interchange Area Management Plan (IAMP) development involves close cooperation between the Oregon Department of Transportation (ODOT) and local government agencies. Management of the I-5/Beltline interchange involves particular coordination among ODOT, the City of Springfield, and the City of Eugene. State and federal policies and rules, as well as local policies and codes play a key part in the development, adoption, and implementation of IAMPs.

State and federal policies guide interchange area management strategies; the IAMP recommendations must be consistent with federal and state policies. Policies and code language from local documents 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 for the future.

## Federal and State Plans, Policies, and Rules

The proposed I-5 Beltline Interchange Project is in compliance with a multitude of relevant statewide planning goals and plans, and their implementing administrative rules, as found through the alternative development and screening process of the environmental assessment. Relevant federal and state plans, policies, and rules include:

- National Environmental Policy Act (NEPA), 1969
- Federal Interchange Policy, 1998
- OTC Policy for New Interchanges, 1998
- Statewide Planning Goals (including 2, 11, 12 and 14)
- Oregon Transportation Plan, 1992
- Oregon Highway Plan, 1999
- Oregon Public Transportation Plan, 1997
- Freight Moves the Oregon Economy, 1999
- Transportation Planning Rule (OAR 660-012)
- Access Management Rule (OAR 734-051)

The following includes summaries of each of the plans, policies or rules as well as its relevance for the IAMP and project recommendations. Appendix D contains more detailed descriptions of the relevant federal and state plans and policies, their relevance to the I-5/Beltline Interchange Project, and how the proposed project is consistent with those plans and policies.

## **National Environmental Policy Act (NEPA), 1969**

*Summary:* NEPA is national legislation for environmental protection, and sets national environmental policy and establishes a basis for environmental impact statements (EISs). NEPA requires that to the extent possible, the policies, regulations, and laws of the federal government are interpreted and administered in accordance with the protection goals of the law.

*Relevance:* IAMP recommendations were developed consistent with the NEPA process because impacts to the natural and human environments were fully evaluated as part of the project, in compliance with the requirements of NEPA. Results of the environmental impacts analysis—including information on noise, air quality, natural resources, and other issues—were documented in an Environmental Assessment prior to the selection of a preferred alternative.

## **Federal Interchange Policy, 1998**

*Summary:* 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.

*Relevance:* Project and plan recommendations were developed consistent with the OTC policy, as all alternatives advanced for the I-5/Beltline Interchange meet the requirements of the policy, as does the final recommended project. Interchange spacing standards of 3 miles in an urban area and 6 miles in a rural area mean that addition of a new interchange in the Gateway area is not available as a project alternative. The project alternatives meet the requirements spelled out in the policy and will accommodate design-year traffic demands as a threshold.

## **OTC Policy for New Interchanges, 1998**

*Summary:* This document established Oregon Transportation Commission Policy for the evaluation and selection of new interchanges on full accessed controlled highways on the state system. New interchanges must demonstrate significant statewide or regional benefit. They must have significant local government and public support and be consistent with local transportation plans. They must conform to ODOT design and spacing standards. They may be proposed only after all other alternatives, including construction of new arterials have been evaluated and discarded as not viable.

*Relevance:* The I-5/Beltline Interchange Project is consistent with this policy, because no new interchanges are proposed. Several of the requirements outlined above would preclude the development of a new interchange in the vicinity of the Gateway area. It would be very difficult to demonstrate a significant statewide or regional benefit to a new interchange adjacent to the existing interchange that would primarily serve to help alleviate traffic problems in the Gateway area. A new interchange is not currently a part of local transportation plans. Given the cost, it would be difficult to generate support among all local jurisdictions in lieu of other needed projects already in local transportation plans. Finally, a second interchange serving this area would not meet ODOT and FHWA spacing standards. Improvements to the existing interchange will serve transportation needs at

significantly less cost than a new interchange and without violating the stringent criteria established in the interest of wise use of funds.

## Statewide Planning Goals

*Summary:* Relevant statewide planning goals include Goal 2 (Land Use Planning), Goal 11 (Public Facilities Planning), Goal 12 (Transportation) and Goal 14 (Urbanization). Goal 2 requires that a land use planning process and policy framework be established as a basis for all decisions and actions relating to the use of land. Goal 11 requires cities and counties to plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development. Goal 12 requires cities, counties, metropolitan planning organizations, and ODOT to provide and encourage a safe, convenient and economic transportation system; this is the Goal implemented through the Transportation Planning Rule. Goal 14 regulates activities within urban growth boundaries.

*Relevance:* The I-5/Beltline Interchange Project is part of TransPlan, the Eugene-Springfield Metropolitan Area Transportation Plan. TransPlan has been acknowledged as consistent with Statewide Planning Goals and the Transportation Planning Rule; therefore, the project is consistent with Statewide Planning Goals.

## Oregon Transportation Plan, 1992

*Summary:* The purpose of the OTP is to guide the development of a safe, convenient, and efficient transportation system that promotes economic prosperity and livability for all Oregonians. In the OTP, Oregon's population was projected to increase from 2.8 million in 1990 to 3.8 million in 2012 (this projection is most recently revised to 4.3 million by 2020). The OTP sets broad policies for the state transportation system. The OTP designates I-5 as an important part of the transportation system and notes its importance in the freight system. The plan defines a minimum level of service (now termed mobility standard) for highways that vary by metropolitan areas. The OTP does not specifically address improvements to I-5 but offered a broad policy framework and standards for improving state highway systems.

*Relevance:* The IAMP was developed within the framework of the OTP, particularly policies of the Oregon Highway Plan (discussed below). The I-5/Beltline Interchange Project is consistent with the OTP by providing safe and efficient movement of passengers and freight

## Oregon Highway Plan, 1999

*Summary:* 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

*Relevance:* 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 OHP impacts the I-5/Beltline interchange by establishing interchange spacing requirements, investment priorities, access management policy, and mobility standards. The I-5/Beltline Interchange Project is consistent with all relevant OHP policies. Appendix D includes greater detail regarding consistency with OHP policies.

### **Oregon Public Transportation Plan, 1997**

*Summary:* The Oregon Public Transportation Plan (OBTP) is a modal element of the OTP. The goal of the OPTP is to provide a public transportation system to meet daily medical, employment, educational, business and leisure needs without dependence on single-occupant vehicle transportation. The OPTP defined three different implementation levels for the plan. Level 1 freezes service at current levels, Level 2 keeps pace with current growth, and Level 3 responds to state and federal mandates and goals and responds to Oregon's anticipated growth.

*Relevance:* The OPTP suggests under Level 3 implementation that intercity bus and rail services is anticipated to grow substantially, that additional commuter bus service should be provided in many metropolitan areas, and that additional intercity bus service should be provided through communities with a population of 2,500 and above. The IAMP recommendations should be able to accommodate transit. The I-5/Beltline Interchange Project is consistent with the Oregon Public Transportation Plan (OPTP) by improving the safe and efficient movement of transit and passengers through improvement of capacity and safety.

### **Freight Moves the Economy, 1999**

*Summary:* This document outlines freight conditions in Oregon, including truck, rail, waterway, air, and pipeline. The document states that trucks account for most of the freight in Oregon. Information found in this publication that may affect Interstate 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

*Relevance:* Recommendations are made in this plan for the construction of an intermodal site in Eugene. Beltline Highway links west to industrial properties and rail connections. Improving the I-5/Beltline Interchange is consistent with proposed strategies in this plan; the planned improvements are intended to reduce delay and improve safety, and will therefore eliminate travel barriers for freight.

## Transportation Planning Rule (OAR 660-012)

*Summary:* The TPR implements Statewide Planning Goal 12 (Transportation) and is intended to promote the development of safe, convenient and economic transportation systems that are designed to reduce reliance on the automobile. It also identifies how transportation facilities and services are planned for and provided on rural and urban lands consistent with state goals. Local and state transportation plans must comply with the TPR.

*Relevance:* The I-5/Beltline Project must be consistent with the TPR as an adopted plan for the state highway system. I-5/Beltline project recommendations are included as part of TransPlan (Eugene-Springfield Metropolitan Area Transportation Plan). TransPlan has been acknowledged as consistent with the Transportation Planning Rule; therefore, the proposed project is consistent with the TPR.

## Access Management Rule (OAR 734-051)

*Summary:* OAR 734-051 implements state policy (OHP) related to access management spacing standards in an interchange area and access management plans for IAMPs, and applies to the location, construction, maintenance and use of approaches onto the state highway rights-of-way and properties under the jurisdiction of ODOT. These rules also govern closure of existing approaches, spacing standards, medians, deviations, appeal processes, grants of access and indentures of access.

*Relevance:* OAR 734-051 includes interchange area management plan requirements. The IAMP must be developed consistently with this rule. Appendix D includes a matrix that lists each element of the Access Management Rule and how the I-5/Beltline Interchange Project—and IAMP recommendations where appropriate—are consistent with the requirements.

## Local Plans and Policies

The I-5/Beltline IAMP does not seek plan amendments to any local plans or local adoption, because local plan language—as well as code language—already supports the recommendations put forth in the I-5/Beltline IAMP, as well as effective interchange protection for the duration of the planning period.

Policies from local planning documents support IAMP project recommendations, and project recommendations are consistent with local plans. Policies from local documents also support the IAMP intent of protecting interchange function, providing for safe and efficient operations, and minimizing the need and expense for additional major improvements to the interchange in the future. Some of the most directly relevant provisions of the various local plans and policies that serve to protect the function and safety of I-5/Beltline Interchange are summarized below.

The primary local planning documents relevant for the I-5/Beltline IAMP include:

- Metro Plan, 1987
- TransPlan, 2002
- Gateway Refinement Plan, 1992 (City of Springfield) – plus 2005 text amendments

- Willakenzie Area Plan, 1992 (City of Eugene) – plus subsequent ordinances

Appendix D provides a detailed analysis of these local plans and policies – including specific policy language - and findings of interchange management support.

## **Eugene-Springfield Metropolitan Area General Plan (Metro Plan), 1987**

*Summary:* The Metro Plan serves as the official Comprehensive Plan for metropolitan Lane County, the City of Eugene and the City of Springfield. The Metro Plan contains several sections, including growth management (land use) and economic policies, as well as plan elements (e.g. public facilities, transportation, economy, etc). The Metro Plan also provides a framework for planning assumptions (population and employment) which was folded into the development of the I-5/Beltline IAMP.

*Relevance:* The Metro Plan includes goals, objectives and policies that support the intent of the I-5/Beltline IAMP project recommendations, and the recommended project is consistent with Metro Plan policies. Examples include (1) policies related to concentrating development within the UGB—supports the I-5/Beltline recommendations to improve transportation facilities within the UGB, and (2) policies related to ensuring that infrastructure supports economic development—supports IAMP recommendations, which would preserve the freight movement function of both I-5, a critical freight corridor, and the local roadway system.

Specific goals and objectives included within the plan to support interchange area management include the following:

### **Land Use and Economic Goals and Objectives**

#### **Plan Section: II.B – Metropolitan Goals**

##### **Topic: Growth Management and the Urban Service Area**

1. Use urban, urbanizable, and rural lands efficiently.
2. Encourage orderly and efficient conversion of land from rural to urban uses in response to urban needs, taking into account metropolitan and statewide goals.

#### **Plan Section: II.B – Metropolitan Goals**

##### **Topic: Economy**

1. Broaden, improve, and diversify the metropolitan economy while maintaining or enhancing the environment.

#### **Plan Section: II.C – Growth Management Goals, Findings and Policies**

##### **Subsection: Objectives**

**Objective II.C.3:** Conserve those lands needed to efficiently accommodate expected urban growth.

**Objective II.C.7:** Shape and plan for a compact urban growth form to provide for growth while preserving the special character of the metropolitan area.

#### **Plan Section: III.B – Economic Element**

##### **Plan Element: Economy**

**Objective III.B.10:** Provide the necessary public facilities and services to allow economic development.

These land use and economic goals and objectives support long-range planning for interchange influence areas. The I-5/Beltline interchange project is located within the Urban Growth Boundary (UGB), which is consistent with goals and objectives related to using urban land efficiently. One of the purposes of the I-5/Beltline IAMP is to plan ahead and minimize the need for additional major improvements to the interchange. Planning ahead for interchange areas avoids waste of public funds by designing solutions that anticipate future land use impacts on the transportation system instead of reacting to conditions, which can often times be more expensive.

The land use and economic goals and objectives in the Metro Plan point to the regional desire to grow first within the UGB, and ensure compact development – which is consistent with the solutions provided in the I-5/Beltline IAMP. The I-5/Beltline IAMP was developed consistently with area land use plans, and IAMP recommended projects are expressly intended to be able to carry the traffic anticipated according to local population and employment forecasts.

These policies and objectives also support the provision of necessary public facilities for economic development. Transportation facilities, such as the Interstate 5 corridor, are critical to economic development, as they allow for movement of freight and people. The intent of the IAMP – to improve geometric, operational and safety efficiencies of the existing I-5/Beltline interchange to provide an improved transportation system and support community vitality - is consistent with the values expressed in these goals and policies.

Other land use and economic policies include the following:

### **Land Use and Economic Policies**

#### **Plan Section: II.C – Growth Management Goals, Findings and Policies**

##### **Subsection: Policies**

**Policy II.C.3:** Control of location, timing and financing of the major public investments that directly influence the growth form of the metropolitan area shall be planned and coordinated on a metropolitan-wide basis.

*Findings:* This policy recommends a metropolitan-wide, coordinated planning approach to major public investments, such as the improvements recommended in the I-5/Beltline IAMP. This type of approach is directly provided by the I-5/Beltline IAMP for the I-5/Beltline interchange and surrounding area. The I-5/Beltline IAMP was intentionally developed as broad-based planning effort that involved ODOT, FHWA, Lane County, the City of Springfield and the City of Eugene as part of the stakeholder working group for the project.

**Policy II.C.23.** Regulatory and fiscal incentives that direct the geographic allocation of growth and density according to adopted plans and policies shall be examined and, when practical, adopted.

*Findings:* The I-5/Beltline IAMP provides recommendations that help achieve the allocation of growth and density as adopted in local plans, such as TransPlan and the Gateway Refinement Plan. The interchange area improvements are intended to accommodate future anticipated population and employment growth in the area.

**Policy II.C.25:** When conducting metropolitan planning studies, particularly the Public Facilities and Services Plan, consider the orderly provision and financing of public services and the overall impact on population and geographical growth in the metropolitan area. When appropriate, future planning studies should include specific analysis of the growth impacts suggested by that particular study for the metropolitan area.

*Findings:* This policy supports planning studies that account for growth impacts in the metropolitan area. The I-5/Beltline IAMP is intended to manage the interchange area in a fiscally responsible manner in light of expected growth and traffic. The recommendations in the IAMP are based on information consistent with the land use planning documents and assumptions in the area, and identified projects and strategies are intended to accommodate the growth and land uses identified in local plans. Population and employment numbers were integrated into the planning and environmental process, and informed the direction of the project.

**Policy II.C.26:** Based upon direction provided in Policies 3, 7, and 23 of this section, any development taking place in an urbanizable area or in rural residential designations in an urban reserve area shall be designed to the development standards of the city which would be responsible for eventually providing a minimum level of key urban service to the area. Unless the following conditions are met, the minimum lot size for campus industrial designated areas shall be 50 acres and the minimum lot size for all other designations shall be 10 acres. Any lot under ten acres in size but larger than five acres to be created in this area on undeveloped or underdeveloped land will require the adjacent city and Lane County to agree that this lot size would be appropriate for the area utilizing the following standards:

- a. The approval of a conceptual plan for ultimate development at urban densities in accord with applicable plans and policies.
- b. Proposed land uses and densities conform to applicable plans and policies.
- c. The owner of the property has signed an agreement with the adjacent city which provides:
  - (1) The owner and his or her successors in interest are obligated to support annexation proceedings should the city, at its option, initiate annexation
  - (2) The owner and his or her successors in interest agree not to challenge any annexation of the subject property.
  - (3) The owner and his or her successors in interest will acquire city approval for any subsequent new use, change of use, or substantial intensification of use of the property. The city will not withhold appropriate approval of the use arbitrarily if it is in compliance with applicable plans, policies, and standards, as interpreted by the city, as well as the conceptual plan approved under subsection a above.

*Findings:* This policy outlines steps to ensure that proposed land uses in urbanizable areas are consistent with applicable plans and policies and that future development is coordinated with adjacent jurisdictions. This policy is relevant for land in the northern portion of the

interchange influence area, in that it promotes consideration of future development and its impact on urban services.

**Policy II.C.31.** Eugene, Springfield, and Lane County shall continue to involve affected local governments and other urban service providers in development of future, applicable *Metro Plan* revisions, including amendments and updates.

*Findings:* The I-5/Beltline IAMP was based on information and recommendations included in the Metro Plan (and TransPlan, the transportation element). The IAMP process involved local (Eugene, Springfield, Lane County), state and federal jurisdictions. This policy underscores the importance of continued coordination as Metro Plan revisions could affect plans. In order to maintain compliance with this Metro Plan policy, Eugene, Springfield and Lane County will notify ODOT of any Metro Plan changes that could affect solutions proposed in the I-5/Beltline IAMP.

**Plan Section: III.B – Economic Element**

**Plan Element: Economy**

**Policy III.B.18:** Encourage the development of transportation facilities which would improve access to industrial and commercial areas and improve freight movement capabilities by implementing the policies and projects in the *Eugene-Springfield Metropolitan Area Transportation Plan (TransPlan)* and the *Eugene Airport Master Plan*.

*Findings:* The IAMP promotes protection of the function of the I-5/Beltline interchange, easier freight movement along Interstate 5, and improved access to industrial and commercial areas, which is consistent with this policy. This policy supports the intent of the IAMP recommendations, and therefore, supports the IAMP.

**Eugene-Springfield Metropolitan Area Transportation Plan (TransPlan), July 2002**

*Summary:* TransPlan is adopted as a functional plan of the Eugene-Springfield Metropolitan Area General Plan (Metro Plan), and also serves as the federally required Regional Transportation Plan. TransPlan is the Metro Plan transportation element. TransPlan includes provisions for meeting the transportation demand of residents over a 20-year planning horizon while addressing transportation issues and making changes intended to improve the region's quality of life and economic vitality.

*Relevance:* TransPlan is the primary regional transportation planning document, and lists improvements at the I-5/Beltline interchange as a top priority. Improvements included as part of the I-5/Beltline IAMP are consistent with Project 606 for the I-5/Beltline Interchange as included in TransPlan. Several TransPlan policies support the intent of the IAMP (are consistent with IAMP intent) or support interchange area management. TransPlan policies are the same policies that are adopted as the Metro Plan transportation element policies; citations are those included in Appendix F of TransPlan. Policies included in TransPlan that provide protection of interchange capacity and long-term interchange area management include (exact wording of these policies is found in Appendix D):

**Goal #1:** Calls for provision of an integrated transportation and land use system that supports choices in modes of travel and development patterns that will reduce reliance on the automobile and enhance livability, economic opportunity, and the quality of life. This goal supports a multimodal, integrated transportation system. Long-term actions identified in the I-5/Beltline IAMP include a pedestrian/bicycle facility north of Beltline Highway. An efficient highway system protects the functionality of other modes of transportation (and the local street network) by focusing travel patterns (concentrating traffic on the freeway or local street system as appropriate). Supports the intent of the IAMP, which is to improve the mobility and safety of the transportation system.

**Policy F-4:** Requires improvements that encourage transit, bicycles, and pedestrians in new commercial, public, mixed-use and multi-unit residential development. Supports interchange management by promoting alternate modes of transportation as a tool for congestion management. The alternative recommended in the IAMP for the I-5/Beltline interchange provides a new pedestrian and bicycle connection, including a bridge over I-5, and therefore, is consistent with this policy.

**Policy F-9:** Adopts by reference, as part of the Metro Plan, the 20-year Capital Investment Actions project list contained in TransPlan. Project timing and estimated costs are not adopted as policy. Supports the IAMP because IAMP project recommendations are included on the adopted list.

**Policy F.10:** Protects and manages existing and future transportation infrastructure Supports interchange management by calling for protection and management of future infrastructure such as roadway improvements.

**Policy F.14:** Addresses the mobility and safety needs of motorists, transit users, bicyclists, pedestrians, and the needs of emergency vehicles when planning and constructing roadway system improvements. Supports the intent of the IAMP in that improvements are intended to reduce congestion, which improves access for emergency vehicles and safety.

**Policy F.15:** Calls for the use of motor vehicle LOS to maintain acceptable and reliable performance on the roadway system. Sets a LOS D for the Metro Plan area (aside from downtown Eugene), and states that OHP standards shall be applied to state facilities. Supports interchange management by applying state mobility standards to state facilities and ensuring that local roadway facilities do not operate at substandard levels (worse than D).

**Policy F.16:** Promotes the development of a regional roadway system that meets combined needs for travel through, within and outside the region. Supports interchange management by promoting a regional roadway system, which places value on through travel, thereby supporting interchange improvements for interstate mobility.

**Policy F.17:** Involves management of the roadway system to preserve safety and operational efficiency by adopting regulations to manage access to roadways and applying these regulations to decisions related to approving new or modified access to the roadway system. Supports interchange management through the promotion of

access management, which protect the roadway system in terms of capacity and safety. This would be relevant for local roadways near the interchange.

**Policies F-22 through F-28.** Promotes improvement of the region’s bicycle and pedestrian system and bicycle and pedestrian safety. Supports interchange management through the encouragement of other modes, which can reduce congestion; also supports the IAMP project recommendations due to the recommended pedestrian/bicycle bridge.

**Policy F.29:** Supports reasonable and reliable travel times for freight/goods movement in the Eugene-Springfield region. Promotes the intentions of the IAMP to enhance freight movement and preserve interstate and interchange area mobility.

**Policy F-35.** Sets priorities for TIP investment to address safety and major capacity problems on the region’s transportation system. Supports the IAMP, since the I-5/Beltline interchange is the highest priority project in the region through the TIP process.

**Policy F.36:** Requires that new development pay for its capacity impact on the transportation system. Supports local mechanisms that ensure mitigation for capacity impacts from new developments such as the PeaceHealth medical complex, thereby supporting tools for roadway management in the interchange area.

**Policy F.38 (Finance Policy #6 – Eugene-Specific Finance Policy; TransPlan):** The City of Eugene will maintain transportation performance and improve safety by improving system efficiency and management before adding capacity to the transportation system under Eugene’s jurisdiction. Supports IAMP by limiting the additional capacity that Eugene can add to the transportation system; also promotes TDM measures, which is a tool to preserve capacity.

### **Willakenzie Area Plan, September 1992; Ord. 20265; Ord. 20302; Ord. 20305**

*Summary:* The Willakenzie Area Plan is a City of Eugene subarea plan of the Metro Plan that addresses the 5,708 acre portion of Eugene and unincorporated county west of I-5 and east of the Willamette River. The plan includes a transportation element that includes existing conditions and policies, and addresses proposed transportation projects in the area. Most of the Willakenzie area is developed at this time.

*Relevance:* The plan recognizes that development of the Gateway commercial area in Springfield will have impacts on the transportation system and on commercial land demand in the Willakenzie study area. The IAMP was designed to meet the land use requirements as outlined in the Willakenzie Area Plan.

Although most of the goals and policies in the document are more relevant to local subareas, some policies discuss the need to maintain roadway system capacity (e.g. Major Streets Policies #5 and #6 promote TDM and mitigation for congestion). The goal also discusses the need to plan for future land uses in relation to transportation impacts. The plan also recognizes that the interchange area functions as a gateway to the cities of Eugene and Springfield, and that attention should be paid to the interchange from an aesthetic, congestion, and safety point of view.

Some of the more relevant policies include the following (others are included in Appendix D):

#### **Plan Section 4: Transportation Element**

##### ***Transportation Policies and Proposed Actions:***

**Major Streets, #1:** The transportation network within the Willakenzie area shall be planned and designed to ensure: a) preservation of existing neighborhoods; b) an adequate system of arterials and collectors for the efficient movement of through traffic; and c) the preservation of the use of local streets for local traffic. (Page 97).

*Findings:* This policy promotes preservation of the functional classification system. The functional classification system can be used as a tool for management of the interchange area, because certain roadways are to be designed to certain standards or to carry certain levels of traffic, which helps to ensure that the local and regional street system is in place to accommodate local and regional trips. The IAMP was developed within the framework of the existing functional classification system, and is consistent with this policy.

**Major Streets, #2:** The City shall maintain and encourage the safe and efficient operation of major streets by limiting private, direct access to these streets when necessary. (Page 97).

*Findings:* This policy promotes access management techniques along primary corridors, which is a long-range traffic management tool that works to preserve capacity and enhance safety. This policy fits closely with the intent of the I-5/Beltline IAMP, and means that no additional private access will be allowed to Beltline Highway within the interchange management area.

**Major Streets, #5:** The City shall work with major developers and employers to ensure that transportation demand management strategies are incorporated into their facilities planning and operations.

*Findings:* This policy emphasizes the use of TDM as a long-term transportation management tool for the Willakenzie area. This type of long-term approach helps to support interchange area management goals, in that TDM works as a tool to preserve infrastructure (capacity and safety), which could pull traffic from the interchange.

**Major Streets, #6:** The city shall work with developers to provide and participate in transportation mitigation measures which are necessary to resolve direct traffic impacts resulting from new development. Mitigation measures could include such things as traffic control, street widenings, turn lanes, and other access improvements.

*Findings:* This policy emphasizes the use of TDM as a long-term transportation management traffic levels. The policy supports long-term management of the interchange area, by identifying the need for a resolution to traffic impacts related to new development through mitigation.

**Major Streets, #7:** To the greatest extent possible, the City shall encourage regional and intercity traffic to use major rather than minor arterials.

*Findings:* This policy promotes preservation of the functional classification system, which supports the intentions of the I-5/Beltline IAMP. The functional classification system can be

used as a tool for management of the interchange area, because certain roadways are to be designed to certain standards or to carry certain levels of traffic, which helps to ensure that the local and regional street system is in place to accommodate local and regional trips.

### **Gateway Refinement Plan, November 1992; Gateway Refinement Plan Text Amendments 1/10/05**

*Summary:* The Gateway Refinement Plan is a City of Springfield subarea plan of the Metro Plan that addresses the area bound by I-5 to the west, Pioneer Parkway to the east, Eugene-Springfield Highway to the south, and Game Farm Road to the north. The Plan emphasizes the significance of development in the Gateway area. The Gateway-Beltline intersection is listed as a continued focus of redevelopment and new development. One central stated goal is to ensure that public improvements and infrastructure, such as the local street system, in the Gateway Refinement Plan area are sufficient to accommodate current and future development. The IAMP was developed in coordination with the Gateway Refinement Plan land use assumptions.

*Relevance:* Recent amendments to the Gateway Refinement Plan have allowed for the development of a large medical services complex in the area, which has implications for regional traffic. Specific amended or new policies relate directly to the I-5/Beltline IAMP and promote interchange management by implementing trip monitoring plans for master plans for property at the McKenzie Gateway MDR site.

The following new policy provides interchange area protection through establishing trip monitoring requirements and a trip cap, or maximum number of trips allowable. This ensures some protection of interchange area capacity.

This policy provides interchange protection through trip caps, as well as trip monitoring plans, and site plan review. Also, development proposals that increase the number of allowable PM Peak Hour trips must notice ODOT through TPR procedure, and prove that the development meets TPR requirements. These are interchange protection measures, because it controls the amount of congestion in the interchange area and allows for both local and ODOT review for any significant development.

#### **Residential Element Policy and Implementation Action 13.7:**

Master Plans for property at the McKenzie-Gateway MDR site that propose to apply the MUC and/or MS zoning district pursuant to Residential Policies and Implementation Actions 12.1 and 12.6 shall be subject to the following requirements:

1. An approved trip monitoring plan shall be a requirement of Master Plan approval.
2. The trip monitoring plan shall demonstrate compliance with all conditions contained within applicable plan amendment adoption ordinance(s), and trip-generation estimates shall be performed using assumptions and methods which are consistent with those employed in the plan amendment traffic impact analysis.
3. Traffic generated by land uses within the Master Plan boundaries where the MS and MUC zoning districts that are proposed in Phase 1 of the Development shall,

prior to 2010, be limited to a maximum of 1,457 vehicle trips. Beginning in 2010 for Phase 2 of the Development, traffic generated from site development within the subject districts shall be limited to 1,840 PM Peak-Hour vehicle trips. Vehicle trips are defined as the total of entering plus exiting trips as estimated or measured of the PM Peak Hour of Adjacent Street Traffic. This trip monitoring plan limits allowed land uses to be consistent with the planned function, capacity and performance standards of affected transportation facilities.

4. Subsequent Site Plan Review applications for sites within the Master Plan boundaries shall be in compliance with the approved trip monitoring plan.
5. Any proposal that would increase the number of allowable PM Peak Hour vehicle trips for the MS and MUC area beyond the limits specified in section 3 above shall be processed as a refinement plan amendment, a zoning map amendment or Master Plan approval pursuant to SDC 37.040 or modification pursuant to SDC 37.040 and 37.060(3) and regardless of which type of process is sought, each shall demonstrate compliance with applicable provisions of the Transportation Planning Rule for such proposal.

Other transportation goals of the plan include provisions to reduce future traffic congestion, air pollution, and noise by establishing Transportation Demand Management (TDM), Transportation Supply Management (TSM), and Traffic Reduction Ordinances (TRO) Programs; such regulations would help to ensure the integrity of the I-5/Beltline interchange area. Some of the more relevant policies include the following (others are included in Appendix D):

#### **Plan Section: Community and Economic Development**

**Goal 2a.** Enhance opportunities for industrial, commercial, recreational, and tourism-related property to be developed, redeveloped, improved, rehabilitated, conserved and protected in ways that will:

- a. ensure that public improvements and infrastructure in the Refinement Plan area are sufficient to accommodate current and future development, while mitigating any adverse impacts of such development on residential, school, park, and other uses. (Page 10).

*Findings:* This goal identifies the relationship between development and adequate infrastructure. This goal supports the IAMP by promoting the sufficiency of infrastructure to support current and future development. IAMP recommendations were developed to support existing and future growth as outlined in local and regional plans, and to improve existing and future safety and operations conditions at the interchange.

#### **Plan Section: Transportation Element**

##### ***Goals:***

**Goal 1:** Provide for a safe and efficient transportation system in the Gateway Refinement Plan area. (Page 48).

**Goal 4:** Plan and design and efficient and flexible transportation system for undeveloped lands within the Refinement Plan area to ensure minimum traffic impacts. (Page 48).

**Goal 5:** Reduce future traffic congestion, air pollution, and noise by establishing Transportation Demand Management (TDM), Transportation Supply Management (TSM), and Traffic Reduction Ordinances (TRO) Programs. (Page 48).

*Findings:* These goals are consistent with the intent of the I-5/Beltline IAMP, including the promotion of a safe and efficient transportation system that is flexible enough to accommodate anticipated future development. The goals also support interchange management by promoting TDM and TSM, which are management tools that can help to preserve capacity.

***Policies and Implementation Actions:***

**Policy and Implementation Action 4.0:** Limit access to minor arterials as redevelopment occurs. (Page 49).

**Policy and Implementation Action 4.1:** Encourage the use of joined driveways during the site plan review process. (Page 49).

**Policy and Implementation Action 4.2:** Require large subdivisions or retail outlets with direct access on arterial roads to use “right in right out” drives as appropriate. (Page 49).

*Findings:* These policies and implementation actions promote access management, which functions to preserve roadways and enhance corridor safety. Access management can be used as a tool to control circulation, congestion and safety in the interchange influence area.

**Policy and Implementation Action 13.0:** Future transportation system development in the McKenzie-Gateway Campus Industrial and the 180 acre MDR sites should occur as needed in conjunction with CI and MDR, MUC and MS development. (Amended, Page 51).

**Policy and Implementation Action 13.3:** Upgrade Beltline Road between Gateway and Game Farm Road, widening as needed, including sidewalks only between Gateway Street and Hutton Way, and excluding bicycle lanes. (Page 51).

**Policy and Implementation Action 13.4:** Upgrade Game Farm Road North between Belt Line and I-5 overcrossing to urban standards, including sidewalks and bike lanes. (Page 51).

**Policy and Implementation Action 13.6:** Through the site plan review process, ensure that all plans for development of the McKenzie-Gateway SLI and 180-acres MDR sites plan for and maintain the opportunity to achieve efficient and effective road systems. (Page 51).

**Policy and Implementation Action 13.7:** Implement the following road system improvements, consistent with the recommendations of the Gateway Neighborhood Transportation System Analysis, and proposed TransPlan amendments needed to incorporate them into the TransPlan project list: Develop a collector road that connects the extensions of Beltline Road and Raleighwood Avenue; Extend Beltline Road eastward, mitigating the impact on existing homes to the maximum extent practical, to connect with the McKenzie-Gateway MDR Area’s collector system; Develop an east-west collector within the McKenzie-Gateway SLI site. (Page 52).

*Findings:* These policies and implementation actions outline future planning for the area northeast of the I-5/Beltline interchange. In general, the intent is that adequate roadway improvements are made to accommodate any future new development. This supports the

IAMP by providing local road improvements that will enhance the operations and functionality of the interstate system; local roadway connectivity can draw trips off the state or regional system.

**Policy and Implementation Action 16.0:** Explore the feasibility of a Transportation Demand Management program to reduce demand on the transportation system. (Page 52).

*Findings:* This policy promotes the use of long-term transportation management tools (TDM) that will enhance management of the interchange management area. The policy/implementation action supports interchange management by providing a mechanism to minimize congestion in the interchange area.

**Policy and Implementation Action 18.0:** Explore the possibility and feasibility of providing incentives for employers who encourage their employees to commute to work in ways other than driving along during morning and afternoon peak travel periods. (Page 52).

*Findings:* This policy promotes the use of long-term traffic management tools that will enhance management of the interchange management area. Flexible schedules can contribute to congestion reduction during peak hour travel, which promotes interchange management.

**Policy and Implementation Action 19.0:** Establish Traffic Reduction Ordinances in the future to reduce peak hour vehicle trip generation by major employers in the area. (Page 52).

*Findings:* This policy promotes the use of long-term traffic management tools that will enhance management of the interchange management area. This supports the IAMP by providing a congestion management tool for the interchange area.

**Policy and Implementation Action 25.0:** Facilitate the efficient operation of transportation systems serving the commercially developed area. (Page 54).

**Policy and Implementation Action 25.1:** Provide for the future expansion of the intersection of Gateway Street and Beltline Road when reviewing site plans for developments fronting this intersection. (Page 54).

**Policy and Implementation Action 25.3:** Work with the City of Eugene, Lane County, the State of Oregon, and the Lane Transit District in developing regional transportation solutions to accommodate traffic generated by the Gateway mall and other commercial developments in the planning area. (Page 54).

*Findings:* These policies and implementation actions underscore the importance of linking efficient transportation operations with commercial land uses in the Gateway area. This policy language provides support for the I-5/Beltline IAMP, in that the importance of planning for increased traffic at the Gateway Street/Beltline Road intersection area is recognized.

## Local Development Codes

Primary code documents relevant for the I-5/Beltline IAMP include the Eugene and Springfield Development Codes (including Springfield Municipal Code Article 32 – Public and Private Improvements).

The City of Springfield and City of Eugene have development approval and land use decision procedures. These local codes are designed to ensure that consistent standards are applied to new development and redevelopment, and that new development and redevelopment fit within the policy framework and vision of the jurisdiction and area. The jurisdictions also all have requirements for traffic impact studies, depending on the type and level of new development (e.g., public/private school uses, industrial sites, and special uses). For example, Section 32.020(1)(e)(2) of the Springfield code includes provisions for Traffic Impact Study requirements for applicants; a TIS is required when a land use will generate 250 or more vehicle trips per day.

Springfield and Eugene also have level of service standards, which provide a measure of interchange protection by allowing only certain levels of congestion on roadways (e.g. requiring new development to mitigate if traffic levels are expected to cause the roadway to operate worse than acceptable engineering standards). Springfield and Eugene have access management standards, which limit the amount of turning movements onto a roadway, enhancing safety and traffic operations, and protecting the interchange area (particularly in Springfield). It is assumed that this will lead to interchange protection via the intergovernmental agreement between ODOT and the City of Springfield that has the City monitoring congestion on Beltline Highway east of the interchange.

Some of the more relevant code citations for interchange protection include the following:

### **Springfield Development Code**

**Discretionary Use Criteria for Multi-Unit Developments. 10.035(10)(b)(4).** Where practicable, consolidate or share driveways and internal streets with driveways or internal streets serving abutting sites.

*Findings:* This provision encourages shared driveways and accesses, which works to preserve roadway capacity and enhance safety. This supports interchange management by providing a tool to promote internal circulation rather than multiple accesses, which can cause congestion and safety issues.

**Criteria – 37.040(3).** Proposed on-site and off-site public and private improvements are sufficient to accommodate the proposed phased development and any capacity requirements of public facilities plans; and provisions are made to assure construction of off-site improvements in conjunction with a schedule of the phasing.

*Findings:* This provision requires that public improvements proposed as part of master plan developments are adequately planned to accommodate capacity requirements. This provision helps to protect interchange function by assuring that development does not impact the capacity of the transportation system without mitigation. This provides a level of protection for proposed projects in the IAMP.

### **Public and Private Improvements (Article 32)**

**Streets – Public. 32.020(1)(a).** The street system shall ensure efficient traffic circulation that is convenient and safe.

**32.020(1)(a)(1)(a).** Streets shall be designed to efficiently and safely accommodate all modes of travel including emergency fire and medical service vehicles.

**32.020(1)(a)(1)(c).** Streets shall be interconnected to provide for the efficient provision of public facilities and for more even dispersal of traffic.

**32.020(1)(a)(1)(g).** The street design shall enhance the efficiency of the regional collector and arterial street system by providing relatively uniform volumes of traffic to provide for optimum dispersal.

**32.020(1)(c).** A developer may be required to prepare a Traffic Impact Study to show how the design and installation of on-site and off-site improvements will minimize identified traffic impacts. The study shall be included with a development application, in any of the following instances:

1. When requesting a Variance from the transportation specifications of this Code.
2. When a land use will generate 250 or more vehicle trips per day in accordance with the current version of the Institute of Transportation Engineers Trip Generation Informational Report. Descriptions of the requirements of a minor/major Traffic Impact Study are described in the Department of Public Works Standard Operating Procedures.
3. When the installation of traffic signals may be warranted.
4. The Public Works Director may require a Traffic Impact Study for a land use when the proposed development creates a hazardous situation or degrades existing conditions to an unacceptable level of service.
5. The Public Works Director will determine the nature and the extent of the TIA requirements relating to the number of trips associated with a specific development and potential traffic hazards.

*Findings:* These provisions in Article 32 outline requirements for public streets that are constructed or reconstructed in coordination with development, and also outline Traffic Impact Study requirements. This is important for maintaining the basic functionality of the transportation system as new development or redevelopment occurs. These provisions support the IAMP by requiring Traffic Impact Studies for developments with a specific number of trips. It is assumed that the Public Works Director will ensure that new developments will be consistent with the IAMP and IAMP recommendations, along with other state and local plans and codes.

## Eugene Development Code

### **Standards for Streets, Alleys and Other Public Ways**

**Street Connectivity Standards. 9.6815(2)(b).** The proposed development shall include street connections in the direction of all existing or planned streets within ¼ mile of the development site. The proposed development shall also include street connections to any streets that abut, are adjacent to, or terminate at the development site. Secondary access for fire and emergency medical vehicles is required.

*Findings:* This provision promotes street connectivity, which helps to maintain the local street network, which places less pressure on major arterials in terms of congestion levels. This serves to preserve the improvements recommended as part of the I-5/Beltline IAMP.

### **Traffic Impact Analysis Review**

**Applicability. 9.8670.** Traffic Impact Analysis Review is required when one of the following conditions exists:

- (1) The development will generate 100 or more vehicle trips during any peak hour as determined by using the most recent edition of the Institute of Transportation Engineer's Trip Generation Manual. In developments involving a land division, the peak hour trips shall be calculated based on the likely development that will occur on all lots resulting from the land division.
- (2) The increased traffic resulting from the development will contribute to traffic problems in the area based on current accident rates, traffic volumes or speeds that warrant action under the city's traffic calming program, and identified locations where pedestrian and/or bicyclist safety is a concern by the city that is documented.
- (3) The city has performed or reviewed traffic engineering analyses that indicated approval of the development will result in levels of service of the roadway system in the vicinity of the development that do not meet adopted level of service standards.
- (4) For development sites that abut a street in the jurisdiction of Lane County, a Traffic Impact Analysis Review is required if the proposed development will generate or receive traffic by vehicles of heavy weight in their daily operations.

*Findings:* These provisions outline Traffic Impact Analysis Review, and when it is required. These provisions are important for maintaining the basic functionality of the transportation system as new development or redevelopment occurs. These provisions support the IAMP by requiring Traffic Impact Studies for developments with a specific number of trips. It is assumed that the Public Works Director will ensure that new developments will be consistent with the IAMP and IAMP recommendations, along with other state and local plans and codes.

Other specific code citations and findings of IAMP and interchange management support are included in Appendix D.

## **Conclusions**

The proposed I-5/Beltline Interchange Project and IAMP are consistent with all relevant federal and state policies, plans and rules. The proposed I-5/Beltline Interchange Project and IAMP are also consistent with local policy documents, including a listing in TransPlan, the federally required Regional Transportation Plan and Metro Plan transportation element. The I-5/Beltline IAMP does not seek plan amendments to any local plans or local adoption, because local plan language—as well as code language—already supports (1) the recommended project as put forth in the I-5/Beltline IAMP and (2) effective interchange management and protection for the duration of the planning period.

# Land Use and Environmental Analysis

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## Land Use

Development on the southwest side of the interchange is primarily residential. There is a mixture of residential and industrial/commercial development to the north of the Beltline Highway. Development on the east side of the interchange is primarily commercial and retail. Thus, much of the interchange area is developed with low- and medium-density residential, commercial, industrial, service and office uses. Additional tracts of land are currently under development (i.e., RiverBend Regional Medical Center, Royal Caribbean Call Center). Urban development with both regional and local significance includes Gateway Mall, residential and commercial development, office complexes, and campus industrial complexes such as Symantec.

According to the Metro Plan, continued growth of the local economy is anticipated in the future, as is additional urban development within incorporated cities. The area population is also expected to continue to grow, although the rate of growth and in-migration are expected to be less than in the past.

The northern half of the interchange is near the Eugene-Springfield UGB. Land beyond the UGB is primarily agricultural or undeveloped with scattered rural residential uses. Nearly all the land in the interchange area and within the UGB falls into residential, commercial, or industrial zoning districts. Land use planning maps that served as the basis for the EA, and an updated zoning map, are included in Appendix C.

Approximately 400 acres of vacant or agricultural land are designated for development in the area north of Harlow Road, west of 5th Street and east of Coburg Road. All of this land is within the current limits of Eugene or Springfield or within the UGB. About one-half the area is west of I-5 and about half is east of I-5. Much of the undeveloped land is located north of Beltline Highway in the developing Chad Drive area. Eventually, additional land use development would likely come to a standstill without acceptable safety improvements, which would require access management improvements.

Planned land uses are similar to existing land uses in that the major categories are residential, commercial, and industrial, and occur in the same general locations. The comprehensive land use map and zoning map indicate the following trends in the three functional areas:

- Gateway Area (northeast and southeast quadrants): Continued development of commercial, campus industrial, and medium-density residential uses
- Chad Drive Area (northwest quadrant): Continued development of campus industrial, commercial, and residential uses

- Willakenzie Neighborhood (southwest quadrant): Continued presence of residential uses (primarily single-family) adjacent to I-5

The project's REA includes a chapter on land use findings, where compliance with various policies of the OHP and other plans is discussed. The project was shown to meet each of the relevant requirements.

## Environment

The EA investigated potential impacts of the project to natural and human resources. Because the project area is compact, already disturbed, and committed to urban use, few environmental issues were found to be of concern. Proposed mitigation and conservation measures were addressed in the EA and REA.

The Interchange Build Alternative would include direct impacts to two jurisdictional wetland sites of approximately 7,160 square meters (1.8 acres) total. An individual project National Environmental Policy Act (NEPA)/404 wetland permit is applicable for this project. Fish habitat was not assessed because none of the wetlands appear to have fish-bearing waters present. None of the wetlands in the project area met any of the criteria for wetlands of special interest for protection. Three proposed mitigation sites are located within the project termini within the same watershed as the affected wetlands. Mitigation is in-kind, and the mitigation sites will perform similar functions and values as the affected wetlands. The project area is not within an area of existing high natural resource values. There are no protected sites in the project area.

Analysis of water quality impacts shows that the project would not result in toxicity levels for evaluated metals and would result in a quantity increase of less than 0.0001 percent in the flows of receiving waters through its indirect impacts.

Proposed water quality mitigation for Phase I of the Interchange Build Alternative includes construction of flat-bottomed roadside filter strips and/or bioswales designed to treat 140 percent of the new impervious surface area, or a minimum of 4,208 square meters (45,274 square feet). Treated stormwater is proposed to discharge into proposed wetland mitigation along the northern side of Beltline Highway west of I-5.

The approximately 18.0 acres of land to be acquired and converted to transportation use, according to the EA, is a relatively minor quantity relative to the supply of land in the area. None of the acquisitions would result in changes to the overall availability or use of land in the area.

Because the project would have only minor impacts to geology and soils, air quality, visual landscape, and land use, no mitigation of impacts is proposed for these aspects of the environment. Noise was a concern to some residential stakeholders, and some sound walls are recommended. Investigation of hazardous materials demonstrated either no concern or routine consideration of soil and groundwater contamination for two properties and two sites with active underground storage tanks. The project would not affect any cultural resources or listed plant or animal species. The Interchange Build Alternative would result in two business and two residential displacements. Two service stations and one restaurant would be displaced by the Beltline/Gateway intersection improvements. Some electrical utilities would be affected by the project.

## SECTION 5

# Existing Plan and Conditions and Forecast Deficiencies Analysis

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The existing I-5/Beltline Interchange conditions were evaluated as part of *I-5 State of the Interstate, A Transportation Conditions Report* (2000). The report documents deficiency assessment findings for geometric conditions, operational conditions, safety conditions, bridge structure condition, and pavement ratings. Operational and safety problems will worsen without better connections of the adjacent roadway network and improvements to the interchange. In the next 15 years, according to the Beltline Facility Plan (1999), the number of daily vehicle trips traversing the I-5/Beltline Interchange is expected to increase from 100,000 to 120,000 trips per day, an increase of 20 percent. The number of non-auto trips will also increase. These increases will be associated with additional land development in the surrounding area, as well as an increase in regional trips.

Without improvements to the interchange geometry, these conditions could lead to an increase in the number of crashes, particularly along I-5 and Beltline Road through the weave sections, between interchange loop ramps.

Thus, current problems at the interchange can generally be classified into three related topics: geometric deficiencies, operational deficiencies, and safety deficiencies.

## Existing Geometric Deficiencies

The I-5/Beltline Interchange is a cloverleaf form with circular loop ramps in all four quadrants. When the I-5/Beltline Interchange was constructed, the surrounding area was rural. These conditions facilitated smooth and safe operations through a cloverleaf-type interchange. Traffic demands for I-5/Beltline Road Interchange in 1970 were 20,650 vehicles per day, compared to 100,000 today. For instance, the short distances between loop ramps, where traffic is required to weave, were consistent with traffic demands for the 20-year planning period (from 1965 to 1985). However, the number of associated vehicle conflicts in the weaving areas on both I-5 and Beltline Road is increasing. The weave conflicts are particularly difficult when truck traffic is involved.

Similarly for the Beltline/Gateway intersection, traffic volumes were low when it was originally constructed, and the distance of 625 feet between the interchange ramps and Gateway did not create any traffic issues. However, this spacing now creates challenges for many drivers destined for Arco, Symantec, or other locations north of Beltline. These drivers must cross three eastbound lanes of Beltline to access northbound Game Farm within a short distance.

In 1999, ODOT constructed a safety improvement project that separated northbound off-ramp freeway traffic destined for southbound Gateway from other off-ramp traffic, eliminating a weave with eastbound Beltline to southbound Gateway. Despite these

improvements, the following geometric deficiencies still exist at the I-5/Beltline Interchange according to AASHTO standards:

- The I-5 weave section distance between the exit and entrance ramps is less than ideal for safe movement of current traffic volumes (both northbound and southbound)
- The Beltline Road weave section distance between the exit and entrance ramps is less than ideal for safe movement of current traffic volumes (both eastbound and westbound)
- The loop ramp horizontal alignment in the northwest, southeast, and southwest quadrants' non-circular curves requires operators to constantly adjust steering. This is a problem for truck traffic

## Existing Operational Deficiencies

"Operations" refers to the quality of traffic flow. The operating speed required by the loop ramps creates transition problems for drivers as a result of the differential between freeway travel speeds and speeds of the merge/diverge movements transitioning to the lower speed loop ramps. The highest volume movements are from northbound I-5 to westbound Beltline and the reciprocal movement from eastbound Beltline to southbound I-5.

The operational deficiencies parallel the geometric deficiencies identified above and include the relationship between the Interchange and the nearby Beltline/Gateway intersection:

- The distance of only 625 feet from the I-5 ramp to nearest intersection (Beltline/Gateway) causes intermittent delay during peak commuter periods.
- The Beltline/Gateway intersection northbound storage queue backs up past Kruse Way, creating congestion and delay to business access during peak periods.

According to the ODOT bridge inspection program, the I-5/Beltline overcrossing structure has a condition rating of 64.6 out of a possible rating of 100 and is functionally obsolete, primarily based on its narrow width. Structures in the 50 to 80 range fall into the rehabilitation improvement category.

## Existing Safety Deficiencies

Increased traffic conflicts, coupled with geometric deficiencies, typically result in higher numbers of crashes. During the 4-year period from January 1994 through December 1998, more than 175 crashes in the I-5/Beltline Interchange area were reported to ODOT; these included crashes on the I-5 mainline, the interchange ramps, and Beltline up to but not including the Beltline/Gateway intersection. About 67 percent of the crashes involved injuries to some extent, including one pedestrian fatality. The ratio of daytime to nighttime accidents was 2.5 to 1.

ODOT's 1999 safety improvement project was intended to make intersection operational improvements. About 64 of the reported crashes, or 37 percent, may have been avoided during the reporting period had the enhancement been in place earlier. There remain 111 reported crashes in the area not related to the safety improvement project. Of these

remaining crashes, 58 percent were rear-end, 22 percent were fixed or other object, 11 percent were sideswipe-overtaking, 7 percent involved turning movements, and 2 percent were categorized as other types. Crash hot-spot locations are as follows:

- 15 – I-5 southbound, including weave
- 5 – I-5 northbound, including weave
- 8 – Beltline weaves between I-5 ramps
- 8 – Northbound ramp intersection
- 16 – Beltline to Gateway weave, unrelated to 1999 safety project

According to the EA, ODOT data indicate the interchange area's crash rate is in the state's highest 10 percent of all crash locations.

## Existing and Future Travel Demand

A traffic analysis was performed as part of project development. Traffic volume forecasts for the existing plan and conditions are shown in Table 1. The traffic volume forecasts for the year 2025 assumed the projects identified in the Regional Transportation System Plan Financially Constrained System would be constructed and operational as planned. Since development of the EA, the City of Springfield has approved rezoning of property east of Beltline Road to accommodate the RiverBend Regional Medical Center complex (PeaceHealth Hospital and other facilities). The traffic analysis underwent a threshold test relative to the new development, and the test validated the results of the EA.

## Future Interchange Operations

The Beltline Interchange Selected Alternative would substantially improve traffic operations in comparison to the Financially Constrained System alone. The proposed project would result in no weaving areas operating at unacceptable service levels, by eliminating them or adding auxiliary lanes along Beltline Highway between I-5 and Coburg Road and along I-5 between Beltline and I-105.

Similar to the 2025 Financially Constrained System, the Beltline Interchange Selected Alternative would result in a volume-to-capacity ratio of 0.84 (LOS D) along southbound I-5 to the north of Beltline and a volume-to-capacity ratio of 0.89 (LOS E) along northbound I-5 to the north of Beltline. Consequently, although the I-5/Beltline Interchange project will meet mobility standards for all ramp intersections and weave movements, it does not solve the expected mobility problems on the I-5 mainline. This is a larger problem that will affect all of I-5 through Eugene and Springfield from Goshen to Coburg by 2020 unless improvements are made to the I-5 mainline or demand is reduced.

**TABLE 1**

No-Build and Financially Constrained System Alternatives Design Hour Volumes and Forecasts

*I-5/Beltline IAMP*

Location	No-Build			Financially Constrained Year 2025 (No Project)
	Year 2000	Year 2005	Year 2025	
<b>Highway Segments</b>				
I-5 n/o Beltline	3,610	4,115	6,825	6,845
I-5 s/o Beltline	5,535	6,100	8,990	8,485
Beltline w/o I-5	4,755	5,135	7,010	6,905
Beltline w/o Gateway	3,010	3,385	5,465	5,410
<b>I-5/Beltline Ramps</b>				
NB-to-EB	480	530	850	765
NB-to-WB	1,140	1,190	1,400	1,260
SB-to-EB	145	175	390	420
SB-to-WB	405	445	655	655
EB-to-NB	370	405	590	620
EB-to-SB	1,030	1,075	1,270	1,155
WB-to-NB	190	225	425	425
WB-to-SB	385	435	705	585
<b>Local Roads</b>				
Beltline e/o Hutton	880	955	1,360	2,835
Pioneer Pkwy. e/o GFRS	n/a	n/a	n/a	2,990
Gateway n/o Beltline	1,160	1,325	2,290	2,070
Gateway s/o Beltline	2,450	2,760	4,495	2,875
GFRN n/o International	820	945	1,655	1,620
International e/o GFRN	430	485	800	770
GFRE e/o GFRN	410	470	875	1,025
GFRS s/o Beltline	1,165	1,290	2,035	605

## Notes:

e/o = east of      EB = eastbound    GFRS = Game Farm Road South  
n/o = north of    NB = northbound   GFRN = Game Farm Road North  
s/o = south of    SB = southbound   GFRE = Game Farm Road East  
w/o = west of    WB = westbound

Source : CH2M HILL, 2001. *Transportation Operational Analysis Report for the I-5/Beltline Interchange*  
Prepared for Oregon Department of Transportation. November 2001.

## Future Local Roadway Operations

All but two of the study area intersections would improve to acceptable operations with the I-5/Beltline Interchange project. The two intersections that would not meet service level standards in 2025 despite the proposed project are the Game Farm Road South/Game Farm Road East intersection and the Postal Way/Gateway Street intersection. The Game Farm Road intersection is anticipated to operate at LOS E (with a volume-to-capacity ratio of 0.94) because of increasing traffic associated with nearby industrial development. The stop sign-controlled turns from Postal Way onto Gateway Street are predicted to operate at LOS F (with a volume-to-capacity ratio over 1.0).

During the 2025 design hour the Gateway/Beltline intersection would function with a volume-to-capacity ratio of 0.84 (LOS D). This would be a substantial improvement compared to both the No-Build and Financially Constrained System, which each would result in multiple hours of congestion, excessive motorist delays, and traffic backups.

The Beltline/Hutton intersection would be signalized. It would operate with a 2025 V/C ratio of 0.81 (LOS D). The Gateway/Kruse and Game Farm Road North/Game Farm Road East intersections would be signalized. Both intersections would operate at LOS C or better conditions.

The TIS conducted in conjunction with PeaceHealth's application and review and approval processes indicates the interchange and all intersections would meet mobility standards through 2025. This assumes that the Beltline/Gateway Intersection would adjust the traffic signal timing from a 60-second cycle to a 120-second cycle, change the eastbound right turn lane on Beltline Highway to a shared through/right turn lane, and add a fourth lane from the intersection to the northbound ramp terminal.

## Traffic Progression and Signal Needs

A progression analysis was performed as part of the traffic analysis for the I-5/Beltline Interchange EA. Appendix B includes maps depicting the lane configurations, traffic volumes, and queuing lengths for the proposed project. The 2025 design hour traffic backups extending from the Beltline/Gateway intersection would be contained between the intersection and each of its four adjacent signalized intersections. The Gateway/Kruse intersection would allow southbound Gateway movements to bypass the traffic signal, eliminating southbound backups except for left-turning vehicles. The Beltline/Hutton intersection 2025 design northbound traffic backup would extend about 925 feet to the south, and Hutton would be one-way northbound. The intersection of Game Farm Road North/Game Farm Road East would need a traffic signal in 2011 or 2012. A traffic signal would not be needed for the unsignalized intersections of Game Farm Road South/Game Farm Road East, or for Gateway/Postal, by 2025.

## SECTION 6

# Alternatives Analysis

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Development of the I-5/Beltline Interchange alternatives proceeded through a highly structured decisionmaking process consisting of the following major steps:

1. Formulation of management structure and decisionmaking process
2. Definition of transportation problem
3. Development of alternative evaluation framework
4. Formulation of alternatives
5. Threshold screening of alternatives
6. Collection of data
7. Evaluation and screening of alternatives
8. Selection of multimodal alternatives for detailed evaluation (to be documented in EA)
9. Refinement of screened alternatives

## Formulation of Management Structure and Decision Process

ODOT developed a management structure for the I-5/Beltline Interchange project to provide a framework for the identification and analysis of project alternatives. The management structure consists of the following three groups:

**Beltline Decision Team (BDT):** Made up of a representative from each of the major jurisdictions and agencies with regulatory authority for project implementation, this group sets the policy framework for the project and makes final decisions at key decision points. BDT members are responsible for briefing their organizations and coordinating activities accordingly.

**Stakeholder Working Group (SWG):** Reviews detailed aspects of the project design, provides guidance to technical staff on detailed aspects of the project work, and makes recommendations to the BDT. SWG members represent a range of stakeholder interests, including affected property owners, neighborhoods, interest groups, jurisdictions and agencies. SWG members act as a communication link between their constituencies and agency decisionmakers and elected officials.

**Beltline Management Team (BMT):** Consists of a select committee of technical experts from ODOT and the project consultant team. The BMT serves as staff to the BDT and SWG by providing them needed information, analysis, and facilitation to support project decisionmaking.

## Definition of Transportation Problem

The problem definition was developed by the SWG from May 6, 2000, through June 20, 2000, based on a summary of existing deficiencies. The preliminary problem definition was

reviewed at the public workshop held on August 3, 2000, and approved by the BDT on September 25, 2000. The main topics identified by the SWG were:

- Change from rural to urban land uses since the facility was constructed
- Transportation performance
  - Geometric deficiencies
  - Operational deficiencies
  - Safety deficiencies
  - Future operations
- Community viability
  - Mismatch of transportation capacity to developable vacant land
  - Major facilities have become barriers to non-auto use
  - Increased traffic levels affect neighborhood livability

## Development of Evaluation Framework

The SWG created an evaluation framework approved by the BDT to be used as a tool to support the decisionmaking process. “Pass/fail” thresholds representing minimum conditions of acceptance to screen out unfeasible alternatives were established, as well as criteria to evaluate the feasible alternatives based on their performance against the full range of stakeholder values. The methodology to be used in developing a ranking of the feasible alternatives was specified. The evaluation framework incorporated the following elements:

- The SWG is expected to represent a cross-section of project stakeholders, specifically those affected by the outcome of the project. Evaluation criteria reflecting desired project outcomes would be developed by the SWG.
- Weightings for each criterion would be developed by the SWG to establish their relative importance.
- Quantitative ratings would be developed by technical staff to measure the performance of each alternative against each evaluation criterion.

The performance and importance weightings would be combined to create an alternative ranking. The main evaluation criteria categories were cost, transportation and safety, natural environment, implementation, and human environment. The criteria categories and potential performance measures were reviewed and comments solicited at a public workshop. Detailed evaluation criteria and measures were then developed by the SWG and approved by the BDT.

## Formulation of Alternatives

All regional and local planning documents, plus many potential project alternatives, were reviewed in developing this project. Identified alternatives included various measures of TSM, such as ramp metering, high occupancy vehicle (HOV) “diamond” lanes, and traffic signal timing optimization. Other alternatives included TDM techniques, such as fringe-area

parking and rideshare programs, pedestrian and bicycle paths, and bus transit systems. Doing nothing to address the identified transportation problems of the area, the “no-build” alternative, also was considered.

Several “build” alternatives were formulated, following the functional planning methodology of AASHTO, that were presented to and developed with the SWG. This methodology specifies appropriate interchange forms based on the types of intersecting highways that are served by the interchange. For example, free flow interchange forms are appropriate at the intersection of two freeways. Traffic signals are appropriate for interchange connections to city streets.

The SWG created an evaluation framework approved by the BDT to be used as a tool to support the decisionmaking process. “Pass/Fail” thresholds were established to screen out non-feasible alternatives. Those alternatives carried further into the process received greater levels of scrutiny. Criteria were established to evaluate the performance of feasible alternatives against the full range of stakeholder values and then to rank alternatives.

## Threshold Screening

Threshold criteria are set by acceptable project outcomes and federal, state, and local policies and standards (for which an alternative could not reasonably obtain an exception). Threshold criteria for the interchange related to speed management, weaving movements, and spacing between adjacent interchanges. Threshold criteria for intersections related to right-of-way and safety of operations as influenced by space limits and conflict points.

The threshold criteria (Table 2) were applied by the BMT to the interchange alternatives and intersection options; these were then presented to the SWG for review and formulation of a recommendation to the BDT. The SWG reviewed interchanges first and eliminated several interchange forms that did not meet the criteria. The SWG evaluated intersections by first studying at-grade options, then grade-separated options, until a 20-year design life could be satisfied. A second level of evaluation was undertaken for pairing of the five interchanges and six intersections that met with BDT approval for evaluation against the 20-year design life criterion. Twenty alternatives were forwarded for evaluation and further screening efforts.

Data were then collected to assist in quantifying impacts to the natural and social environments for use in applying the evaluation criteria. Other categories of data were collected and reviewed to determine appropriate factors to include in the evaluation process.

## Alternatives Evaluation

Each feasible alternative was ranked according to how it met the design criteria: total project cost, business displacements, construction phasing costs, safety improvements in the first phase, and mobility at intersections. This included ratings for each criterion on a normalized scale, with the technical ratings provided by project staff to the SWG for review. A nominal group technique was used in a workshop to establish relative weights for each of the evaluation criteria (Table 3). Project alternatives were then ranked, which served as a point

of information from which SWG deliberations were launched to formulate a recommendation. Finally, a sensitivity analysis was performed to test the integrity of the alternative rankings.

Twenty feasible alternatives were evaluated on the basis of 26 evaluation criteria grouped into the following broad categories:

- Cost – Right-of-way acquisition and construction costs were factored into the total project costs.
- Transportation and safety – Operations, mobility, safety and connectivity were evaluated. The modes considered were bike, pedestrian, wheelchair, transit, and motor vehicle.
- Natural Environment – Air quality, wetlands, and water quality were considered to be the most differentiating resource areas based on the information readily available.
- Implementation – Phasing of the ultimate solution into discrete affordable improvements with an emphasis on improving safety and deferring property impacts was evaluated.
- Human environment – Impacts to existing businesses and residential property were considered, as well as impacts to potential future industrial, commercial, and residential uses.

Eighteen alternatives were dismissed in the evaluation screening phase, and generally most were dismissed for the same reason: higher costs, lower transportation and safety benefits, higher impacts to the natural environment, and higher impacts to the human environment. Many had right-of-way or other impacts that were unacceptable locally or difficult to implement. Differences in impacts to the natural environment among alternatives were small and resulted in little difference in the scoring and ranking of alternatives.

The SWG met in November 2000 to review the results of the ranking process and they decided to seek public opinion on the top-ranked alternatives. A public open house was held in December 2000 with a focus on the top six ranked alternatives plus the 13th and 14th ranked alternatives to provide a sense of the breadth of alternatives examined. Project staff received and recorded public comment on alternatives in an organized manner. The comments were factored into the SWG recommendation to the BDT, with which the BDT concurred.

A major conclusion of the process is that the four top-ranked alternatives consisted of the same I-5/Beltline Interchange configuration with varying Beltline/Gateway intersection configurations. Potential environmental impacts of the Interchange Build Alternative and a No-Build Alternative were identified. Beltline/Gateway Intersection Option 1 received the highest ranking, followed by Intersection Option 2. Intersection Option 3 was added later as part of the refinements evaluation phase, and therefore was not ranked during the alternatives evaluation process. All three Beltline/Gateway Intersection Options are included in the EA.

**TABLE 2**  
 Threshold Criteria  
*I-5 Bellline IAMP*

Threshold Criteria	Measure
<b>1. Interchange and intersection form consistency with AASHTO forms:</b>	
1A. System-to-system	Do the I-5/Beltline West movements pass through a free flow ramp, in the ultimate configuration?
1B. System-to-service	Do the I-5/Beltline East connections pass through a ramp terminal intersection connection?
1C. Arterial system	Does the design provide for gradual transition between the high-speed, controlled-access Beltline West and the lower speed Beltline East?
<b>2. Applicable design standards and applicable OHP Policies (or concurrence on deviations by ODOT/FHWA). Federal Policy<sup>a</sup> requirements are:</b>	
2A. OHP Major Improvements, Policy 1G	Does the alternative improve the existing facilities (e.g., I-5/Beltline Interchange) without adding new interchange connections, or provides new interchange connections with overall benefit to the system and solves existing deficiencies?
2B. OHP Access Management Standards, Appendix C	Is the interchange spacing from crossroad to crossroad in an urban area at least 3 miles between interchange forms?
2C. FHWA Interstate Access, Policy 4	Do the freeway ramps connect to public roads and provide all traffic movements?
2D. NEPA Design Life requirement, OHP Mobility Standard, Policy 1F	Does the alternative accommodate the 20-year projected traffic demand on the affected system, in its ultimate configuration?
<b>3. Local Criteria</b>	
3A. Stakeholder concern for community impact and cost	Can the project be phased?
3B. Stakeholder concern for safety	Does the alternative maintain or improve safety over 20-year "No-Build" for all modes?

<sup>a</sup> The FHWA Interstate Access Policy is derived from Section 111 of Title 23 U.S.C. This essentially establishes the policy for amending or adding new points of access to the interstate system.

**TABLE 3**  
Evaluation Criteria  
*I-5 Beltline IAMP*

Evaluation Criteria	Measure
<b>A. Cost</b>	
A1. Total construction costs	Total construction cost in dollars
<b>B. Transportation and Safety</b>	
B1. Bike, pedestrian, wheelchair facility connectivity	High, medium, or low based on improved mode links and desirable characteristics of system
B2. Bike, pedestrian, wheelchair facility safety	High, medium, or low based on reduction of conflicts and separation of modes
B3. Accommodation of transit	High, medium, or low based on provision of safe multi-modal facilities and relative preference over autos
B4. Motorized vehicle safety	High, medium, or low based on form consistency, Number and separation of conflicting movements, operations of transitions, etc.
B5. Mobility at intersections and ramps	Number of locations exceeding Oregon Highway Plan volume to capacity standards and local Level Of Service standards
B6. Travel time	Cumulative delay on approximately five origin and destination trip pairs, measuring stop delays and total travel time
<b>C. Natural Environment</b>	
C1. Air quality	Number of intersections within study area exceeding volume-to-capacity ratio of 0.9
C2. Water quality	Square feet of impervious surface added
C3. State and federal threatened and endangered species and high-quality wetlands	Acres of affected critical habitat
C4. Other wetlands	Acres of affected wetland area
<b>D. Implementation</b>	
D1. Construction phasing costs	Net present value in dollars
D2. Safety improvement from B2 and B4 in the first phase	High, medium, and low based on percent of total conflicting movements eliminated in first phase
D3. Ability to defer residential and business property impacts as determined in E1, E3, and E7, to later phases	Percent of displacement and non-displacement impacts in the first phase
<b>E. Human Environment</b>	
E1. Business displacements	Product of number of employees, number of displacements, and market value (from the County Assessor's files)
E2. Access change to existing business	Number of existing businesses whose physical access would be improved, maintained at current conditions, or worsened in relation to current access conditions (from the business perspective)

**TABLE 3**  
 Evaluation Criteria  
*I-5 Beltline IAMP*

<b>Evaluation Criteria</b>	<b>Measure</b>
E3. Business property impact, non-displacement	Mean percent of acres lost by non-displaced business properties impacted. (The total number of existing non-displaced business properties impacted will also be provided as additional information.)
E4. Historic property impacts	Number of identified 'potential' National Historic Eligible Properties weighted by the extent of impact—loss, relocation, neither
E5. Loss of potential future industrial development	Vacant industrial acres removed from inventory for right-of-way
E6. Loss of potential future commercial development	Vacant commercial acres removed from inventory for right-of-way
E7. Residential property displacements	Number of residences displaced for right-of-way
E8. Residential property impacts, non-displacements	Acres of non-displaced residential properties removed for right-of-way
E9. Loss of potential future residential development	Vacant residential acres removed from inventory for right-of-way
E10. Residential noise	High, medium, low based on volume, speed, distance, elevation, length of frontage, distance roadway moved closer/further away, etc in relation to 20-year 'No-Build'
E11. Neighborhood cohesion	Number of residential areas split/bisected
E12. Light/glare impact to neighborhoods	Linear feet of improvement adjacent to residential zoned properties

## Alternatives for Further Consideration

The decisionmaking process followed for development of the EA resulted in one I-5/Beltline Interchange Build Alternative in combination with three Beltline/Gateway Intersection Options and value engineering modifications. The preferred alternative was selected by ODOT from a recommendation by the BDT, with input and involvement by the SWG and local community support.

Bicycle/pedestrian facility concepts were developed as a refinement activity once the I-5/Beltline Interchange Build Alternative and Intersection Options were selected for analysis. These findings were presented in a progress review meeting with the SWG, and no objections were voiced.

The EA document provides extensive information concerning the affected environment and potential impacts of the selected build alternative with options. The EA also provides a summary of proposed mitigation and conservation measures.

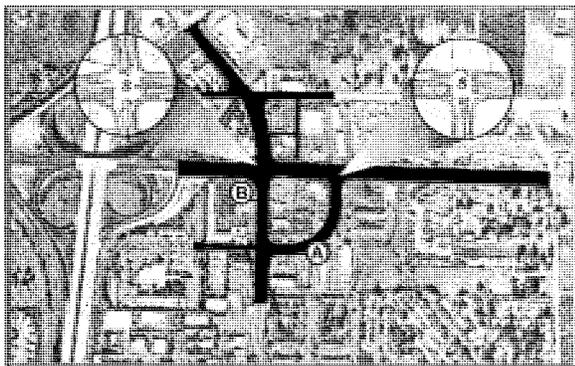


*Interchange Build Alternative (selected)*

## Project Improvements

The proposed project (the selected build alternative) includes improvements to the interchange, as shown in Figure 2, and the local system, as shown in Figure 3. The I-5/Beltline Interchange project does not add new facilities to increase capacity but rather helps avoid or delay the need to add new facilities (for example, new interchange, highway, or bypass) by adding capacity to the existing system. The project involved the public in developing a project that effectively provides for access management, mobility and safety, land use controls, environmental mitigation, TDM measures, and multimodal improvements.

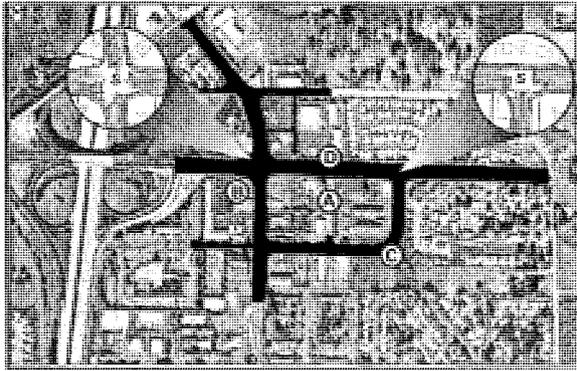
The proposed interchange form consists of a partial cloverleaf-A (loop ramps in advance of the overcrossing structure of I-5) with a single exit and entrance ramps from and to the I-5 mainline. The ramps have a separate decision point for eastbound or westbound movements. The highest volume movement is a high-speed directional ramp for northbound I-5 to westbound Beltline Highway movement.



*Option 1:  
Hutton Road/Kruse Way Connector*

Off-roadway bicycle/pedestrian facilities would be constructed parallel to I-5 connecting to Game Farm Road West to the north and Harlow Road to the south. A proposed connection to the west with Willakenzie Street would provide an entrance into the local neighborhood. Opposite Postal Way, the bicycle/pedestrian facility crosses over I-5.

Local street circulation would be altered through the creation of a one-way couplet section to the south of Beltline east of I-5. Gateway would be changed from two-way travel to southbound only to a point just to the south of existing Kruse Way. Kruse Way and Hutton Street would become one-way north.

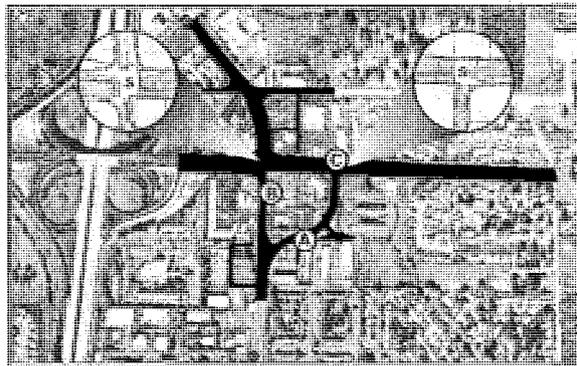


Option 2:  
New Road/Kruse Way Connector

The proposed project includes new traffic signals and modification or replacement of existing traffic signals located at the southbound and northbound I-5 exit ramps at Beltline Highway, and intersections of Beltline Road and Gateway Street, Gateway Street and Gateway Loop, Beltline Road and Hutton Street, Beltline Road and Game Farm Road South, Game Farm Road North and East, and Game Farm Road North and International Way.

Selected Alternative year 2025 design hour volume-to-capacity ratios and levels-of-service for the applicable highway segments, weaving areas, and ramp junctions.

Table 4 summarizes the Financially Constrained System and Beltline Interchange



Option 3:  
Gateway and Hutton Road/  
Kruse Way Couplet (selected)

Table 5 summarizes the Financially Constrained System volume-to-capacity ratios and levels-of-service for the applicable signalized and unsignalized intersections.

Since development of the EA, the City of Springfield has approved rezoning of property east of Beltline Road to accommodate the RiverBend Regional Medical Center complex (PeaceHealth Hospital and other facilities). The traffic analysis underwent a threshold test relative to the new development, and the test validated the results of the EA.

The proposed project would accommodate left turns for the eastbound Beltline traffic onto North Game Farm Road as well as maintain access to properties in the southeast quadrant of the Beltline Road/Gateway Street intersection. Local street circulation would be altered through the creation of a one-way couplet section to the south of Beltline east of I-5. Gateway would be changed from two-way travel to southbound only to a point just to the south of existing Kruse Way. Kruse Way and Hutton Street would become one-way north; thus, no left turn lanes would exist on westbound Beltline Road at the intersection with Hutton Road. Access to the Jack in the Box near the Beltline Road/Hutton Street intersection would be closed. Thus, public road accesses will be reduced, with some turning movements prohibited.

**TABLE 4**

Year 2025 Conditions for Freeway and Interchange Ramps  
 Design Hour Volume-to-Capacity Ratios and LOS Highway Segments, Weaving Areas, and Ramp Junctions  
 I-5/Beltline IAMP

Location	Applied V/C or LOS Standard	Year 2025 Conditions	
		Financially Constrained	Proposed Project
<b>Highway Segments</b>			
I-5 NB n/o Beltline	0.80	<b>0.89 / E</b>	<b>0.89 / E</b>
I-5 SB n/o Beltline	<b>0.80</b>	<b>0.84 / D</b>	<b>0.84 / D</b>
Beltline WB w/o I-5	<b>0.85</b>	<b>0.84 / D</b>	n/a
Beltline EB w/o I-5	0.85	<b>0.93 / E</b>	n/a
<b>Weaving Areas</b>			
I-5 NB @ Beltline	0.80	<b>0.97 / E</b>	n/a
I-5 SB @ Beltline	0.80	<b>1.01 / F</b>	n/a
I-5 NB s/o Beltline	0.80	<b>1.09 / F</b>	0.63 / C
I-5 SB s/o Beltline	0.80	0.73 / C	0.75 / D
Beltline WB @ I-5	0.85	<b>1.07 / F</b>	n/a
Beltline EB @ I-5	0.85	<b>0.86 / D</b>	n/a
Beltline WB w/o I-5	0.85	n/a	0.67 / D
Beltline EB w/o I-5	0.85	n/a	0.54 / C
<b>Ramp Junctions</b>			
NB-to-EB merge	0.85	0.43 / A	n/a
SB-to-WB diverge	0.80	<b>0.90 / D</b>	0.65 / C
SB-to-WB merge	0.85	0.80 / D	n/a
EB-to-SB diverge	0.85	<b>0.94 / E</b>	n/a
WB-to-NB diverge	0.85	0.61 / C	0.61 / C
WB-to-NB merge	0.80	<b>1.09 / F</b>	0.60 / C
EB-to-NB merge	0.80	n/a	0.55 / B
WB-to-SB diverge	0.85	n/a	0.35 / B
WB-to-SB merge	0.80	n/a	0.49 / B
NB off-ramp diverge	0.80	n/a	0.55 / C
SB off-ramp diverge	0.80	n/a	0.58 / B
EB off-ramp diverge	0.85	n/a	0.62 / B
WB on-ramp merge	0.80	<b>n/a</b>	0.48 / B

## Notes:

e/o = east of  
 n/o = north of  
 s/o = south of  
 w/o = west of

EB = eastbound  
 NB = northbound  
 SB = southbound  
 WB = westbound

**Bolded** figures exceed OHP volume-to-capacity standards

Source: CH2M HILL, 2001. *Transportation Operational Analysis Report for the I-5/Beltline Interchange*.  
 Prepared for Oregon Department of Transportation. November 2001.

**TABLE 5**  
 Year 2025 Conditions for Financially Constrained System and Intersections  
 Design Hour Volume-to-Capacity Ratios and LOS Intersections  
*I-5/Beltline IAMP*

Location	Applied V/C or LOS Standard	Financially Constrained
<b>Intersections</b>		
Beltline/I-5 SB off-ramp	0.80 / D	n/a
Beltline/I-5 NB off-ramp	0.80 / D	n/a
Gateway/Beltline	0.85 / D	<b>1.52 / F</b>
Beltline/Hutton	0.85 / D	<b>2.0+ / F</b>
Beltline/Kruse	0.85 / D	n/a
Beltline/GFRS/Pioneer Pkwy.	0.85 / D	0.78 / D
Gateway/Kruse	0.85 / D	<b>2.0+ / F</b>
Kruse/Hutton	0.85 / D	n/a
Gateway/Gateway Loop	0.85 / D	0.80 / D
Gateway/Postal	0.85 / D	<b>1.0+ / F</b>
GFRN/GFRE	0.85 / D	<b>2.0+ / F</b>
GFRN/International	0.85 / D	0.79 / D
GFRS/GFRE	0.85 / D	<b>0.94 / E</b>

## Notes:

e/o = east of      EB = eastbound      GFRN = Game Farm Road North  
 n/o = north of    NB = northbound    GFRE = Game Farm Road East  
 s/o = south of    SB = southbound    GFRS = Game Farm Road South  
 w/o = west of    WB = westbound

**Bolded** figures exceed OHP volume-to-capacity standards

Source: CH2M HILL, 2001. *Transportation Operational Analysis Report for the I-5/Beltline Interchange*. Prepared for Oregon Department of Transportation. November 2001

Access management is governed by OAR 734-051-0125, which provides spacing standards for approaches in an interchange area. According to Table 6 of this rule, the applicable spacing standards for the I-5/Beltline Interchange in this urban area is 1,320 feet from the ramp to the nearest public cross road. The distance to the end of the northbound exit ramp onto Beltline Road to the intersection with Gateway Street is 625 feet.

Therefore, the proposed improvements to the I-5/Beltline Interchange do not meet the standard. OAR 734-051-0125 (6) requires ODOT to acquire access control on cross roads around interchanges for a distance of 1320 feet. ODOT does not own the right-of-way along Beltline to the east of the Beltline Road/Gateway Street/Game Farm Road North intersection. ODOT does control access to the west of the interchange for the required distance.

Deviations to the spacing standards and controls are governed by OAR 735-051-135. Full compliance by project improvements would result in significantly more investment to reconstruct local streets, relocate utilities, and additional displacements of building improvements beyond those that are already part of the proposed project. The Regional Access Management Engineer was directly involved in analyzing and establishing the project-specific access spacing parameters to reach an acceptable compromise to move in the direction of the access spacing standards. The Regional Access Management Engineer has approved a deviation to the standards (Appendix F).





- LEGEND**
- PROPOSED R/W
  - CONCRETE CURB
  - LANE LINE
  - ▭ RAISED MEDIAN/ISLAND
  - ◻ PLANTER
  - S SIGNAL

**FIGURE 3**  
 PROPOSED INTERSECTION  
 IMPROVEMENTS  
 Not To Scale

## SECTION 7

# Plan Recommendations

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The City of Springfield and ODOT have successfully worked in cooperation to develop a solution to existing and forecasted congestion problems in and around the I-5/Beltline Interchange, particularly the Beltline/Gateway intersection. This cooperation is evidenced by the IGA (Appendix A), which includes the traffic monitoring and modeling provisions that were made part of the REA. The existing local agency plans, policies, and codes (see Section 3) are key features of the interchange management approach. This IAMP incorporates those provisions and describes the interchange area management actions that address the 20-year planning period through 2025. The management actions of this IAMP are based on the operational, geometric, and safety analyses, and the resulting proposed project, developed for the I-5/Beltline Interchange EA. The project effectively addresses federal, state, and local requirements for access management, mobility and safety, land use controls, environmental mitigation, TDM measures, multimodal improvements, and public involvement and agency coordination.

The proposed project will address concerns of local businesses and residents about the ability of the existing interchange to adequately serve existing businesses and future development. The proposed project also will address concerns about increased congestion affecting residential neighborhoods, and the need for greater connectivity between neighborhoods west of I-5 and the Gateway area east of I-5, particularly with respect to bicycles and pedestrians. Thus, the I-5/Beltline Interchange project would meet ODOT's interchange operations goals while addressing local concerns. This IAMP addresses management of the interchange throughout the 20-year planning period and consistent with the project's phased implementation.

The project's Phase I improvements are in compliance with local agency plans, policies, and codes. Phase I improvements consist of new ramp construction (2006) for I-5 northbound to westbound Beltline Highway (flyover); partial construction of the I-5 northbound onramp; and construction of a separated collector distributor road on I-5 southbound. The existing ramp loop in the northeast quadrant of the interchange would also be removed.

Aside from continued implementation of the local plans, policies, and code provisions, the principal management action is monitoring (as specified in the IGA) overall traffic growth in the immediate vicinity of the interchange (Beltline/Gateway intersection) to ensure that any potential operational problems are identified and addressed as early as possible. Key to access management will be actions by the City of Springfield to redevelop the local street network in the Gateway Mall area as traffic volume and queues warrant. This was the City's desire, because it allows the City to retain design flexibility as the area redevelops. The City's Gateway Refinement Plan, part of the City's Transportation System Plan (TSP), calls for access management along Gateway Street. The access management plan for the interchange area has been prepared under the project development guidelines rather than as an individual permit application. Access management will be governed by the City of Springfield in the interchange management area. ODOT has authority to protect the

function of the interchange improvements by managing the Beltline/Gateway intersection essentially as a single-point ramp meter. The deviations for access spacing and controls, approved by the Regional Access Management Engineer, are allowed on the basis that the improvements will improve safety and operations while moving toward the access spacing standards.

Under the terms of the IGA, annual monitoring will begin when two conditions are satisfied. The first condition is construction of the Pioneer (Martin Luther King [MLK]) Parkway extension from Harlow Road to East Beltline Road. The second condition (already met) is programming of the project's Phase I improvements into ODOT's STIP (2006-2009). Monitoring will end after construction of the Phase II improvements.

Management actions include essential features designed into the reconstruction of the interchange through the project's three phases. It is anticipated that by 2015, the project's proposed Phase II improvements on Beltline Road, Gateway Street, Game Farm Road North, Kruse Way, and Hutton Road would be necessary, as determined by the periodic monitoring program of the IGA. The City of Springfield would initiate and approve funding for the design and construction of these improvements. In addition, it is anticipated that by 2020, the third phase of the project would be constructed by ODOT. Phase III consists of the bicycle/pedestrian facility north of Beltline Highway, completion of the southbound freeway exit ramp and the northbound freeway entrance ramp, and the Harlow Road overcrossing.

Nevertheless, such improvements to system efficiency and interchange performance will leave little reserve capacity at the end of the 20-year planning horizon under the current assumptions and provisions of local planning documents. The proposed project assumes that the Pioneer Parkway extension would be operational in the year 2025. In fact, worsened service levels would result at many of the intersections listed prior to 2025 without the Pioneer Parkway extension. Development of the Pioneer (MLK) Parkway Extension by 2010 would likely enable all study area intersections to operate acceptably until at least 2025. Because of the proposed RiverBend Regional Medical Center (relocation of PeaceHealth Hospital), the EA's traffic analysis underwent a threshold test relative to the new development. The test validated the results of the EA.

Monitoring of traffic volume and property development in the area is a critical action for interchange area management. Since development of the EA, the City of Springfield has approved rezoning of property east of Beltline Road to accommodate the RiverBend Regional Medical Center complex (PeaceHealth Hospital and other facilities).

Thus, the proposed I-5/Beltline Interchange Project, supported by the IAMP, improves both safety and operations over the No-Build Alternative. The proposed project corrects or improves geometric deficiencies and accommodates safe bike and pedestrian movements while improving mobility. The interchange improvement alternatives in the I-5/Beltline Interchange EA are designed to meet OHP operational standards through 2025. The proposed project also would accommodate the 2003 and subsequent assumptions about the trip generation potential derived from the TransPlan, the Springfield Comprehensive Plan, and sub-area transportation plans. Sub-area plans developed by Springfield and Eugene, along with provisions of the cities' and county's development codes, provide protections to the interchange capacity and long-term management tools.

## SECTION 8

# Public and Agency Involvement

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The I-5/Beltline Interchange project has been conducted and developed by ODOT with local agency coordination and public participation, and is thus consistent with the State Agency Coordination (SAC) Program on Transportation. No goals exceptions or Comprehensive Plan amendments are required for the I-5/Beltline Interchange project. The project has included significant coordination with local agencies and public participation, including workshops, open houses, meetings, and public hearings, as described below.

The BDT set the policy framework for the project and made final recommendations to ODOT at key decision points. The BDT consists of a representative from each of the major jurisdictions and agencies with regulatory authority for project implementation, including:

- Springfield City Council
- Eugene City Council
- Lane County Board of Commissioners
- FHWA
- ODOT

Public involvement conducted by the City of Springfield, City of Eugene, and ODOT has been a key element of community transportation system planning relative to this project for more than 5 years. Both the TransPlan and Metro Plan were developed through extensive public outreach and involvement programs supported by the required public hearing process. The project's SWG included representatives from ODOT, FHWA, both cities' governments, and the eight community interest groups comprising businesses and residents, including:

- Gateway Street Owners for Positive Change  
Gateway Street Mall
- Eugene/Springfield Chamber of Commerce
- Patrician Mobile Home Park
- Harlow Neighborhood
- Game Farm Neighbors
- Friends of Eugene
- Oregon Truckers

Throughout the project, the role of SWG members was to act as a communication link between their constituencies and agency decisionmakers and elected officials. The SWG met 19 times between April 2000 and October 2002. In addition, 32 meetings were conducted with various stakeholders between July 2002 and November 2002.

The project's public involvement activities culminated in an open house and public hearing held for the EA on June 5, 2002, at the Springfield DoubleTree Motel (since demolished and now a Best Buy store) located in the Beltline/Gateway intersection vicinity. The purpose of

the open house was to present the project alternatives, answer questions from the public, and otherwise provide project information to those requesting it. Persons attending the open house were also invited to provide written comments and/or oral testimony at the public hearing portion of the event. A total of 79 people signed in at the open house and public hearing. There were 22 oral testimonies presented in formal hearing, and 29 pieces of written correspondence were received. The event was advertised widely through the local media and invitations were specifically sent to more than 500 property owners in the area, as well as to SWG. A summary of public involvement activities and agency coordination, as well as the public hearing comments and responses, are included as an appendix to the project's REA. The selection of the build alternative occurred after the public hearing was held on the EA and comments received during the comment period were considered by the BDT.

## SECTION 9

# Plan Implementation Responsibilities

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Development, adoption, and implementation of this IAMP are determined by regulatory authority. Local agency authority comes from and through state statutes, and city and county comprehensive plans and development codes. State of Oregon authority comes in the form of policy and administrative rules governing authority over federal and state systems, as granted through the following:

- State Agency Coordination Rule and Agreement (SAC 1990—OAR 731-015) – The purpose of this rule is to define what ODOT actions are land use actions and how ODOT will meet its responsibilities for coordinating these activities with the statewide land use planning program, other agencies, and local government. The SAC Rule and Agreement guideline document also defines the components of ODOT’s planning program and how it relates to other ODOT activities.
- Transportation Planning Rule (OAR 660-012) – This rule is one of several statewide planning rules that provides protection of the long-term livability of Oregon’s communities for future generations. The rule requires multi-modal transportation plans to be coordinated with land use plans. In satisfying the goal, state and local governments must satisfy requirements that lead to implementation of a transportation system that functions consistent with the planned land uses.

Access Management Rule (OAR 734-051) – This rule applies to the location, construction, maintenance and use of approaches onto the state highway rights-of-way and properties under the jurisdiction of ODOT. These rules also govern closure of existing approaches, spacing standards, medians, deviations, appeal process, grants of access, and indentures of access.

## Local Implementation Steps and Responsibilities

The project’s improvements are consistent with Project 606 for the I-5/Beltline Interchange as included in the TransPlan, and as affirmed by documents in Appendix E, including the BDT’s Decision Summary and Correspondence. No goals exceptions or comprehensive plan amendments are required for the I-5/Beltline Interchange project. The City of Springfield and City of Eugene have adopted TransPlan, and this project is included in TransPlan. Several provisions of local plans and policies adopted by the local agencies support 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 in the future. Access spacing requirements and the concerns of local businesses and residents will be addressed during the design of the Springfield local street system (Phase II), balancing the needs of existing business, transportation users, and future development. The design process will involve a steering committee process and Springfield will coordinate with ODOT.

The public has had many opportunities to comment on the project, plans, and policies. The project includes the provisions of the IGA (#20525) which, along with the project's improvements, form the management actions of this IAMP. Therefore, each management action of this IAMP has been adopted already by the City of Springfield and City of Eugene, and the public has had an opportunity to comment on these actions.

The City of Springfield shall:

- Implement the terms of the IGA
- Implement the trip cap provisions of the RiverBend (PeaceHealth) zone change and master plan development
- Implement all other provisions of the City's code and policies that are relevant to this IAMP

## State and Federal Implementation Steps and Responsibilities

Formal approval of the IAMP is required by the Oregon Transportation Commission (OTC) prior to starting construction of the project's first phase.

The project's improvements are designed to meet OHP provisions through 2025 and accommodate specific assumptions about the trip generation potential identified in the EA and consistent with the TransPlan. The I-5/Beltline Interchange project was conducted and developed by ODOT with local agency coordination and public participation, and is thus consistent with the SAC Program on Transportation.

ODOT shall:

- Implement the terms of the IGA, including managing the Beltline/Gateway intersection
- Seek a formal written statement of conformity with local adopted plans
- Participate and comment on local land development actions with the potential to affect the interchange

The FHWA required an executed IGA (#20525) between ODOT and the City of Springfield prior to its approval of the REA. Any additional local agency coordination not already accomplished or underway would occur before or as part of final project design, per the project's IGA and SAC requirements.

## Investment Requirements

The total project cost is estimated at \$104 to 122 million. Oregon Transportation Investment Act (OTIA) funds provide \$18 million for Phase I. The \$100 million costs shown in TransPlan (and now the Central Lane MPO Regional Transportation Plan of 2004) are 1997 planning level estimates that are generally accepted by planning staff to be for construction only; that is, the estimates do not include preliminary engineering, right-of-way acquisition, and construction engineering. The total project costs are inclusive of these additional items and reflect implementation of the value engineering recommendations that are part of the proposed project.

If there were a shortfall of funds, ODOT would address project programming as outlined in TransPlan (2002). A TransPlan (2002) amendment would not be required because the entire project is shown as part of the financially constrained plan. If there is a shortfall, it would fall into Phase III. The responsible agency begins the process of project refinement and programming funding. ODOT's vehicle for updating programming of construction costs on a programmatic level is through the update of the STIP. Likewise, local capital improvement programs are updated annually. ODOT would coordinate with local jurisdictions regarding programming of funds, should a build alternative be selected, using the processes for updating capital construction costs.

Under terms of the IGA, the City of Springfield has agreed that the City shall, at its own expense, be responsible for the volume-to-capacity ratio monitoring work and Phase II construction improvements. ODOT's portion of the monitoring costs for the project shall not exceed \$50,000 and shall be funded through STIP Key number 10377. If additional funds are needed for ODOT to perform its functions, an amendment to the IGA will be required to increase that amount. At the time of executing the IGA, ODOT certified that sufficient funds were available and authorized expenditure to finance costs of the project within ODOT's current appropriation or limitation of current biennial budget. ODOT shall, at its own expense, be responsible for its portion of the monitoring activities, as described in the IGA.

## SECTION 10

# References

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CH2M HILL. *I-5 State of the Interstate Report, A Transportation Conditions Report*. Prepared for Oregon Department of Transportation, June 2000.

CH2M HILL. *Transportation Operational Analysis Report for the I-5/Beltline Interchange*. Prepared for Oregon Department of Transportation. November 2001.

CH2M HILL. *Decision Document for the I-5/Beltline Interchange*. Prepared for Oregon Department of Transportation. November 2002.

CH2M HILL. *Local Code and Plan Review - I-5/Beltline Interchange*. Prepared for Oregon Department of Transportation. April 2005.

Eugene, City of. *Willakenzie Area Plan*. September 1992.

Lane Council of Governments. *Eugene/Springfield Transportation System Plan (TransPlan)*. June 2001 revision.

Lane County Board of Commissioners. *Lane County Rural Comprehensive Plan*. February 1984.

Oregon Department of Transportation, Transportation Planning Analysis Unit. Prepared by Peter Schuytema. *Traffic Volumes, Land Configurations, Volume-to-Capacity Ratios, Level of Service, and 95<sup>th</sup> Percentile Queues by Project Alternative*. 2000.

Oregon Department of Transportation and Federal Highway Administration. *Environmental Assessment, I-5 Beltline Interchange Project*. May 2002.

Oregon Department of Transportation and Federal Highway Administration. *Revised Environmental Assessment, I-5 Beltline Interchange Project*. June 2003.

Springfield, City of. *Commercial Lands Study*. February 2000.

Springfield, City of. *McKenzie Gateway Development TIA*. January 2001

Springfield, City of. *Gateway Refinement Plan*. November 1992.

APPENDIX A

# Phase II Intergovernmental Agreement

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# INTERGOVERNMENTAL AGREEMENT

I-5 – Beltline Project: Monitoring and Implementation Plan

**THIS AGREEMENT is made and entered into by and between THE STATE OF OREGON, acting by and through its Department of Transportation, hereinafter referred to as "ODOT"; and THE CITY OF SPRINGFIELD, acting by and through its elected officials, hereinafter referred to as "CITY".**

## RECITALS

1. This Intergovernmental Agreement applies to the selected alternative as described in the I-5/Beltline Interchange project Revised Environmental Assessment, including mitigation and implementation measures.
2. By the authority granted in ORS 190.110 and 283.110, state agencies may enter into agreements with units of local government or other state agencies for the performance of any or all functions and activities that a party to the agreement, its officers, or agents have the authority to perform.
3. Under such authority, ODOT and CITY enter into this agreement for purposes of identifying their respective duties and responsibilities in monitoring traffic conditions in the vicinity of the I-5-Beltline Interchange project identified above.
4. The I-5 – Beltline interchange is a state system under the jurisdiction and control of ODOT and the Beltline Highway/Gateway Street intersection is a City street system under the jurisdiction and control of CITY.

**NOW THEREFORE**, the premises being in general as stated in the foregoing recitals, it is agreed by and between the parties hereto as follows:

## TERMS OF AGREEMENT

1. As used in this agreement, "Phase I" and "Phase II" of the I-5/Beltline Interchange project have the following meanings:
  - a. Phase I refers to improvements to the I-5 Beltline Interchange, which will be administered by ODOT.
  - b. Phase II refers to improvements at and near the Beltline Highway/Gateway Street intersection, which will be administered by CITY.
2. It is understood that design of Phase II (improvements to the local system) will utilize a Steering Committee with property owner representation.

3. Future project agreements for development and construction of Phase I and Phase II will be required.
4. If Phase II is implemented, said work will be funded with funds available to CITY and will be addressed under a separate agreement.
5. The "Monitoring and Implementation Plan," marked Exhibit A and by this reference made a part hereof, describes the monitoring activities and implementation actions necessary for initiation of Phase II.
6. Activities described in the Monitoring and Implementation Plan will be funded with CITY and ODOT Funds. Each party will be responsible for its own associated monitoring costs. ODOT's portion of the monitoring costs for this project shall not exceed \$50,000 and shall be funded through STIP Key number 10377. If additional funds are needed for ODOT to perform its functions, an amendment to this agreement will be required to increase that amount.
7. Activities described in the Monitoring and Implementation Plan shall begin on the date all required signatures are obtained and Exhibit A conditions 1.A and 1.B are met. Monitoring and implementation activities shall terminate upon completion of the Phase II construction. Thereafter, CITY or ODOT may elect to continue monitoring traffic conditions as part of ongoing operations of their respective facilities.

### **CITY OBLIGATIONS**

1. CITY shall, at its own expense, be responsible for the volume-to-capacity ratio monitoring work and Phase II construction improvements as described in Exhibit A.
2. CITY agrees to comply with all federal, state, and local laws, regulations, executive orders and ordinances applicable to the work under this agreement, including, without limitation, the provisions of ORS 279.312, 279.314, 279.316, 279.320 and 279.555, which hereby are incorporated by reference. Without limiting the generality of the foregoing, CITY expressly agrees to comply with (i) Title VI of Civil Rights Act of 1964; (ii) Section V of the Rehabilitation Act of 1973; (iii) the Americans with Disabilities Act of 1990 and ORS 659A.142; (iv) all regulations and administrative rules established pursuant to the foregoing laws; and (v) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations.
3. CITY shall perform the service under this agreement as an independent contractor and shall be exclusively responsible for all costs and expenses related to its employment of individuals to perform the work under this agreement including, but not limited to, retirement contributions, workers compensation, unemployment taxes, and state and federal income tax withholdings.
4. CITY, its subcontractors, if any, and all employers working under this agreement are subject employers under the Oregon Workers Compensation Law and shall comply with ORS 656.017, which requires them to provide workers' compensation coverage for all their subject workers, unless such employers are exempt under ORS 656.126. CITY shall ensure that each of its contractors complies with these requirements.

5. CITY's project manager for this agreement is Nick Arnis, Transportation Manager, 225 Fifth Street, Springfield, Oregon, 97477, (541) 744-3373.

## ODOT OBLIGATIONS

1. ODOT certifies, at the time this agreement is executed, that sufficient funds are available and authorized for expenditure to finance costs of this agreement within ODOT's current appropriation or limitation of current biennial budget. ODOT shall, at its own expense, be responsible for its portion of the monitoring activities as described in Exhibit A.

2. ODOT's project manager for this agreement is Karl Wieseke, ODOT Area 5 Project Leader, 644 A St, Springfield, OR 97477 (541) 744-8080.

## GENERAL PROVISIONS

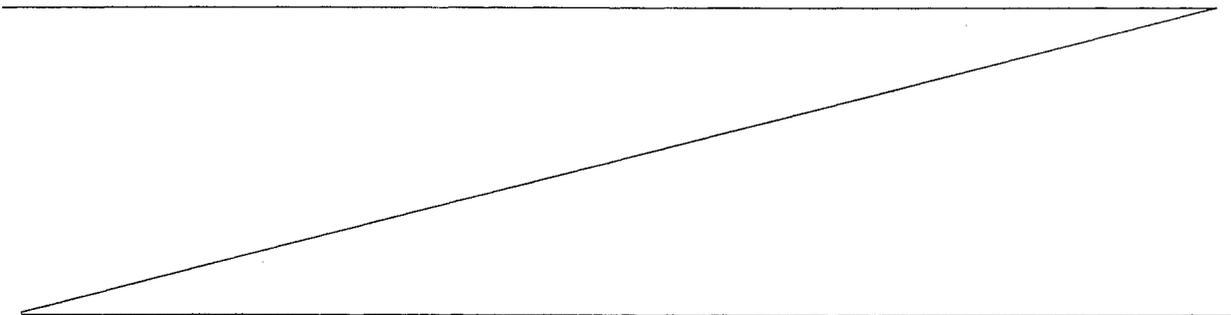
1. This agreement may be terminated by mutual written consent of both parties.
2. ODOT may terminate this agreement effective upon delivery of written notice to CITY, or at such later date as may be established by ODOT, under any of the following conditions:
  - a. If CITY fails to provide services called for by this agreement within the time specified herein or any extension thereof.
  - b. If CITY fails to perform any of the other provisions of this agreement or so fails to pursue the work as to endanger performance of this agreement in accordance with its terms, and after receipt of written notice from ODOT fails to correct such failures within 10 days or such longer period as ODOT may authorize.
  - c. If ODOT fails to receive funding, appropriations, limitations or other expenditure authority at levels sufficient to pay for the work provided in the agreement.
  - d. If Federal or State laws, regulations or guidelines are modified or interpreted in such a way that either the work under this agreement is prohibited or if ODOT is prohibited from paying for such work from the planned funding source.
3. Any termination of this agreement shall not prejudice any rights or obligations accrued to the parties prior to termination.
4. CITY acknowledges and agrees that ODOT, the Secretary of State's Office of the State of Oregon, the federal government, and their duly authorized representatives shall have access to the books, documents, papers, and records of CITY which are directly pertinent to the specific agreement for the purpose of making audit, examination, excerpts, and transcripts for a period of three years after final payment. Copies of applicable records shall be made available upon request. Payment for costs of copies is reimbursable by ODOT.
5. This agreement and attached exhibits constitute the entire agreement between the parties on the subject matter hereof. There are no understandings, agreements, or

representations, oral or written, not specified herein regarding this agreement. No waiver, consent, modification or change of terms of this agreement shall bind either party unless in writing and signed by both parties and all necessary approvals have been obtained. Such waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. The failure of ODOT to enforce any provision of this agreement shall not constitute a waiver by ODOT of that or any other provision.

**IN WITNESS WHEREOF**, the parties hereto have set their hands and affixed their seals as of the day and year hereinafter written.

The I-5/Beltline Project was approved by the Oregon Transportation Commission on February 13, 2002, as part of the 2002-05 Statewide Transportation Improvement Program (Key 10377).

The Oregon Transportation Commission on February 13, 2002, approved Delegation Order No. 2, which authorizes the Director to approve and execute agreements for day-to-day operations when the work is related to a project included in the Statewide Transportation Improvement Program or a line item in the biennial budget approved by the Commission.



**Signature Page to Follow**

On September 6, 2002, the Director of the Oregon Department of Transportation approved Subdelegation Order No. 2, in which the Director delegates authority to the Executive Deputy Director for Highways to approve and execute agreements over \$75,000 when the work is related to a project included in the Statewide Transportation Improvement Program.

CITY OF SPRINGFIELD, by and through  
its Elected Officials

By *M.A. Keel*  
City Manager

Date 4/22/03

APPROVED AS TO LEGAL  
SUFFICIENCY

By *Joseph J. Loring*  
City Attorney

Date 4/3/2003

AGENCY ADDRESS:  
Nick Amis  
Transportation Manager  
City of Springfield  
225 5<sup>th</sup> Street  
Springfield OR 97477

STATE OF OREGON, by and through its  
Department of Transportation

By *John Z. [Signature]*  
Executive Deputy Director of Highways

Date 5-14-03

APPROVAL RECOMMENDED

By *Chas M. [Signature]*  
Technical Services Manager/Chief  
Engineer

Date 5-14-03

By *John [Signature]*  
Region 2 Manager

Date 4/22/03

By *Robert J. Pirnie*  
Area 5 Manager

Date 4/24/03

APPROVED AS TO LEGAL  
SUFFICIENCY

By *W. H. [Signature]*  
Assistant Attorney General

Date 5/16/03

# Exhibit A

## I-5 / BELTLINE INTERCHANGE PROJECT Monitoring and Implementation Plan

### 1. Description of Monitoring and Implementation Plan

The intent of the Monitoring and Implementation Plan (hereinafter referred to as MIP) is to determine when capital improvements at and near the Beltline Highway/Gateway Street intersection will be required (hereinafter referred to as Phase II), so as not to compromise the investment in the Interstate 5/Beltline Highway interchange and to support safe and efficient traffic conditions within the interchange area.

Activities described in the MIP will commence once two key conditions are satisfied:

- A. Pioneer Parkway's extension from Harlow Road to East Beltline Road is constructed and operational, and
- B. The planned northbound I-5 to westbound Beltline Highway flyover ramp and planned northbound I-5 to eastbound Beltline Highway ramp, which are each elements of the I-5/Beltline Highway Interchange's Phase I improvements, are programmed in the Oregon Department of Transportation's (ODOT's) Statewide Transportation Improvement Program.

Until both of these conditions are met, ODOT and the City of Springfield will continue to honor their current monitoring practices for the Beltline Highway/Gateway Street intersection. Further details of the MIP are described in Section 2 of this exhibit.

### 2. Description of Monitoring Methodology

The following criteria are based on conditions that typically occur during the 30<sup>th</sup> highest hour of traffic volumes on an annual basis. Current and historic data indicate that typical August p.m. peak hour conditions approximate the 30<sup>th</sup> highest hour at the Beltline Highway/Gateway Street intersection. Therefore, annual monitoring will occur each August between 4:30 and 6:30 p.m. The Oregon Department of Transportation (ODOT) will determine the appropriate week in August for annual monitoring and data will be collected for three mid-week days. Monitoring for both the traffic queuing and volume-to-capacity ratio criteria will occur on the same days and will be coordinated between ODOT and the City of Springfield.

#### ***2.A. Eastbound Beltline Highway Traffic Queuing Monitoring***

After both of the conditions under 1(A) and 1(B) are met, annual monitoring of two key criteria will commence:

- a. Eastbound Beltline Highway traffic queues extending from the Gateway Street intersection will be measured to determine potential impacts with the northbound I-5 ramp terminal intersection. This criterion will be used to evaluate the *effectiveness* of interchange/intersection interaction.
- b. Eastbound Beltline Highway's volume-to-capacity ratio at the Gateway Street intersection will be measured to determine the intersection's performance. This criterion will be used to evaluate the *efficiency* of the interchange/intersection system and to satisfy Oregon Highway Plan mobility standards.

The City of Springfield's City Council will initiate Phase II and approve funding for Phase II project design with Steering Committee involvement as noted in the TERMS OF AGREEMENT, and construction within six months of the reporting of the following event:

*Eastbound Beltline Highway traffic queues extend to or beyond a point measured 200 feet east of the northbound I-5 ramp terminal intersection for more than 25 percent of the observed traffic signal cycles at the Gateway Street intersection.*

The City of Springfield will release construction bid documents (plans, specifications and cost estimate) for the Phase II improvements within six months of the reporting of the following event:

*Eastbound Beltline Highway traffic queues extend to or beyond the northbound I-5 ramp terminal intersection for more than 25 percent of the observed traffic signal cycles at the Gateway Street intersection.*

ODOT will be responsible for preparing the annual traffic queuing evaluation report. The City of Springfield will provide oversight. Both ODOT and the City of Springfield must mutually agree that one or both of the traffic queuing events have occurred prior to the City of Springfield initiating Phase II and releasing construction bid documents, as appropriate.

In addition to excessive traffic queuing based on actual surveyed conditions, the City of Springfield will, in good faith, rely upon ongoing and future traffic studies to determine when the above events may be met and will pursue the above Phase II actions based upon these results, as appropriate.

## **2.B. Eastbound Beltline Highway Volume-to-Capacity Ratio Criteria**

The City of Springfield's City Council will initiate Phase II and approve funding for Phase II project design and construction within six months of the following event, and will also release construction bid documents (plans, specifications and cost estimate) as soon as practical thereafter:

*Eastbound Beltline Highway's volume-to-capacity ratio, measured at the Gateway Street intersection, exceeds 0.85.*

The City of Springfield will be responsible for preparing the annual volume-to-capacity evaluation report. ODOT will provide oversight. The assessment shall use traffic counts

collected at the Beltline Highway/Gateway Street intersection and at all signalized and unsignalized intersections to the west along Beltline Highway within the interchange area. All parameters input to the volume-to-capacity calculation must be mutually agreed to by the City of Springfield and ODOT. All data will be used in conjunction with a traffic operational method acceptable by ODOT to develop traffic signal timing that produces a volume-to-capacity ratio of 1.00 or less for the entire Beltline Highway/Gateway Street intersection.

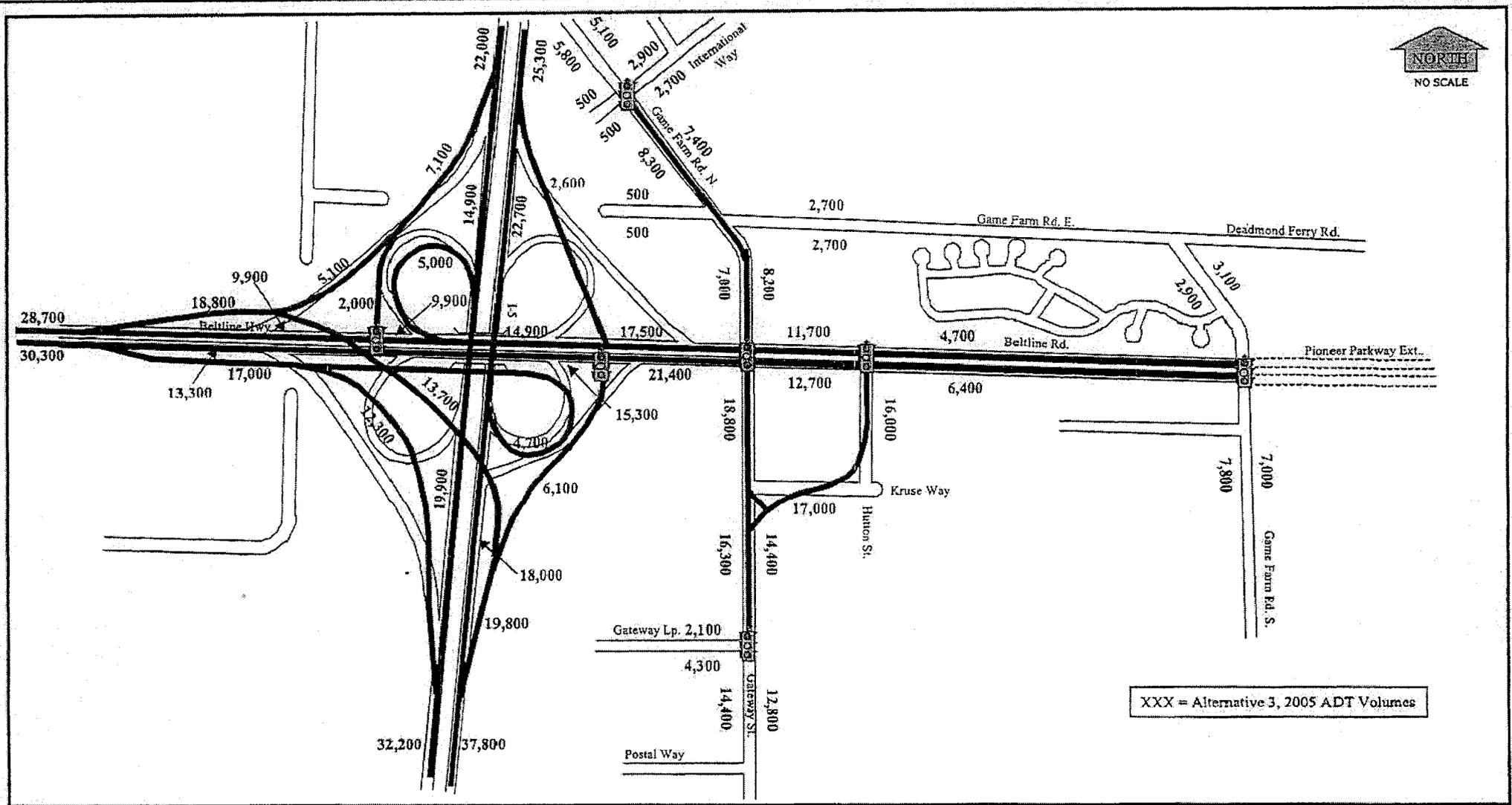
Both ODOT and the City of Springfield must mutually agree that the volume-to-capacity event has occurred prior to the City of Springfield initiating Phase II and releasing construction bid documents, as appropriate. In the event of disagreement, both parties agree to third party mediation to adjudicate the disagreement. The third party mediated resolution shall be binding and accepted by both parties.

In addition to excessive volume-to-capacity results based on actual surveyed conditions, the City of Springfield will, in good faith, rely upon ongoing and future traffic studies to determine when the above events may be met and will pursue the above Phase II actions based upon these results, as appropriate.

APPENDIX B

# Lane Configurations, Traffic Volumes, and Queuing Lengths

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OREGON DEPARTMENT OF TRANSPORTATION

TPAU

TRANSPORTATION PLANNING ANALYSIS UNIT

**Alternative 3, Year 2005  
Average Daily Traffic Volumes**

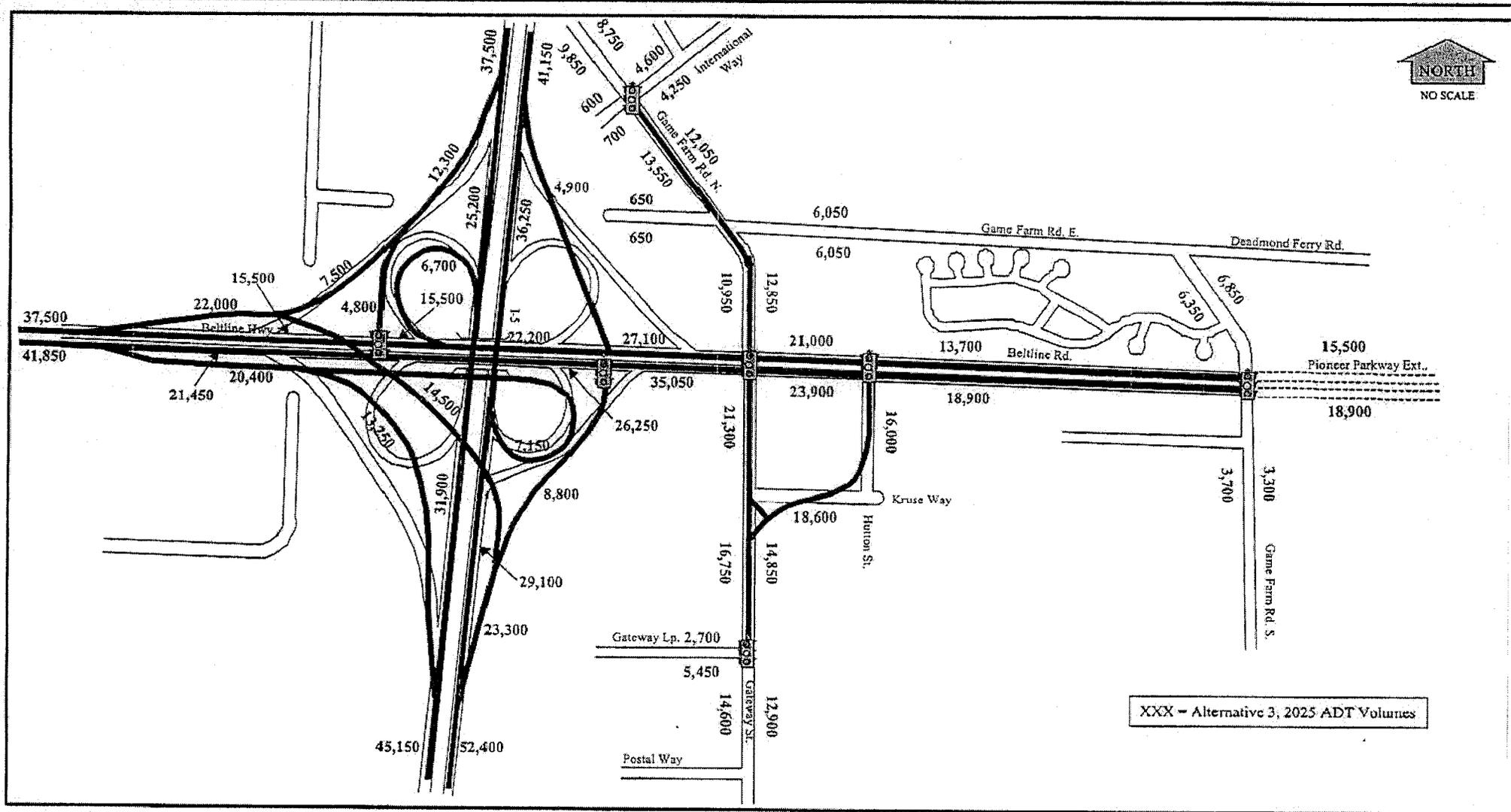
FILE: Beltline Int~.ppt

Prepared By: Peter L. Schuytens

DATE: 1/12/01

Reviewed By: Brian G. Dunn, P.E.

**Figure B-25**



OREGON DEPARTMENT OF TRANSPORTATION

TPAU

TRANSPORTATION PLANNING ANALYSIS UNIT

**Alternative 3, Year 2025  
Average Daily Traffic Volumes**

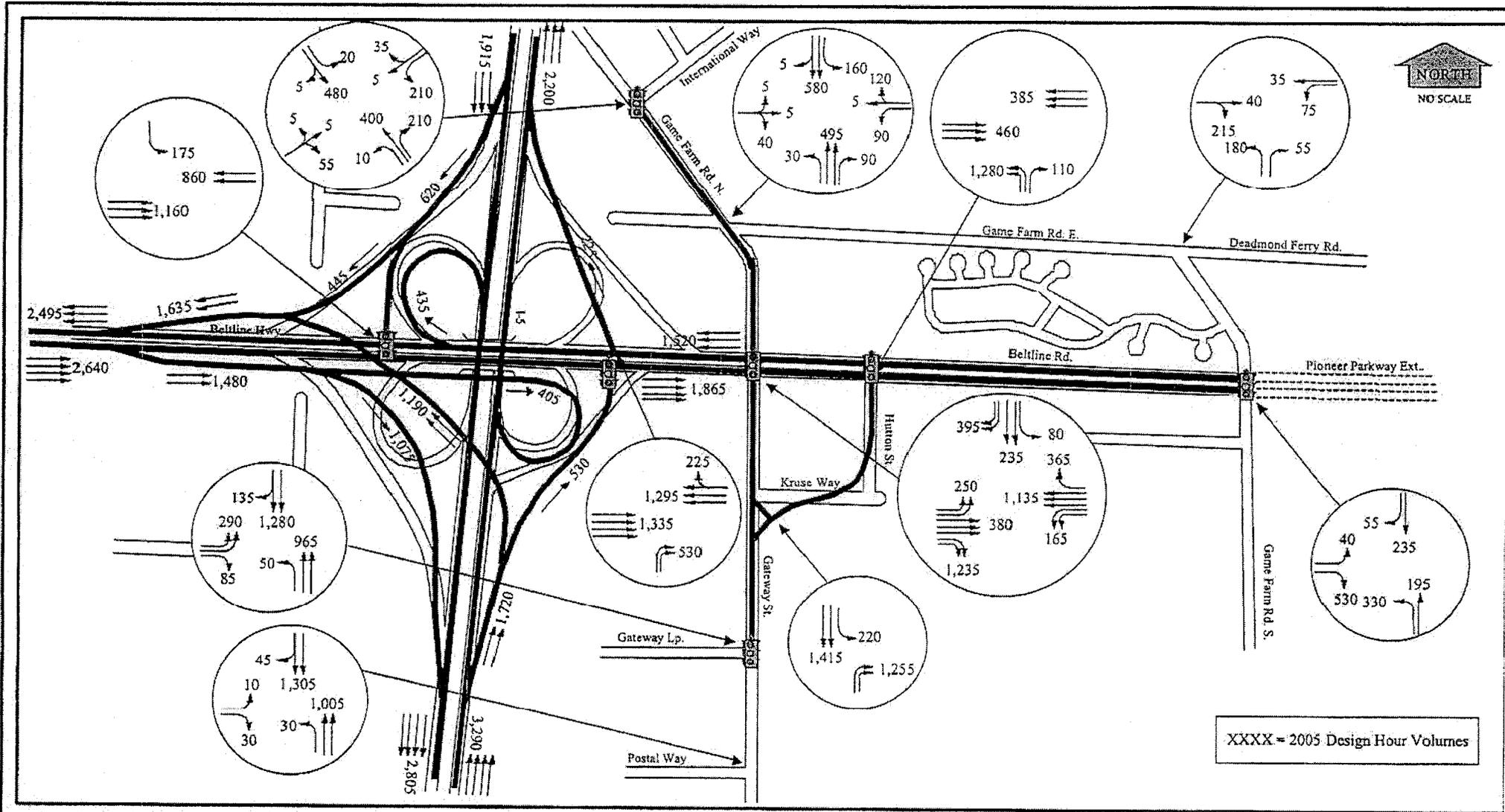
FILE : Beltline Int -.ppt

Prepared By: Peter L. Schuytema

DATE : 1/12/01

Reviewed By: Brian G. Dunn, P.E.

**Figure B-26**



OREGON DEPARTMENT OF TRANSPORTATION

TPAU

TRANSPORTATION PLANNING ANALYSIS UNIT

**Alternative 3, Year 2005**  
**Design Hour Volumes & Lane Configurations**

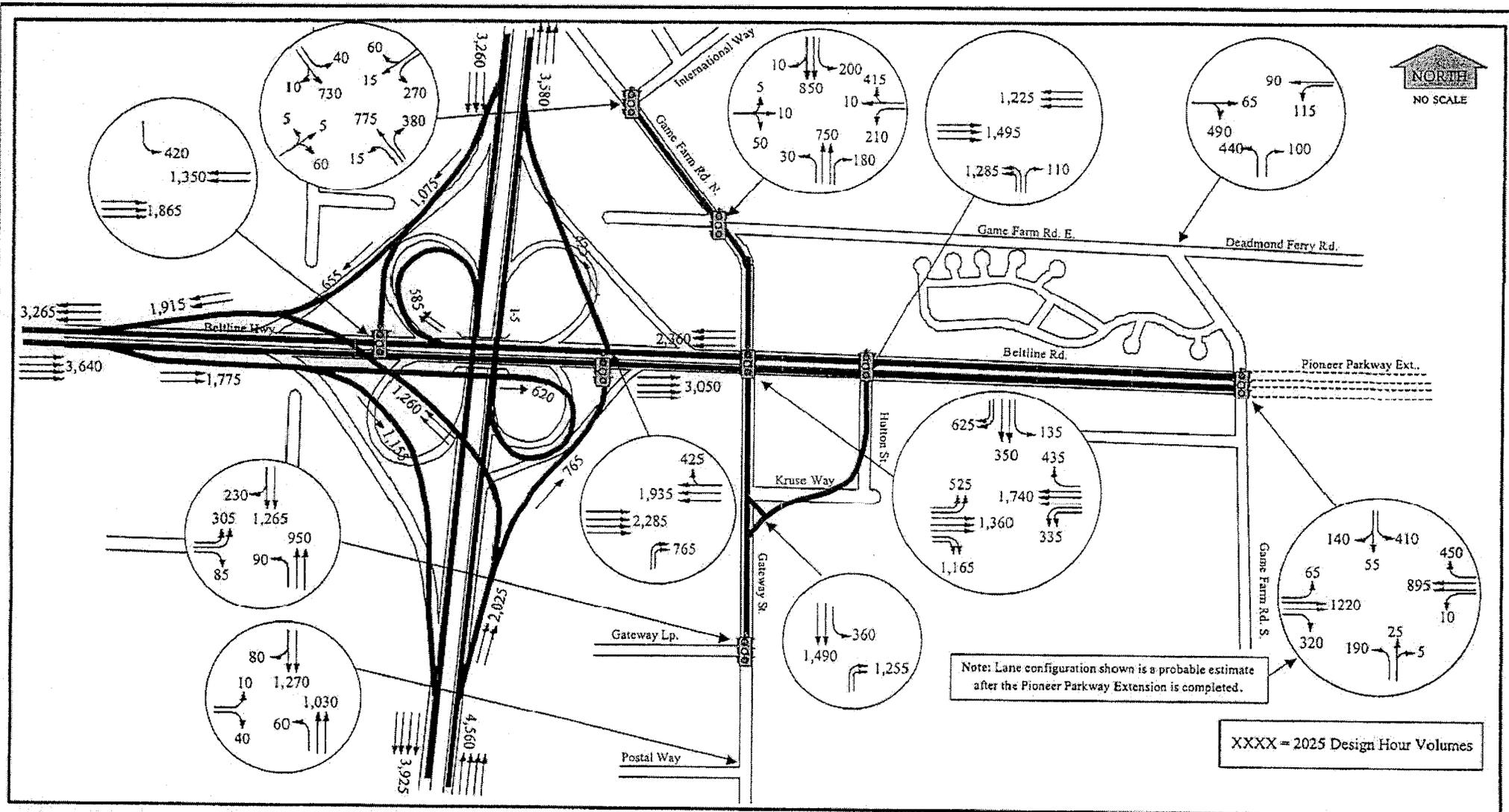
FILE : Beltline Int - ppt

Prepared By: Peter L. Schuytema

DATE :2/07/01

Reviewed By: Brian G. Dunn, P.E.

**Figure B-27**



**Alternative 3, Year 2025  
Design Hour Volumes & Lane Configurations**

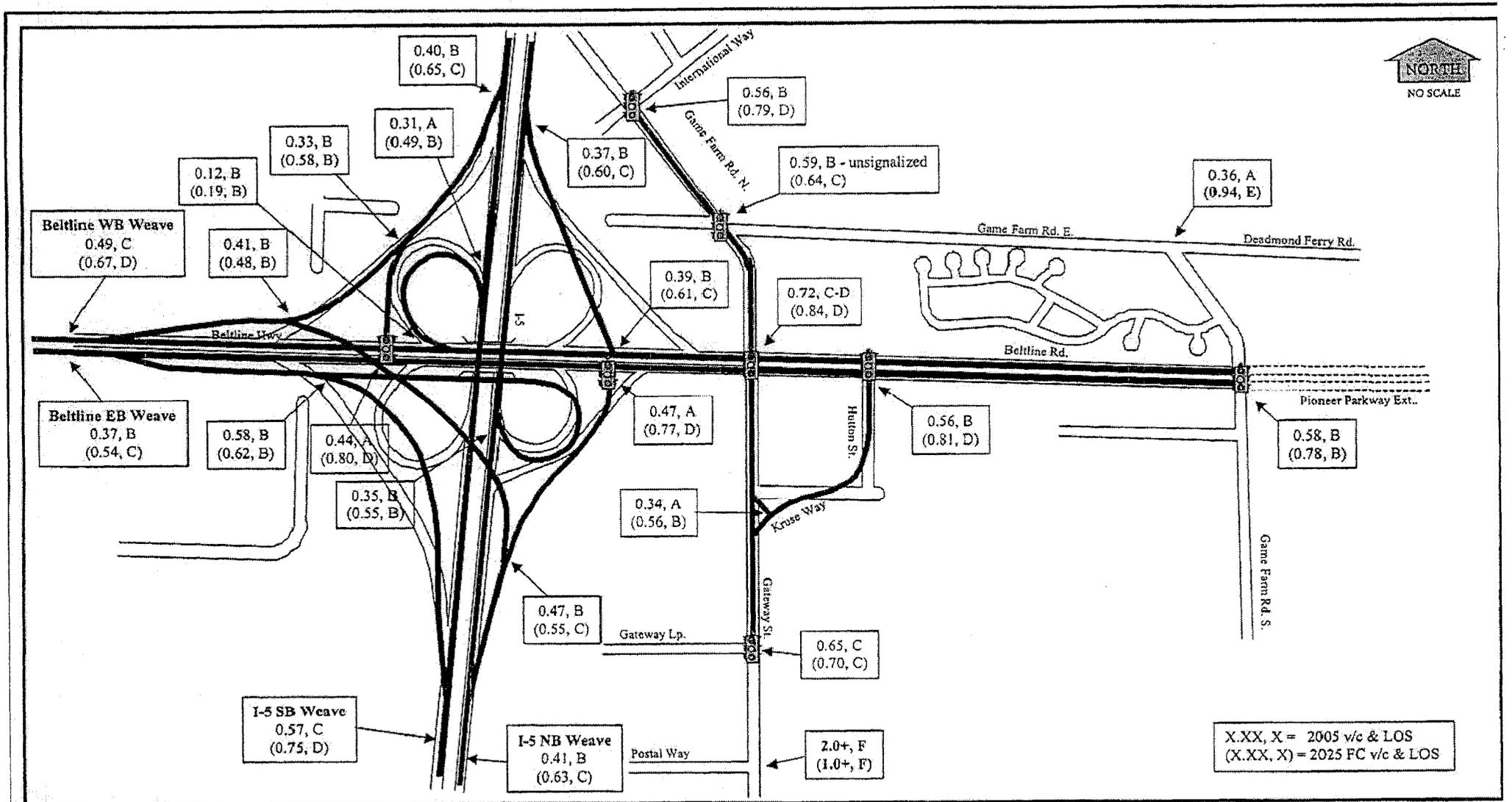
FILE : Beltline Int -.ppt

Prepared By: Peter L. Schuytema

DATE : 2/07/01

Reviewed By: Brian G. Dunn, P.E.

**Figure B-28**



**Alternative 3, Years 2005 & 2025  
 Design Hour Volume to Capacity Ratios & Levels of Service**

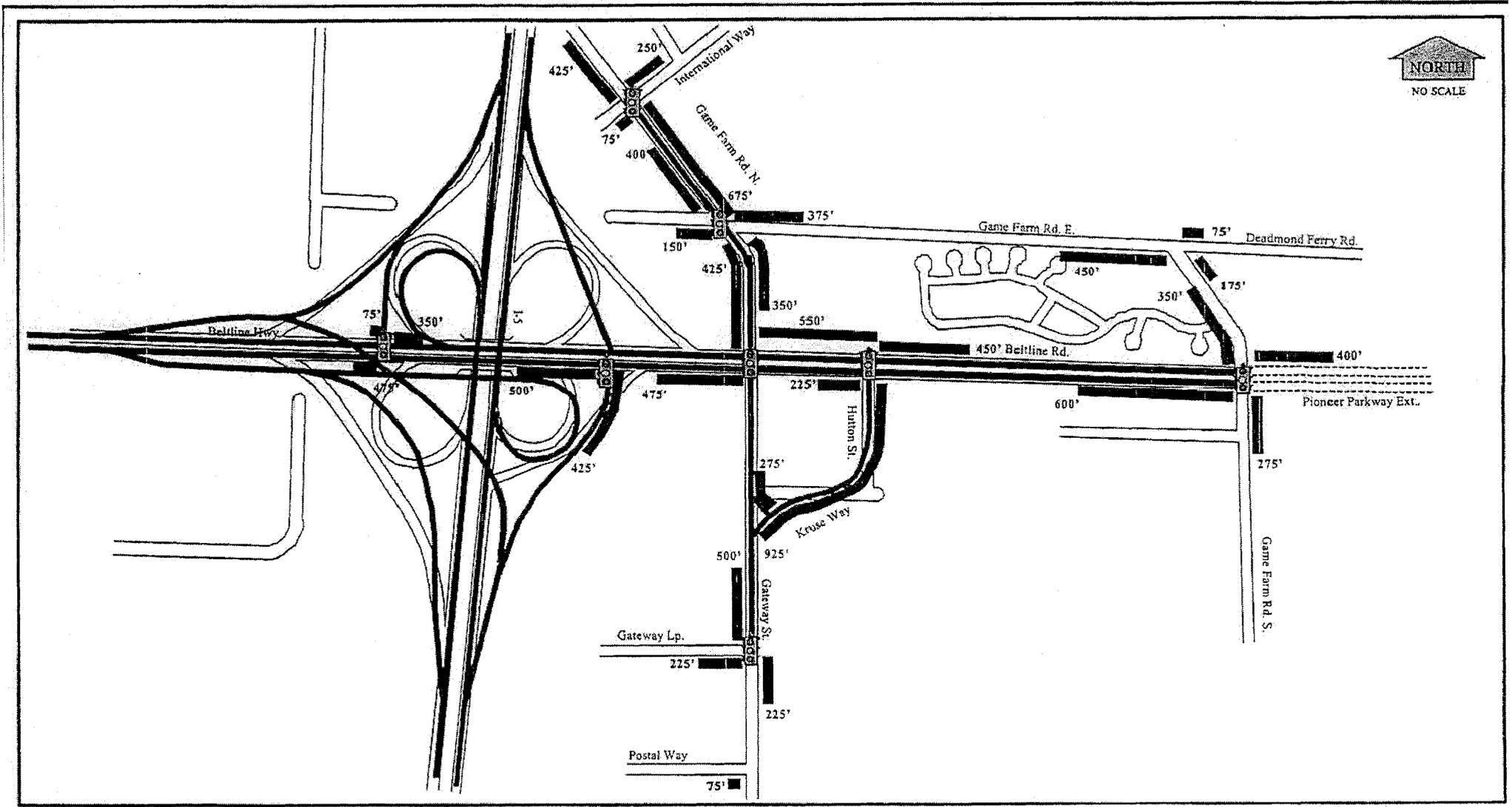
FILE : Beltline Int -.ppt

Prepared By: Peter L. Schuytema

DATE : 2/27/01

Reviewed By: Brian G. Dunn, P.E.

**Figure B-29**



OREGON DEPARTMENT OF TRANSPORTATION

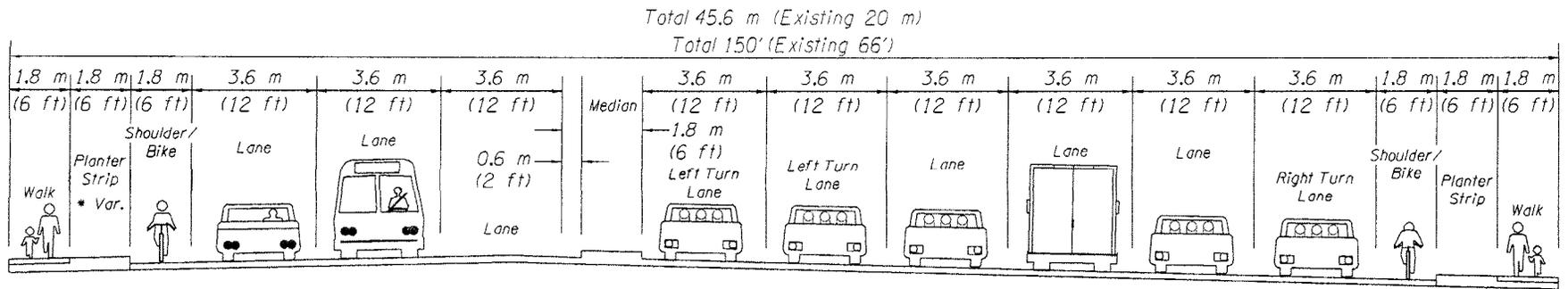
TPAU TRANSPORTATION PLANNING ANALYSIS UNIT

**Alternative 3, Year 2025**  
**Design Hour 95<sup>th</sup> Percentile Queuing Lengths**

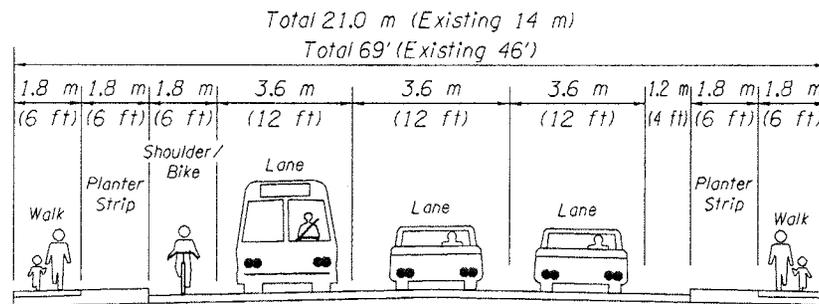
FILE : Beltline Int ~.ppt  
 DATE : 1/12/01

Prepared By: Peter L. Schuytema  
 Reviewed By: Brian G. Dunn, P.E.

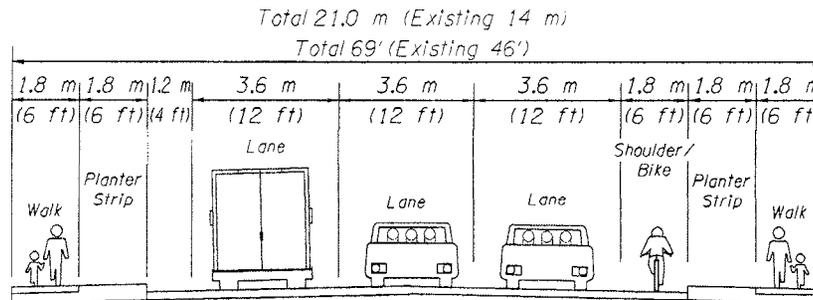
**Figure B-30**



**BELTLINE EAST OF GATEWAY LOOKING WEST**  
\* Planter Strip Narrows At Holiday Inn



GATEWAY (ONEWAY SOUTHBOUND) NORTH OF KRUSE WAY LOOKING NORTH



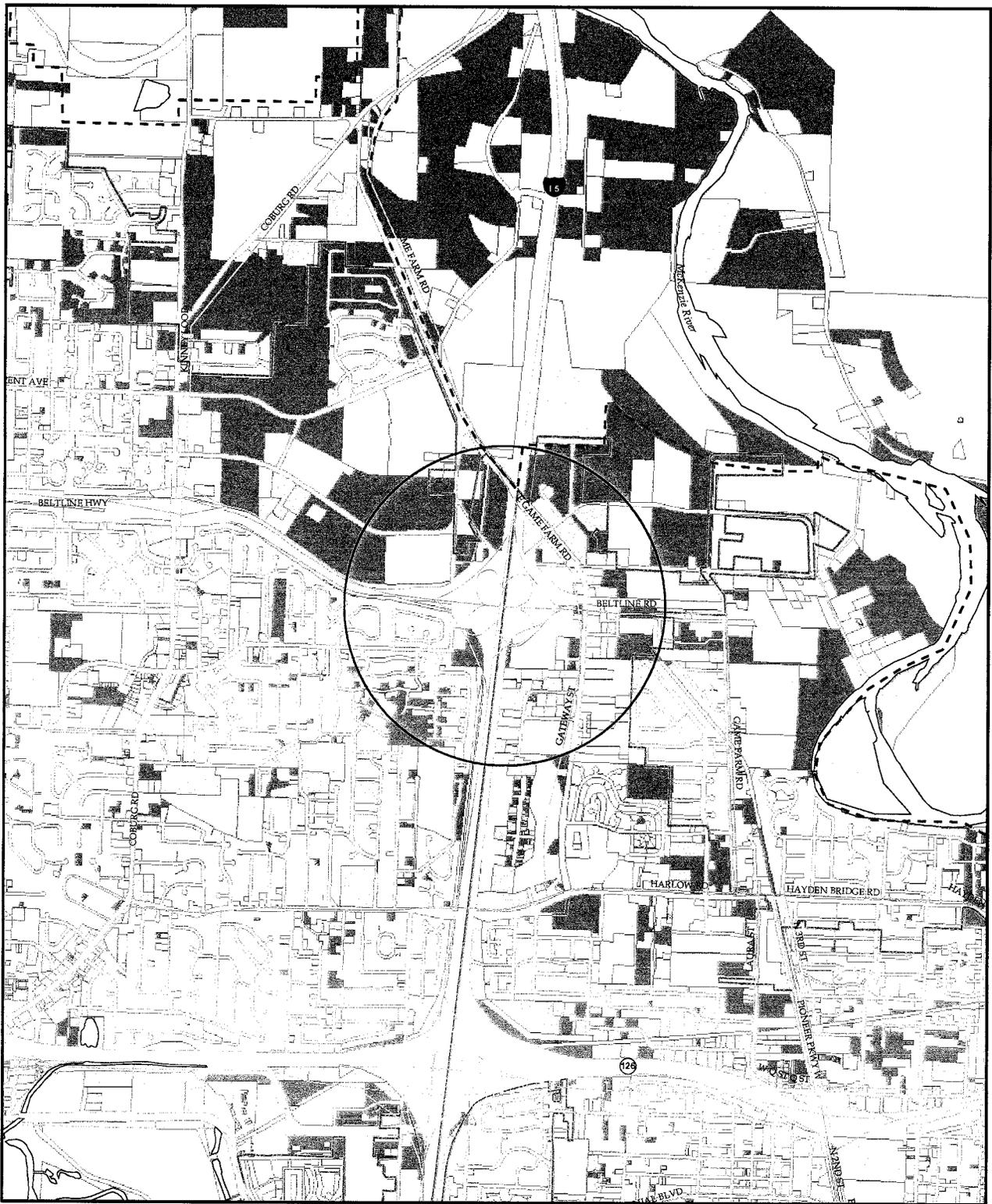
KRUSE WAY / HUTTON ROAD (ONEWAY NORTHBOUND) LOOKING NORTH

**FIGURE B**  
INTERSECTION OPTION 3 - CROSS SECTIONS  
GATEWAY STREET & HUTTON ROAD  
/KRUSE WAY COUPLET  
Not To Scale

APPENDIX C

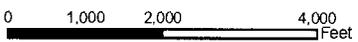
# Land Use Planning Maps

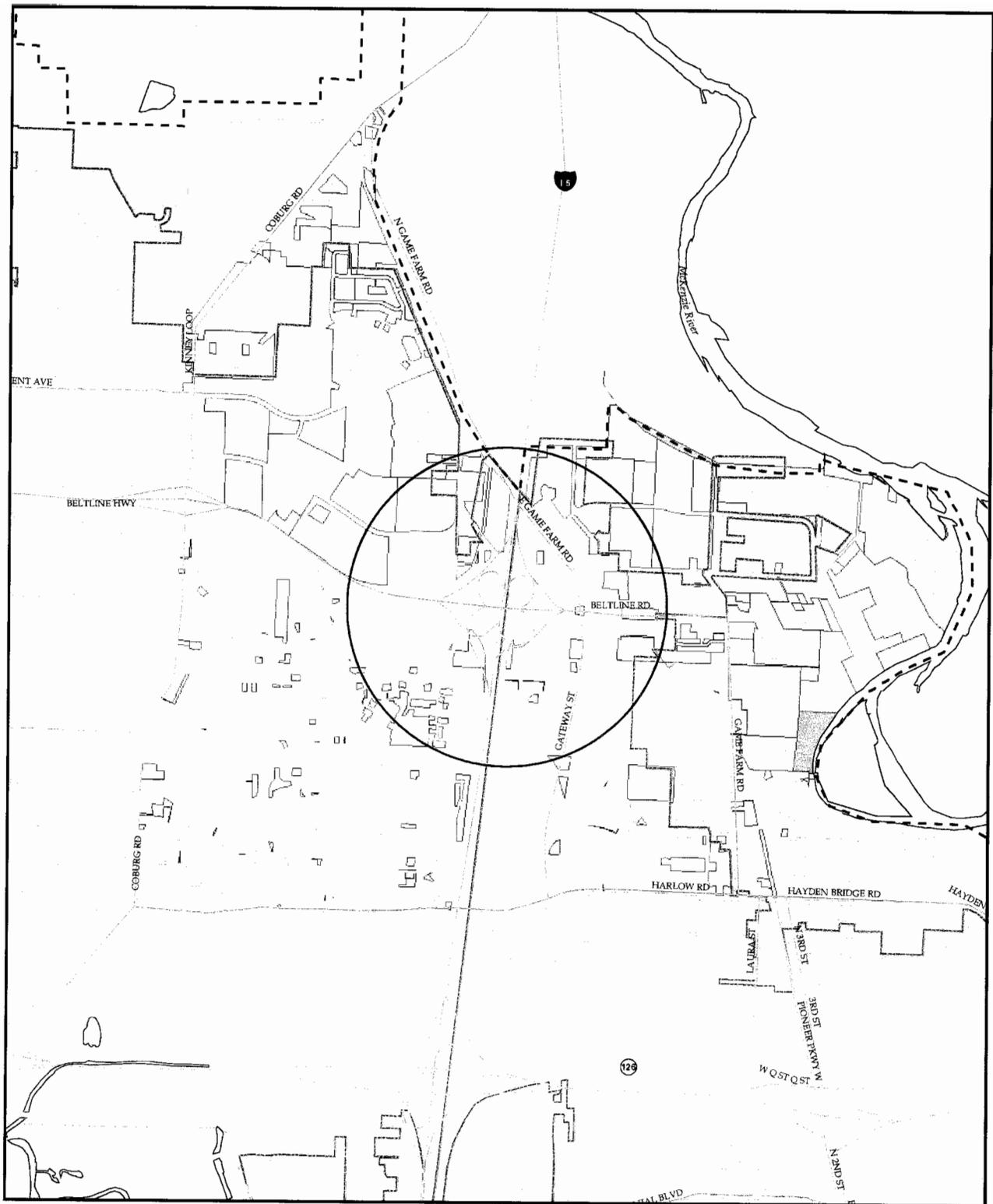
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- Legend**
- Roads
  - ▭ Urban Growth Boundary
  - ⊞ City Limits
  - ⊞ Waterbody
  - ⊞ Interchange Management Area (Half-mile radius)
  - Land Use**
  - ▭ Residential
  - ▭ Commercial
  - ▭ Manufacturing
  - ▭ Communications/Utilities
  - ▭ Cultural/Entertainment/Recreation
  - ▭ Education/Government
  - ▭ Undeveloped/Unknown/Vacant
  - ▭ Agriculture
  - ▭ Transportation
  - ▭ Transportation ROW

**Figure C-1**  
**Existing Land Use Map**





**Legend**

- Roads
- - - Urban Growth Boundary
- ☐ City Limits
- ☉ Waterbody
- Interchange Management Area (Half-mile radius)

**Undeveloped and Agricultural Lands**

- ☐ Vacant / Undeveloped
- ☐ Broadleaf Brush
- ☐ Agriculture
- ☐ Miscellaneous
- ☐ All other tax lots

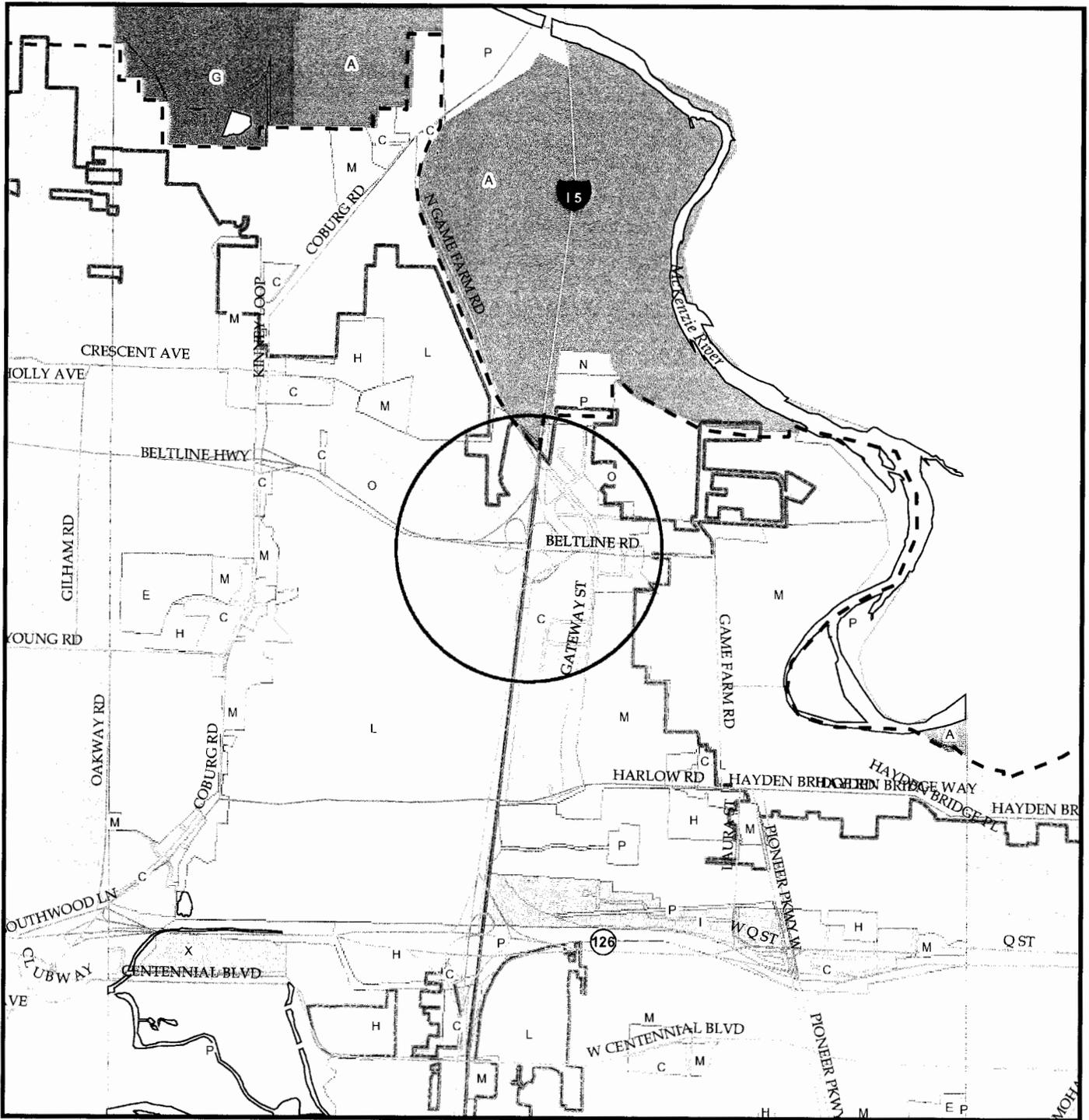
source: LSGG

**Figure C-2**  
**Undeveloped and Agricultural Lands Map**

I-5/BELTLINE  
INTERCHANGE PROJECT

N

0 1,000 2,000 4,000  
Feet



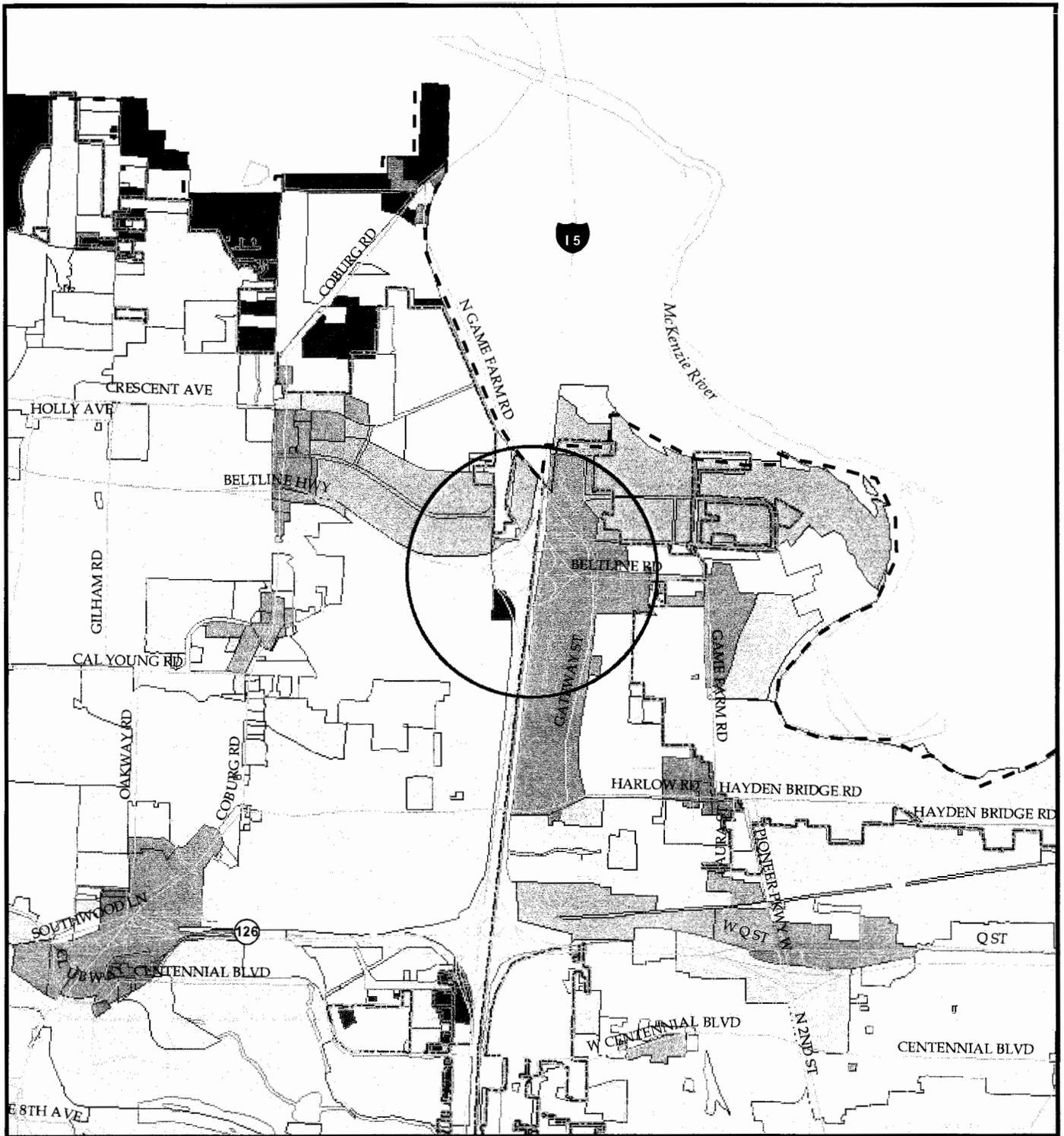
**Figure C-3**  
**Comprehensive Land Use Plan**



**Legend**

- Roads
- - - Urban Growth Boundary
- ▭ City Limits
- ~ Waterbody
- Interchange Management Area (Half-mile radius)
- Comprehensive Land Use Plan**
- ▭ Agriculture - A
- ▭ Campus Industrial - O
- ▭ Light Medium Industrial - I
- ▭ Commercial - C
- ▭ Government - X
- ▭ Education - E
- ▭ University Research - V
- ▭ High Density Residential - H
- ▭ Low Density Residential - L
- ▭ Medium Density Residential - M
- ▭ Natural Resource - N
- ▭ Parks and Open Space - P
- ▭ Sand and Gravel - G

Source: LGOG from Eugene/Springfield Metropolitan General Plan



**Figure C-4**  
**Zoning**



- Zoning**
- Agriculture
- ▣ Industrial
- ▣ Commercial
- ▣ Miscellaneous
- ▣ Residential
- ▣ Public Land / Open Space
- Interchange Management Area (Half-mile radius)
- ⊞ Urban Growth Boundary
- ⊞ City Limits
- ⊞ Waterbody
- Roads**

Source: LCOG, 2004 and City of Springfield, 2005

APPENDIX D

# Review of Local Plans and Policies

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## I-5/Beltline IAMP Policy and Code Review

PREPARED FOR: Tom Boyatt, ODOT  
Terry Cole, ODOT  
Karl Wieseke, ODOT

CC: Donna Kilber-Kennedy/CH2M HILL

PREPARED BY: Kirsten Pennington/CH2M HILL  
Larry Weymouth/CH2M HILL

DATE: July 27, 2005

PROJECT NUMBER: 185446.02.05

### Overview

Interchange Area Management Plan (IAMP) development involves close cooperation between the Oregon Department of Transportation (ODOT) and local government agencies. Management of the I-5/Beltline interchange involves coordination among ODOT, the City of Springfield, and the City of Eugene. State and federal policies and rules, as well as local policies and codes 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 for the future.

The review of state and federal plans presents discussion regarding how the I-5/Beltline IAMP is consistent with relevant state and federal planning documents. The review of local planning documents (begins on page 16) and development codes (begins on page 32) 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/Beltline interchange.

### Federal and State Plans, Policies, and Rules

Through the alternative development and screening process of the environmental assessment, 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, Federal Interchange Policy, OTC Policy for New Interchanges, Oregon Public Transportation Plan, Freight Moves the Oregon Economy, Statewide Planning Goals, the Oregon Transportation Plan (1992), the Oregon Highway Plan (1999). Also receiving particular attention was the project's need to comply with

provisions of the OAR 660-012 (Transportation Planning Rule) and OAR 734-051 relating to interchange area and access management.

### **National Environmental Policy Act (NEPA)**

The IAMP was developed consistent with the NEPA process. Impacts to the natural and human environments were fully evaluated as part of the project, in compliance with the requirements of NEPA. Results of the environmental impacts analysis – including information on noise, air quality, natural resources, and other issues – were documented in an Environmental Assessment prior to the selection of a preferred alternative.

Solutions for the transportation system are required to satisfy travel demand for a 20-year planning horizon. Solutions may be implemented in phases to accommodate incremental improvements throughout the 20-year planning period. It will be necessary to prove continuing validity of the environmental assessment for implementation of subsequent phases.

### **Federal Interchange Policy, 1998**

The I-5/Beltline project is consistent with the Federal Interchange Policy. 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 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 improvement.
- 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 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. 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. Alternatives advanced for the I-5/Beltline Interchange meet the requirements of the policy. Interchange spacing standards of 3 miles in an urban area and 6 miles in a rural area mean that addition of a new interchange in the Gateway area is not available as a project alternative. The project alternatives meet the requirements spelled out in the policy and will accommodate design-year traffic demands as a threshold.

### **OTC Policy for New Interchanges, 1998**

This document established Oregon Transportation Commission Policy for the evaluation and selection of new interchanges on full accessed controlled highways on the state system. With limited funding and increasing requests for new interchanges on the state system, the policy establishes procedures for evaluating proposed interchanges. New interchanges must demonstrate significant statewide or regional benefit. They must have significant local government and public support and be consistent with local transportation plans. They must conform to ODOT design and spacing standards. They may be proposed only after all other alternatives, including construction of new arterials have been evaluated and discarded as not viable.

Several of the requirements outlined above would preclude the development of a new interchange in the vicinity of the Gateway area. It would be very difficult to demonstrate a significant statewide or regional benefit to a new interchange adjacent to the existing interchange that would primarily serve to help alleviate traffic problems in the Gateway area. A new interchange is not currently a part of local transportation plans. Given the cost, it would be difficult to generate support among all local jurisdictions in lieu of other needed projects already in local transportation plans. Finally, a second interchange serving this area would not meet ODOT and FHWA spacing standards. Improvements to the existing interchange will serve transportation needs at significantly less cost than a new interchange and without violating the stringent criteria established in the interest of wise use of funds.

### **Statewide Planning Goals**

Relevant statewide planning goals include Goal 2 (Land Use Planning), Goal 11 (Public Facilities Planning), Goal 12 (Transportation) and Goal 14 (Urbanization). Goal 2 requires that a land use planning process and policy framework be established as a basis for all decisions and actions relating to the use of land. Goal 11 requires cities and counties to plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development. Goal 12 requires cities, counties, metropolitan planning organizations, and ODOT to provide and encourage a safe, convenient and economic transportation system; this is the Goal implemented through the Transportation Planning Rule. Goal 14 regulates activities within urban growth boundaries.

The Eugene-Springfield Metro Plan and implementing measures have been acknowledged by the Oregon Department of Land Conservation and Development as being in compliance with the Statewide Planning Goals. Beginning in May 1999, the Revised Draft TransPlan (Eugene-Springfield Metropolitan Area Transportation Plan), and concurrent amendments to the Metro Plan to revise the Transportation Element and make related changes consistent with TransPlan, went through an extensive review by the public and adopting officials.

TransPlan was adopted by the Lane Council of Governments Board in June 2001 and by the local jurisdictions in the fall of 2001, effective November 31, 2001, and published as the December 2001 TransPlan. The updated TransPlan and concurrent Metro Plan amendments have been acknowledged for compliance with Statewide Planning Goals (ORS 195, 196, 197). TransPlan and the Metro Plan are in essence consistent with each other at this time. Thus, project compliance with the Metro Plan and refinement plans indicates compliance with Statewide Planning Goals.

### **Oregon Transportation Plan, 1992**

The I-5/Beltline Project was developed to be consistent with the Oregon Transportation Plan – specifically, the Oregon Highway Plan, which is a modal element of the OTP (see next section). The purpose of the OTP is to guide the development of a safe, convenient, and efficient transportation system that promotes economic prosperity and livability for all Oregonians. In the OTP, Oregon’s population was projected to increase from 2.8 million in 1990 to 3.8 million in 2012 (this projection is most recently revised to 4.3 million by 2020). The OTP sets broad policies for the state transportation system. The OTP designates I-5 as an important part of the transportation system and notes its importance in the freight system. The plan defines a minimum level of service (now termed mobility standard) for highways that vary by metropolitan areas. The OTP did not specifically address improvements to I-5 but offered a broad policy framework and standards for improving state highway systems. The OTP predicted that truck vehicle miles traveled (VMT) would grow at approximately 2.5 percent per year between 1990 and 2010 (1.1 billion VMT in 1990 to 1.8 billion VMT by 2010).

The OTP encourages improvements to local transportation systems that allow local traffic to travel around communities without having to use the state highway system. Among other general issues relating to highway systems, the OTP identifies the need to establish Intelligent Vehicle Highway Systems (now termed Intelligent Transportation Systems or ITS) on I-5 and other highways to increase system capacity, improve motorist information, and improve travel efficiency. The OTP also promotes highway safety standards for trucks and truck operators and the maintenance, preservation, and improvement of the highway system in good order to provide infrastructure for the efficient movement of goods by freight. The IAMP and recommended project is consistent with the OTP by providing safe and efficient movement of passengers and freight.

### **Oregon Highway Plan, 1999**

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 OHP impacts the I-5/Beltline interchange by establishing interchange spacing requirements, investment priorities, access management policy, and mobility standards. The interchange spacing standards of the OHP for an interstate freeway to freeway connection are the same as those of the Federal Interstate Policy — 3 miles in an urban area, and 6 miles in a rural area. The OHP highway mobility standards for different highway categories use volume to capacity (v/c) ratios to measure performance. For interstate highways, including I-5, the v/c ratio in rural areas is 0.70, compared to 0.85 for Beltline west of Gateway Street and 0.85 for Beltline to the east. Under limited funding scenarios, the Major Investment Policy, which is part of the OHP, stipulates that infrastructure improvements will be undertaken only to address critical safety problems and critical levels of congestion. Transportation studies for the I-5/Beltline interchange show that safety and congestion will be critical within the design horizon. The IAMP is consistent with the following policies: investment policy, interchange policy, access management policy, and mobility.

The Oregon Highway Plan (OHP) includes several policies that were addressed during development of the I-5/Beltline Interchange Project. The policies applicable to this project and most relevant to land use findings are discussed below. In many cases, the information presented for a particular policy is also relevant to other policies discussed.

**Policy 1A: State Highway Classification System.** This policy categorizes the state highways to guide planning, management, and investment decisions regarding state highway facilities. The policy declares Interstate Highways are major freight routes and their objective is to provide mobility; the management objective is to provide for safe and efficient high-speed continuous-flow operation in urban and rural areas. Statewide Highways primarily provide inter-urban and inter-regional mobility and connections to larger urban areas, and secondarily provide for intra-urban and intra-regional trips. The management objective is the same as Interstate Highways, except in constrained and urban areas where interruptions to flow should be minimal.

*Findings:* The OHP lists the classification of state highways. I-5 is an Interstate Highway; Beltline Highway west of I-5 is a Highway of Statewide Significance. Beltline Highway between I-5 and Gateway Street is classified as a Regional Highway. Beltline Road east of Gateway Street is owned by the City of Springfield and is an Urban Arterial. The I-5/Beltline Interchange Project supports the standards that qualify I-5 as an Interstate Highway and Beltline Highway as a State Highway. Correction of the functional and operational deficiencies of the interchange will facilitate freight mobility and inter-urban travel. The project does not conflict with the portion of Beltline Road designated as an Urban Arterial because reconstruction of the Beltline/Gateway Intersection will meet highway mobility standards per Policy 1F for the local street system as described below. Data substantiating these findings are presented below.

The existing I-5/Beltline Interchange has geometric, operational, and safety deficiencies. Within the next 20 years, the number of daily vehicle trips traversing the interchange (I-5 at Beltline Road) is expected to increase from 93,000 trips to 120,000 trips per day in 2015

(according to the Beltline Facility Plan), an increase of 29 percent. Transportation studies for the Beltline Interchange (*Transportation Operational Analysis Report for the I-5/Beltline Interchange*, ODOT, November 2001) show that safety and congestion levels will be inconsistent with stated management objectives within the design horizon. The OHP highway mobility standards for different highway categories use volume to capacity (v/c) ratios to measure performance. A v/c ratio is the peak hour traffic volume (measured in vehicles per hour [vph]) on a facility divided by the maximum volume that the facility can handle. For example, when a highway segment's v/c ratio equals 0.85, peak hour traffic uses 85 percent of a highway's capacity and 15 percent of the capacity is not used. If the traffic volume entering a highway section exceeds 1.00, traffic backups will form and lengthen. When a v/c ratio is less than but close to 1.0 (for example, 0.95), traffic flow becomes unstable.

The v/c standard for I-5 and its interchange components is 0.80 (OHP, Policy 1F). For Beltline Highway and its components, the v/c standard is 0.85. These standards are compared against the predicted operations of each future alternative to evaluate its performance.

The City of Springfield's level-of-service (LOS) "D" performance standard was equated to a v/c standard of 0.85 for comparative purposes. The City of Springfield uses LOS standards rather than v/c ratio standards. LOS A represents the best operating conditions and LOS F the worst. Each LOS designation represents a range of operating conditions.

By year 2025 under the No-Build alternative, four of six weaving areas and three of six ramp junctions will exceed the mobility standards; whereas, only the problematic weaving area on I-5 northbound south of Beltline in year 2000 exceeded the mobility standard with a v/c ratio of 0.87, increasing to 1.05 projected for year 2005 and 1.37 in year 2025 (Table 4-9 of the EA). The Beltline/Gateway, Beltline/Hutton, and Gateway/Kruse intersections exceeded the mobility standard of 0.85 in year 2000 with v/c ratios of 0.91, 2.0+, and 2.0+, respectively. Gateway/Postal will exceed mobility standards in 2005 with a v/c ratio of 2.0+. In year 2025, projections are that seven of the nine arterial intersections studied as part of the project will exceed the mobility standard under the No-Build alternative. By 2025 all but two of the study area intersections are expected to operate unacceptably with the No-Build alternative. Traffic demands at the signalized Beltline/Gateway Intersection are expected to increase the v/c ratio to 1.68 (LOS F) for several hours, and traffic would back up along all four of the intersection's approaches. These conditions would also impact movements on several of the I-5/Beltline Interchange ramps.

The selected Interchange Build Alternative and Intersection Option 3 would meet acceptable mobility standards (0.80 v/c ratio) in year 2025 at all I-5 weaving areas and ramp junctions (see Tables 4-11 and 4-12 in the EA). The weaving area on I-5 northbound south of Beltline would have a v/c ratio of 0.63. Seven of the nine arterial intersections would meet mobility standards in 2025, with the exceptions being the Gateway/Postal Intersection and Game Farm Road South/East Intersection. Therefore, the project would provide mobility that is consistent with the management objectives of Policy 1A for the State Highway Classification System in that performance will be maintained and safety improved.

**Policy 1B. Land Use and Transportation.** This policy recognizes that State and local governments must work together and share responsibility for the road system while

providing safety, efficiency, livability, and economic viability for all citizens. The land use and transportation policy addresses the relationship between the highway and patterns of development both on and off the highway. It emphasizes development patterns that maintain state highways for regional and intercity mobility, and compact development patterns that depend less on state highways than linear development for access and local circulation.

The Eugene-Springfield Metropolitan Area General Plan (Metro Plan) includes the Eugene-Springfield Transportation System Plan (TransPlan). The TransPlan, Gateway Refinement Plan, and Willakenzie Area Plan were reviewed for potential conflicts with the I-5/Beltline Interchange Build Alternative, including any conflicts that would require a conditional use permit or other plan amendment. In addition, project alternatives were developed with consideration of how these various plans would reduce reliance on the automobile. Regional studies reviewed included the Willamette Valley Transportation Strategy, Commuting in the Willamette Valley, and the Bus Rapid Transit Concept-Major Investment Study Final Report.

*Findings:* The I-5/Beltline project is consistent with local land use and transportation plans (i.e., Metro Plan, TransPlan, Gateway Refinement Plan, and Willakenzie Area Plan). These plans in turn are consistent with Policy 1B in that they promote the orderly development of land and compact development patterns, and encourage the availability and use of transportation alternatives. The transportation modeling used for this project is consistent with TransPlan, beginning with the fundamental land use assumptions contained in TransPlan. Land use issues related to the Metro Plan and TransPlan were identified in the Land Use and Regulatory Compliance technical memorandum (CH2M HILL, July 17, 2000) and the Plans, Policies, and Study Review Summary (CH2M HILL, February 18, 2000), which became the basis for the analyses in the Land Use Technical Report (CH2M HILL, February 2002) and related sections of the EA for the project. The Oregon Department of Transportation and the City of Springfield have entered into an Interagency Agreement to monitor conditions and implement phases of this project. Data substantiating these findings is presented below.

The local transportation system plan (TransPlan) projects a need for transportation improvements to support planned land use in the project area. As part of its projection, TransPlan includes modeling of specific transportation demand management (TDM) measures, including bus rapid transit (BRT). The TDM measures that were developed in the TransPlan process were factored into the transportation analysis for this project through the use of Lane Council of Governments' (LCOG) TransPlan travel demand model. Transportation modeling also specifically considered a financially constrained system, programmed and unprogrammed projects, and the differences in traffic patterns and volumes with and without the City of Springfield Pioneer Parkway Extension project. Modeling for this project did not include nodal development, which was not in the LCOG model when the traffic analysis was done for this project.

There are potential impacts from the proposed PeaceHealth development on the operation of the interchange. In the case of PeaceHealth and other potential development of vacant land and redevelopment of existing land, there is likely to be some variation of the actual trips resulting from the development when compared to the planned trips. Resolving this issue is primarily addressed through evaluating the known traffic impacts. A secondary

method of resolving the issue is through ODOT's participation in the land use process through the enforcement of Goal 12 and the Transportation Planning Rule.

A preliminary Traffic Impact Assessment (TIA) (JRH Engineering, September 24, 2002) assumed a plan amendment and development of 99 acres at the proposed PeaceHealth site. The development assumed a combination of medium density residential and mixed use. The site was analyzed during August 2002 and assumed 709 apartments, 200 assisted living units, a 1,445,000 square-foot hospital, and 254,000 square feet of office space. The preliminary traffic numbers for the total site modeled for the year 2018 at the 4:00pm peak hour are estimated at 767 inbound trips and 1,555 outbound trips. The results of the analysis indicated that mobility standard (0.85 v/c ratio or LOS D) for all intersections in the interchange area would be met for Intersection Option 3. ODOT has reviewed and concurs with the findings. An additional analysis was performed using the roadway configuration shown in the EA, without the access modifications included in the Phase 2 Implementation proposal. The analysis showed all intersections would meet mobility standards except for the Beltline/Gateway intersection. The calculated v/c ratio for 2025 was 0.90, exceeding the maximum ratio of 0.85. The year of failure would be approximately 2023 without additional minor traffic impact mitigation, which ODOT has determined to be feasible by modifying signal timing, turning movements, and/or travel lanes.

In accordance with the Statewide Planning Goals and the Major Investment Policy stated in the Oregon Highway Plan, ODOT has been working closely with the City of Springfield to evaluate the zone change application that would permit the RiverBend Regional Medical Center complex (PeaceHealth Hospital and other facilities) development according to Goal 12, the Transportation Planning Rule (TPR), and the Gateway Refinement Plan goals and policies. ODOT has expressed the expectation that the City will ensure its land use decisions will not cause the I-5/Beltline Interchange to operate below the adopted State performance standard, or to operate in such a way as to create a safety hazard to those using the facility through 2025. A threshold test of the EA's traffic analysis recently validated the results relative to the RiverBend development.

The Draft Springfield Commercial Lands Study designates land uses and specifies regional development nodes that can affect the regional transportation system and the I-5/Beltline Interchange in particular. Nodes are to be zoned such that more local trips will occur at nodes than across nodes. The I-5/Beltline interchange area is designated for such nodal development. Traffic modeling was not able to account for nodal development at the time the project was analyzed; however, the model has since been updated and nodal development will be included in modeling used for final design of the project. Nevertheless, four traffic studies were done for specific developments in the area, which provided input on localized traffic demands that were accounted for in project planning. These traffic studies are compiled in the Plans, Policies, and Study Review Summary (CH2M HILL, February 18, 2000) and include the Gateway Mall Theater Traffic Impact Analysis (JRH Engineering, October 1997), North Gateway Traffic Impact Analysis Update (JRH Engineering, October 1998), Traffic Impact Analysis for Sports Center Complex (Branch Engineering, October 1998), and Traffic Impacts Analysis for Lube-It USA (Branch Engineering, May 1997).

The selected I-5/Beltline Interchange Build Alternative would require the acquisition of 0.4 hectare (1 acre) of land zoned for exclusive farm use (EFU) outside the Eugene-

Springfield Urban Growth Boundary (UGB). However, the parcel of land to be acquired is entirely adjacent to existing roadway right-of-way, the acquisition would not result in creation of new parcels, and no buildings would be displaced or removed. This use is permitted outright under ORS 215.213(1)(n). By definition in OAR 660-012-0065 (Transportation Planning Rule, Transportation Improvements on Rural Lands), such uses are consistent with Goal 3 (Agricultural Lands), Goal 4 (Forest Lands), Goal 11 (Public Facilities and Services), and Goal 14 (Urbanization). The Metro Plan restricts development beyond the Urban Growth Boundary (UGB); however, the 1-acre of EFU-zoned land outside of the existing UGB is permitted outright for this transportation improvement.

In addition, the selected I-5/Beltline Interchange Build Alternative would require the acquisition of about 7.3 hectares (18.0 acres) of land zoned for campus industrial, residential, or commercial use. Conversions of land from residential to nonresidential use is discouraged in the Metro Plan (III-A-6, #20). The selected modified Intersection Option 3 would result in the conversion of small amounts of existing residential land (0.04 ha or 0.1 ac) and commercial land (1.12 ha or 2.8 ac) to transportation uses. Because there is approximately 277 hectares (685 acres) of vacant or agricultural land designated for development in the project study area, the relatively small amount of land acquisition and changes in land use would not adversely affect the overall pattern, availability, or use of residential and commercial lands in the study area.

**Policy 1G: Major Improvements.** This policy directs ODOT and local jurisdictions to protect and improve the efficiency of the highway system before adding new highway facilities. Action 1G.1, which takes precedence over the other actions in Policy 1G, includes the following prioritized list of improvement measures:

1. Protect the existing system
2. **Improve efficiency and capacity** of existing highway facilities
3. Add capacity to the existing system
4. Add new facilities to the system

**Findings:** The I-5/Beltline Interchange Project does not add new facilities to increase capacity but rather helps avoid or delay the need to add new facilities (for example, new interchange, highway, or bypass) to the system. The selected build alternative applies Measure 3 (above) and would satisfy Policy 1G and Action 1G.1 of the OHP in that the higher priority Measures 1 and 2 already have been implemented, as substantiated below.

**Measure 1: Protect the Existing System.** Actions to protect the existing system per Measure 1 have been exhausted. Since the opening of the interchange in 1968, changes in land use have affected its function. The immediate area surrounding the interchange is now almost fully developed, and access is currently controlled. Land use and transportation in the area is regulated by the Metro Plan. The TDM measures that have already been developed in TransPlan include ridesharing, alternative modes, and mass transit. The TransPlan elements were factored into the transportation analysis through the use of LCOG's TransPlan travel demand model. The analysis showed that the highest attainable levels of TDM as provided in TransPlan would provide very little reduction in vehicular traffic at the I-5/Beltline Interchange (*Transportation Operational Analysis Report for the I-5/Beltline Interchange*, ODOT, November 2001). TransPlan has found that voluntary TDM strategies, such as the employer-paid bus pass program, can reduce vehicle miles traveled

(VMT) by 3 percent, and that mandatory strategies, such as mandatory employer support, can reduce VMT up to 10 percent.

The current and projected v/c ratios for key elements of the interchange area (as presented earlier under Policy 1A) confirm that measures beyond protection of the existing system are needed. By 2025, the I-5/Beltline Highway major weaving sections are expected to be failing, along with most of the major intersections in the study area. These problems are too serious to be solved through improvements to traffic operations, such as signal timing optimization. By 2025 traffic volumes measured as vehicles per day (vpd) on Beltline east of I-5 are expected to increase almost 55 percent (from 10,100 to 15,600 vpd); Gateway, to the north of Beltline, is expected to see traffic grow by more than 95 percent (from 13,400 to 26,300 vpd), and just south of Beltline, is predicted to grow by almost 85 percent (from 28,200 to 51,600 vpd). By 2025 all but two of the study area intersections are expected to operate unacceptably with the No Build Alternative. Traffic demands at the signalized Beltline/Gateway Intersection are expected to increase the v/c ratio to 1.68 (LOS F) for several hours, and traffic would back up along all four of the intersection's approaches. These conditions would also impact movements on several of the I-5/Beltline Interchange ramps. Traffic backed up along the I-5 off-ramps could extend to the freeway itself, resulting in potentially unsafe conditions. Vehicle backups at the Beltline/Gateway Intersection would extend 500 feet to the west, affecting I-5's northbound off-ramp operations and impeding eastbound traffic flow along Beltline Highway. Under the No Build Alternative, northbound backups would extend about 1,100 feet to the south, inhibiting driveways along Gateway.

**Measure 2: Improve Efficiency and Capacity of Existing Highway Facilities.** Minor improvements consistent with Measure 2 have already been implemented for this area. For example, the efficiency and capacity of the existing facilities have been improved and maximized through the addition of auxiliary lanes to I-5 in 1999. Transportation studies for the I-5/Beltline Interchange (see *Transportation Operational Analysis Report for the I-5/Beltline Interchange*, ODOT, November 2001) show that these issues cannot be effectively resolved through any typical transportation system management (TSM) measures such as ramp metering, HOV lanes, or fringe parking. The project includes improvements to bicycle/pedestrian facilities by providing a crossing of I-5 and a separated bike lane along I-5 and Beltline Highway which will address TransPlan's plan for more bikeways.

**Measure 3: Add Capacity to the Existing System.** To resolve the geometric, operational, and safety deficiencies of the I-5/Beltline Interchange and Beltline Highway now requires consideration of major roadway improvements that add capacity to the existing highway facilities. I-5 north of Beltline and several of the intersections adjacent to the interchange are currently operating over volume-to-capacity standards. The TDM/TSM methods of Measures 1 and 2 alone have not eliminated the need for making major improvements that add capacity to the system, per Measure 3 and the focus of the proposed I-5/Beltline Interchange Project.

The proposed interchange form consists of a partial cloverleaf-A (loop ramps in advance of the overcrossing structure of I-5) with a single exit and entrance ramps from and to the I-5 mainline. The highest volume movement is a high speed directional ramp for northbound I-5 to westbound Beltline movement. Off-roadway bicycle/pedestrian facilities are proposed parallel to I-5 connecting to Game Farm Road West to the north and Harlow Road

to the south. In addition, there is a proposed bicycle/pedestrian overcrossing of I-5 providing connectivity from Eugene to Springfield at Postal Way.

The projected improvements to the v/c ratio from the selected Interchange Build Alternative and Intersection Option 3 (see discussion under Policy 1A) would meet the goals of the project and the highway management objectives.

**Action 1G.4.** This action requires that the design of major improvements for limited access protect through-traffic movements. Also required is that the State develop and implement an access management intergovernmental agreement (IGA) that requires the local jurisdiction to adopt supporting actions in its comprehensive plan. The City of Springfield's Gateway Refinement Plan calls for access management along Gateway Street. In coordination with State and City staff, accesses were reviewed and preliminary access locations identified. Preliminary private accesses were identified for elimination and consolidation to improve safety and operations. Final access locations require agreement between the City of Springfield and ODOT, and documentation in an interchange management plan. As part of developing an access management plan, ODOT would enter into one or more IGAs with the City of Springfield.

A recent IGA (#20525) executed between ODOT and the City of Springfield specifies performance criteria (triggers) for the implementation of Phase 2 improvements that are acceptable to FHWA, ODOT, and the City of Springfield. Beltline Highway's traffic queues and v/c ratios will be measured to evaluate the effectiveness and efficiency, respectively, of the interchange/intersection system (see discussion under Policy 2F). Included in the IGA are provisions consistent with Action 1G.4. The IGA specifies the roles, responsibilities, triggers, and actions to be taken to ensure safety and operational effectiveness of the I-5/Beltline Interchange for the traveling public.

**Policy 2F: Traffic Safety.** It is the policy of the State of Oregon to continually improve safety for all users of the highway system. During the 4-year period from January 1994 through December 1998, more than 175 crashes in the I-5/Beltline Interchange area were reported to ODOT. These included crashes on the I-5 mainline, the interchange ramps, and Beltline up to but not including the Beltline/Gateway Intersection. About 67 percent of the crashes involved injuries to some extent, including one pedestrian fatality. The ratio of daytime to nighttime accidents was 2.5 to 1. ODOT's 1999 safety improvement project that added a northbound freeway exit lane to the interchange was intended to make intersection operational improvements at eastbound Beltline Road and Gateway Street. About 64 of the reported crashes, or 37 percent, may have been avoided during the reporting period had the improvements been in place earlier. This interchange area's crash rate is in the state's highest 10 percent of all crash locations.

**Findings:** The selected build alternative improves traffic safety per Policy 2F, implements cost-effective solutions per Action 2F.1, and includes a monitoring and evaluation process per Action 2F.2. Because the selected build alternative would result in v/c ratios within the mobility standards for the interchange weaving areas and ramp junctions (see Table 4-11 of the EA), improvements in traffic safety are anticipated. Information provided below substantiates these findings.

Action 2F.1 requires an improvement project to develop and implement the most cost-effective solutions to high priority safety problems. A Value Engineering (VE) study provided an independent peer review and analysis of the project designs to determine if there were more economical or efficient means of achieving project goals. The VE Study recommended a number of revisions to the Build Alternative and Intersection Options that were advanced for public comment and review in the environmental assessment. The results of the study show reduced right-of-way costs and improved traffic circulation patterns. The VE Study recommended the construction of public access roads in the quadrant north of Beltline Road and east of Gateway Street. VE Option A-10 for Intersection Option 3 was selected. With this option there would be no access from the north leg of the signalized Beltline/Hutton Intersection. The option would have the advantage of reducing right-of-way costs by providing legal circulation to Shari's Restaurant and to the ARCO/AM-PM Mini-Mart. While the new public access roads would require portions of the parcels of existing businesses, they would result in no displacements and would eliminate the displacement of Shari's and the ARCO/AM-PM Mini-Mart.

Action 2F.2 of the Traffic Safety policy applies because safety is a stated objective of the I-5/Beltline Interchange Project. The action requires the project to include goals and a process to evaluate the outcome and further refine the project selection and solution process. The goal of reducing the above crash rate by improving v/c ratios (reducing congestion) and facilitating weave movements was incorporated in the development of the selected build alternative for the I-5/Beltline Interchange Project. Regarding evaluation of the project outcomes, ODOT has an ongoing program of compiling crash data. The state highway system is divided into 5-mile segments, and a tally is made of the number of fatal and serious injury crashes over a 3-year period.

In addition, the IGA between ODOT and the City of Springfield (#20525) includes provisions for monitoring and phased implementation of the project. The intent of the IGA along with the I-5/Beltline Project Monitoring and Implementation Plan is to determine when capital improvements at and near the Beltline /Gateway Intersection will be required so as not to compromise the investment in the I-5/Beltline Interchange, and to support safe and efficient traffic conditions within the interchange area. Once the interchange ramps are programmed in the STIP and the Pioneer Parkway Extension is constructed by the City of Springfield, ODOT and the City of Springfield will begin annual monitoring of two key criteria for the Beltline /Gateway Intersection. Specifically, Beltline Highway's traffic queues and v/c ratios will be measured to evaluate the effectiveness and efficiency, respectively, of the interchange and intersections. When all of the Phase II improvements, as defined in the I-5/Beltline Interchange Environmental Assessment, are constructed, monitoring may cease.

**Policy 3C: Interchange Access Management Areas.** This policy states that the State of Oregon will plan for and manage grade-separated interchange areas to ensure safety and efficient operation between connecting roadways. The purpose of the I-5/Beltline Interchange Project is to address geometric, operational, and safety deficiencies in the interchange area, including intersection operations at the Beltline/Gateway Intersection. In addition, Action 3C.2 of this policy requires that the project consider the need for transit and park-and-ride facilities, along with the effect on pedestrian and bicycle traffic. The selected Interchange Build Alternative includes addition of a bicycle/pedestrian crossing of I-5 and an improved

trail system. The project is designed to accommodate the safe and efficient operation of transit vehicles, consistent with TransPlan programs to expand transit service, build park-and-ride lots, and add bicycle/pedestrian facilities in the area. Lane Transit District was a member of the Stakeholder Working Group for the project and will continue to provide input during final design of the project, particularly in regard to bus rapid transit.

**Findings:** The improvements proposed as part of this project are compatible with land use and zoning in adjacent areas and by design are consistent with Policy 3C and Action 3C.2, as substantiated below.

Because of the proximity of the Beltline/Gateway Intersection to the interstate, future traffic forecasts predict that the traffic queues at the local intersection will adversely affect the performance of the I-5/Beltline Interchange northbound ramp terminal. That is, under the year 2025 No Build alternative, vehicle backups at the Beltline/Gateway Intersection would extend 500 feet to the west, affecting I-5's northbound off-ramp operations and impeding eastbound traffic flow along Beltline Highway. Northbound backups would extend about 1,100 feet to the south, inhibiting driveways along Gateway. In addition, there is a great deal of local traffic concentrated at this intersection creating problems for bicycles, pedestrians and transit. AASHTO design principles were applied in combination with OHP policies regarding interchanges, mobility, major investments, and access management in the development of the selected build alternative.

With Intersection Option 3, 2025 design hour traffic backups extending from the Beltline/Gateway Intersection would be contained between the intersection and each of its four adjacent signalized intersections. The Gateway/Kruse Way Intersection would allow southbound Gateway movements to bypass the traffic signal, eliminating southbound backups except for left-turning vehicles. The Beltline/Hutton Intersection 2025 design northbound traffic backup would extend about 925 feet to the south, but since Hutton would be one-way northbound, driveway movements would be improved.

Access management would be governed by the City of Springfield in the Beltline/Gateway Intersection area, although ODOT may exercise existing authority through the Oregon Transportation Planning Rule (TPR) to manage congestion and safety problems. This may include negotiating access management features as a condition for future site development and redevelopment approval as part of a zone change or comprehensive land use plan amendment. A preliminary access management concept has been developed for this project. The City of Springfield does call for access management along Gateway Street as part of the Gateway Refinement plan. In coordination with State and City staff, accesses have been reviewed and preliminary access locations identified. Preliminary private access locations have been identified for elimination and consolidation to improve safety and operations. Final access locations will be agreed to between the City of Springfield and ODOT, and documented in an interchange management plan.

With the selection of Intersection Option 3, local street circulation would be altered through the creation of a one-way couplet section to the south of Beltline east of I-5. Gateway would be changed from two-way travel to southbound only to a point just to the south of existing Kruse Way. Kruse Way and Hutton would become one-way north. With this configuration, it is possible to accommodate left turns for the eastbound Beltline traffic onto North Game

Farm Road as well as maintain a more direct point of access to properties in the SE quadrant of the Beltline/Gateway intersection.

**Policy 4B: Alternative Passenger Modes.** This policy states that the State of Oregon will advance and support alternative passenger transportation systems where travel demand, land use, and other factors indicate the potential for their successful and effective development. Alternative modes typically include pedestrian, bicycle, and transit. Local plans include provisions for alternative passenger modes consistent with Policy 4B.

*Findings:* Local refinement plans include policies and standards related to pedestrian and bicycle facilities, as well as corridor alternatives for new bicycle and pedestrian facilities. The selected build alternative addresses the alternative passenger modes of bicycle, pedestrian, and mass transit, and includes facilities shown in local plans, consistent with Policy 4B. Information substantiating these findings is presented below.

The I-5/Beltline Interchange Project also is designed to accommodate the safe and efficient operation of transit vehicles. TransPlan includes a series of capital investment actions for transit projects. Included are short range projects that include three park and ride lots at locations to be determined along major corridors and passenger boarding improvements at various locations. Long-range projects include a Beltline/Gateway transfer station with a possible park and ride lot and six additional park and ride lots along major corridors at locations to be determined. LTD's Route 12 would be re-routed in the northbound direction from Gateway to the new Hutton Road/Kruse Way one-way street. None of the bus re-routings would cause substantial impacts.

The selected Interchange Build Alternative includes pedestrian and bicycle facilities, specifically a new pedestrian-bicycle bridge over I-5 and associated trail segments to connect the east-side commercial areas with the west-side residential areas. The selected Intersection Option 3 would provide a new traffic signal and pedestrian crosswalks at the Beltline/Hutton Intersection. The Hutton Road/Kruse Way one-way street would have a northbound bicycle lane and sidewalks on both sides. The complimentary southbound bicycle lane would continue to be provided on Gateway.

**Policy 4D: Transportation Demand Management.** This policy states that the State of Oregon will support the efficient use of the state transportation system through investment in TDM strategies.

*Findings:* Local plans consider TDM and transportation system management (TSM) strategies as appropriate and consistent with Policy 4D; however, the selected build alternative is needed to significantly improve system operations in the project area. The information below substantiates these findings.

TSM and TDM measures included in TransPlan were also included as part of the traffic projections undertaken for this project. Nodal development, as with the Springfield Commercial Lands Study, will be incorporated in upcoming traffic modeling. Even with maximum use of TDM measures and implementation of Bus Rapid Transit, capacity problems remain in the area of the interchange, and safety issues associated with the existing interchange would not be fully addressed by TDM measures. The City of Springfield recognizes Gateway as a congested area. Voluntary TDM measures are already in place in the vicinity of the I-5/Beltline Interchange. For example, Symantec participates in

TDM measures with a bus pass program. However, none of the plans reviewed nor level of voluntary TDM participation suggested any effective TSM/TDM strategies that might alleviate the need for the full interchange and intersection improvement project. (The applicability of TDM strategies also was discussed under Policy 1G, Measure 1.)

### **Oregon Public Transportation Plan, 1997**

The I-5/Beltline Interchange Project is consistent with the Oregon Public Transportation Plan (OPTP), which is a modal element of the OTP, by improving the safe and efficient movement of passengers. The goal of the OPTP is to provide a public transportation system to meet daily medical, employment, educational, business and leisure needs without dependence on single-occupant vehicle transportation. The OPTP defined three different implementation levels for the plan. Level 1 freezes service at current levels, Level 2 keeps pace with current growth, and Level 3 responds to state and federal mandates and goals and responds to Oregon's anticipated growth.

Intercity transit service is provided by both bus and rail along the I-5 corridor. Greyhound bus service provides as many as 14 daily round trips between Eugene and Portland along I-5. Amtrak provides rail service along the I- corridor. There are proposed upgrades to rail facilities which would provide high speed rail service between Eugene and Portland, and between Portland and Seattle. The OPTP suggests under Level 3 implementation that intercity bus and rail services would grow substantially. Additional commuter bus service should be provided in many metropolitan areas, and that additional intercity bus service should be provided through communities with a population of 2,500 and above.

One of the policies of the OPTP is to reduce highway demand. The OPTP states in Strategy 1E.1 that demand management and transportation system management techniques should be used to reduce peak period single-occupant automobile travel and vehicle miles traveled.

### **Freight Moves the Oregon Economy, 1999**

Improving the Beltline Interchange is consistent with proposed strategies, reduce delay and eliminating travel barriers, to make improvements to existing facilities. 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 Interstate 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

Recommendations are made for the construction of an intermodal site in Eugene. Beltline west links to industrial properties and rail connections. The IAMP is consistent with this Plan because it seeks to accommodate the safe and efficient movement of freight.

## **Transportation Planning Rule (Oregon Administrative Rule 660-012)**

The TPR implements Statewide Planning Goal 12 (Transportation) and is intended to promote the development of safe, convenient and economic transportation systems that are designed to reduce reliance on the automobile. It also identifies how transportation facilities and services are planned for and provided on rural and urban lands consistent with state goals. Local and state transportation plans must be compliant with the TPR.

I-5/Beltline project recommendations are included as part of TransPlan. TransPlan has been acknowledged as consistent with Statewide Planning Goals and the Transportation Planning Rule; therefore, the IAMP project is consistent with Statewide Planning Goals.

## **Oregon Administrative Rule 734-051**

OAR 734-051 implements state policy (OHP) related to access management spacing standards in an interchange area and access management plans for IAMPs, and applies to the location, construction, maintenance and use of approaches onto the state highway rights-of-way and properties under the jurisdiction of ODOT. These rules also govern closure of existing approaches, spacing standards, medians, deviations, appeal processes, grants of access and indentures of access. Table 1, appended to this technical memorandum, lists each OAR 734-051 requirement and how it is addressed by the selected alternative for the I-5/Beltline Interchange Project.

## **Local Policies and Code Provisions**

### **Local Planning Documents**

The primary local planning documents relevant for the I-5/Beltline IAMP include the Metro Plan, TransPlan, the City of Springfield's Gateway Refinement Plan and the City of Eugene's Willakenzie Area Plan. The following policies and provisions support I-5/Beltline interchange area management.

### **Eugene-Springfield Metropolitan Area General Plan (Metro Plan), 1987**

The Metro Plan serves as the official Comprehensive Plan for metropolitan Lane County, the City of Eugene and the City of Springfield. This area includes the I-5/Beltline interchange influence area. All Eugene and Springfield plans must be consistent with the Metro Plan.

The Metro Plan is currently undergoing a Periodic Review housekeeping process, but as those changes are not yet adopted, this review addresses the 1987 version, as presented in the Metro Housekeeping Plan Revisions Draft – April 6, 2004.<sup>1</sup> The Metro Plan is organized into several sections, including Section II – Fundamental Principles and Growth Management Policy Framework, and Section III – Specific Elements. Certain goals and policies included within the Plan support interchange area management, including the following (note – relevant Metro Plan transportation policies are reviewed under the discussion of TransPlan):

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<sup>1</sup> This version of the Metro Plan was recommended for review for this project by LCOG, in May 2005. Therefore, some of the numbering may differ from other versions of the Plan.

## **Land Use and Economic Goals and Objectives**

### **Plan Section: II.B – Metropolitan Goals**

#### **Topic: Growth Management and the Urban Service Area**

1. Use urban, urbanizable, and rural lands efficiently.
2. Encourage orderly and efficient conversion of land from rural to urban uses in response to urban needs, taking into account metropolitan and statewide goals.

### **Plan Section: II.B – Metropolitan Goals**

#### **Topic: Economy**

1. Broaden, improve, and diversify the metropolitan economy while maintaining or enhancing the environment.

### **Plan Section: II.C – Growth Management Goals, Findings and Policies**

#### **Subsection: Objectives**

**Objective II.C.3:** Conserve those lands needed to efficiently accommodate expected urban growth.

**Objective II.C.7.** Shape and plan for a compact urban growth form to provide for growth while preserving the special character of the metropolitan area.

### **Plan Section: III.B – Economic Element**

#### **Plan Element: Economy**

**Objective III.B.10:** Provide the necessary public facilities and services to allow economic development.

*Findings:* These land use and economic goals and objectives support long-range planning for interchange influence areas. The I-5/Beltline interchange is located within the Urban Growth Boundary (UGB), which is consistent with goals and objectives related to using urban land efficiently. One of the purposes of the I-5/Beltline IAMP is to plan ahead and minimize the need for additional major improvements to the interchange. Planning ahead for interchange areas avoids waste of public funds by designing solutions that anticipate future land use impacts on the transportation system instead of reacting to conditions, which can often times be more expensive.

The land use and economic goals and objectives in the Metro Plan point to the regional desire to grow first within the UGB, and ensure compact development – which is consistent with the solutions provided in the I-5/Beltline IAMP. The I-5/Beltline IAMP was developed consistently with area land use plans, and IAMP recommended projects are expressly intended to be able to carry the traffic anticipated according to local population and employment forecasts.

These policies and objectives also support the provision of necessary public facilities for economic development. Transportation facilities, such as the Interstate 5 corridor, are critical to economic development, as they allow for movement of freight and people. The intent of the IAMP – to improve geometric, operational and safety efficiencies of the existing I-5/Beltline interchange to provide an improved transportation system and support community vitality – is consistent with the values expressed in these goals and policies.

## **Land Use and Economic Policies**

### **Plan Section: II.C – Growth Management Goals, Findings and Policies**

#### **Subsection: Policies**

**Policy II.C.3:** Control of location, timing and financing of the major public investments that directly influence the growth form of the metropolitan area shall be planned and coordinated on a metropolitan-wide basis.

*Findings:* This policy recommends a metropolitan-wide, coordinated planning approach to major public investments, such as the improvements recommended in the I-5/Beltline IAMP. This type of approach is directly provided by the I-5/Beltline IAMP for the I-5/Beltline interchange and surrounding area. The I-5/Beltline IAMP was intentionally developed as broad-based planning effort that involved ODOT, FHWA, Lane County, the City of Springfield and the City of Eugene as part of the stakeholder working group for the project.

**Policy II.C.23.** Regulatory and fiscal incentives that direct the geographic allocation of growth and density according to adopted plans and policies shall be examined and, when practical, adopted.

*Findings:* The I-5/Beltline IAMP provides recommendations that help achieve the allocation of growth and density as adopted in local plans, such as TransPlan and the Gateway Refinement Plan. The interchange area improvements are intended to accommodate future anticipated population and employment growth in the area.

**Policy II.C.25:** When conducting metropolitan planning studies, particularly the Public Facilities and Services Plan, consider the orderly provision and financing of public services and the overall impact on population and geographical growth in the metropolitan area. When appropriate, future planning studies should include specific analysis of the growth impacts suggested by that particular study for the metropolitan area.

*Findings:* This policy supports planning studies that account for growth impacts in the metropolitan area. The I-5/Beltline IAMP is intended to manage the interchange area in a fiscally responsible manner in light of expected growth and traffic. The recommendations in the IAMP are based on information consistent with the land use planning documents and assumptions in the area, and identified projects and strategies are intended to accommodate the growth and land uses identified in local plans. Population and employment numbers were integrated into the planning and environmental process, and informed the direction of the project.

**Policy II.C.26:** Based upon direction provided in Policies 3, 7, and 23 of this section, any development taking place in an urbanizable area or in rural residential designations in an urban reserve area shall be designed to the development standards of the city which would be responsible for eventually providing a minimum level of key urban service to the area. Unless the following conditions are met, the minimum lot size for campus industrial designated areas shall be 50 acres and the minimum lot size for all other designations shall be 10 acres. Any lot under ten acres in size but larger than five acres to be created in this area on undeveloped or underdeveloped land will require the adjacent city and Lane County to agree that this lot size would be appropriate for the area utilizing the following standards:

- a. The approval of a conceptual plan for ultimate development at urban densities in accord with applicable plans and policies.
- b. Proposed land uses and densities conform to applicable plans and policies.
- c. The owner of the property has signed an agreement with the adjacent city which provides:
  - (1) The owner and his or her successors in interest are obligated to support annexation proceedings should the city, at its option, initiate annexation.
  - (2) The owner and his or her successors in interest agree not to challenge any annexation of the subject property.
  - (3) The owner and his or her successors in interest will acquire city approval for any subsequent new use, change of use, or substantial intensification of use of the property. The city will not withhold appropriate approval of the use arbitrarily if it is in compliance with applicable plans, policies, and standards, as interpreted by the city, as well as the conceptual plan approved under subsection a above.

*Findings:* This policy outlines steps to ensure that proposed land uses in urbanizable areas are consistent with applicable plans and policies and that future development is coordinated with adjacent jurisdictions. This policy is relevant for land in the northern portion of the interchange influence area, in that it promotes consideration of future development and its impact on urban services.

**Policy II.C.31.** Eugene, Springfield, and Lane County shall continue to involve affected local governments and other urban service providers in development of future, applicable *Metro Plan* revisions, including amendments and updates.

*Findings:* The I-5/Beltline IAMP was based on information and recommendations included in the Metro Plan (and TransPlan, the transportation element). The IAMP process involved local (Eugene, Springfield, Lane County), state and federal jurisdictions. This policy underscores the importance of continued coordination as Metro Plan revisions could affect plans. In order to maintain compliance with this Metro Plan policy, Eugene, Springfield and Lane County will notify ODOT of any Metro Plan changes that could affect solutions proposed in the I-5/Beltline IAMP.

### **Plan Section: III.B – Economic Element**

#### **Plan Element: Economy**

**Policy III.B.18:** Encourage the development of transportation facilities which would improve access to industrial and commercial areas and improve freight movement capabilities by implementing the policies and projects in the *Eugene-Springfield Metropolitan Area Transportation Plan (TransPlan)* and the *Eugene Airport Master Plan*.

*Findings:* The IAMP promotes protection of the function of the I-5/Beltline interchange, easier freight movement along Interstate 5, and improved access to industrial and commercial areas, which is consistent with this policy. This policy supports the intent of the IAMP recommendations, and therefore, supports the IAMP.

## **Eugene-Springfield Metropolitan Area Transportation Plan (TransPlan), July 2002**

TransPlan is adopted as a functional plan of the Eugene-Springfield Metropolitan Area General Plan (Metro Plan), and is consistent with the Metro Plan transportation element. As such, Oregon Statewide Planning Goals and the Transportation Planning Rule are applicable. TransPlan serves as the Transportation Plan for the City of Eugene, the City of Springfield and metropolitan Lane County. TransPlan is consistent with the Central Lane Metropolitan Planning Organization's Regional Transportation Plan (adopted December 2004), which is the federal MPO plan for the MPO planning area, which now includes the City of Springfield, City of Eugene, metropolitan Lane County, and the City of Coburg. TransPlan includes provisions for meeting the transportation demand of residents over a 20-year planning horizon while addressing transportation issues and making changes intended to improve the region's quality of life and economic vitality.

TransPlan is adopted as a functional plan of the Eugene-Springfield Metropolitan Area General Plan (Metro Plan). The City of Eugene and City of Springfield are local jurisdictions with land uses subject to Statewide Planning Goals (ORS 195, 196, and 197). These governments have land use regulations and acknowledged comprehensive plans. The project's selected build alternative is consistent with land use provisions of Oregon Statewide Planning Goals, the Transportation Planning Rule, and the Metro Plan (including TransPlan).

Improvements included as part of the I-5/Beltline IAMP are consistent with Project 606 for the I-5/Beltline Interchange as included in TransPlan. The Metro Plan establishes the broad framework upon which Eugene, Springfield, and Lane County make coordinated land use decisions. Other local jurisdictions involved with the regional planning process are the Lane Council of Governments and Lane Transit District. In compliance with provisions of TEA 21 and the TPR, TransPlan contains transportation policies and expected actions and is financially constrained to revenues reasonably expected to be available. TransPlan is particularly important for guiding transportation policy and investment decision making over periods of 3 to 5 years until the next plan update. Phases 1 and 2 of the project are part of the financially constrained plan; Phase 3 is not needed from an operational perspective until outside of TransPlan's planning horizon. Letters from local agency planning officials state agreement that the project is consistent with TransPlan.

The following TransPlan goals, objectives and policies support the intent of the I-5/Beltline IAMP or interchange management:

### **TransPlan Goals and Objectives**

**Goal 1.** Provide an integrated transportation and land use system that supports choices in modes of travel and development patterns that will reduce reliance on the automobile and enhance livability, economic opportunity, and the quality of life.

**Goal 2.** Enhance the Eugene-Springfield metropolitan area's quality of life and economic opportunity by providing a transportation system that is:

- Balanced,
- Accessible,
- Efficient,

- Safe,
- Interconnected,
- Environmentally responsible,
- Supportive of responsible and sustainable development,
- Responsive to community needs and neighborhood impacts, and
- Economically viable and financially stable.

**Objective 1: Accessibility and Mobility.** Provide adequate levels of accessibility and mobility for the efficient movement of people, goods, and services within the region.

**Objective 2: Safety.** Improve transportation system safety through design, operations and maintenance, system improvements, support facilities, public information, and law enforcement efforts.

**Objective 4: Economic Vitality.** Support transportation strategies that improve the economic vitality of the region and enhance economic opportunity.

**Objective 6: Coordination/Efficiency.** Coordinate among agencies to facilitate efficient planning, design, operation and maintenance of transportation facilities and programs.

**Objective 7: Policy Implementation.** Implement a range of actions as determined by local governments, including land use, demand management, and system improvement strategies, to carry out transportation policies.

*Findings:* These goals and objectives support a multimodal, integrated transportation system. Protecting the function of the I-5/Beltline interchange, preserving capacity and promoting safety – such as the recommended improvements in the IAMP recommendations – help to implement this goal. Long-term actions identified in the I-5/Beltline IAMP include a pedestrian/bicycle facility north of Beltline Highway. The IAMP is consistent with TransPlan goals and objectives because it is intended to provide solutions that will enhance accessibility and mobility, safety and economic vitality in a coordinated and efficient manner. TransPlan goals and objectives support the intent of the IAMP, as well as IAMP solutions.

### TransPlan Policies

#### **TransPlan Policy: Land Use Policy #4 - Multi-Modal Improvements in New Development**

**Metro Plan Policy F-4:** Require improvements that encourage transit, bicycles, and pedestrians in new commercial, public, mixed-use and multi-unit residential development.

*Findings:* This policy states that multiple modes are required when developing new improvements. Recommendations in the I-5/Beltline IAMP include multimodal elements, such as bicycle and pedestrian facilities. This policy also intends to protect interchange capacity by encouraging modes of transportation other than vehicles. This supports interchange management by promoting alternate means of transportation as a tool for congestion management, potentially alleviating some interchange area congestion.

#### **TransPlan Policy: TSI System-Wide Policy #5 – TransPlan Project Lists**

**Metro Plan Policy F-9:** Adopt by reference, as part of the Metro Plan, the 20-year Capital Investment Actions project list contained in TransPlan. Project timing and estimated costs are not adopted as policy.

*Findings:* This policy states that the TransPlan capital project list is to be adopted as part of the regional Metro Plan. Improvements included as part of the I-5/ Beltline IAMP are consistent with Project 606 for the I-5/ Beltline Interchange as included in TransPlan. Therefore, TransPlan and Metro Plan support the I-5/ Beltline IAMP and its project recommendations.

**TransPlan Policy: TSI System-Wide Policy #1 – Transportation Infrastructure Protection and Management**

**Metro Plan Policy F-10:** Protect and manage existing and future transportation infrastructure.

*Findings:* This policy directly supports protection of interchange capacity and long-term interchange area management. The purpose of the IAMP is to protect and manage the I-5/ Beltline interchange and surrounding area, including recommending interchange area improvements that will enhance safety and improve geometric and operational deficiencies. IAMP project recommendations are intended to manage existing infrastructure (preservation of capacity) as well as accommodate future transportation demand, based on local land use plans and population and employment forecasts. The IAMP reinforces the policy direction outlined.

**TransPlan Policy: TSI Roadway Policy #1 – Mobility and Safety for All Modes**

**Metro Plan Policy F-14:** Address the mobility and safety needs of motorists, transit users, bicyclists, pedestrians, and the needs of emergency vehicles when planning and constructing roadway system improvements.

*Findings:* This policy emphasizes the need to address safety and mobility, which is consistent with the IAMP. This policy supports interchange area management because IAMP recommendations are intended in part to alleviate congestion, which improves access for emergency vehicles. IAMP recommendations are also intended to correct geometric safety issues, which improves safety for all users.

**TransPlan Policy: TSI Roadway Policy #2 – Motor Vehicle Level of Service**

**Metro Plan Policy F-15:** Motor vehicle level of service policy

1. Use motor vehicle level of service standards to maintain acceptable and reliable performance on the roadway system. These standards shall be used for:
  - a) Identifying capacity deficiencies on the roadway system.
  - b) Evaluating the impacts on roadways of amendments to transportation plans, acknowledged comprehensive plans and land-use regulations, pursuant to the TPR (OAR 660-12-0060).
  - c) Evaluating development applications for consistency with the land-use regulations of the applicable local government jurisdiction.
2. Acceptable and reliable performance is defined by the following levels of service under peak hour conditions: LOS E within Eugene’s Central Area Transportation Study (CATS) area, and LOS D elsewhere.

3. Performance standards from the OHP shall be applied on state facilities in the Eugene-Springfield metropolitan area.

*Findings:* This policy supports interchange management by (1) requiring that state mobility standards are apply to state facilities; and (2) ensuring that local roadway facilities do not operate at substandard levels (worse than LOS D for the I-5/Beltline interchange area) via local mechanism. Operations standards help to ensure that peak hour congestion is kept at acceptable levels. When developers submit development applications, they often must provide mitigation if their development increases congestion by a certain level, especially if it causes a roadway facility to operate worse than the acceptable LOS standard. The policy also requires compliance with the TPR in cases of local plan amendments, which offers a layer of protection against development that would seriously jeopardize the intent of the IAMP to preserve the interchange area and interstate system.

**TransPlan Policy: N/A**

**Metro Plan Policy F-16:** Promote or develop a regional roadway system that meets combined needs for travel through, within, and outside the region.

*Findings:* This policy supports the IAMP and interchange management by promoting a regional roadway system that places value on through travel, thereby supporting interchange improvements designed for interstate preservation and mobility. This policy supports regional system improvements that would contribute to the management of the interchange area (for example, the Pioneer Parkway Extension) by pulling trips away from the interchange area for north-south travel.

**TransPlan Policy: TSI Roadway Policy #4 – Access Management**

**Metro Plan Policy F-17:** Manage the roadway system to preserve safety and operational efficiency by adopting regulations to manage access to roadways and applying these regulations to decisions related to approving new or modified access to the roadway system.

*Findings:* This policy underscores the importance of access management and its implementation, which is an important part of the management of the I-5/Beltline interchange, per the Intergovernmental Agreement (I-5 – Beltline Project: Monitoring and Implementation Plan) between ODOT and the City of Springfield dated May 2003, which outlines when capital improvements at and near the Beltline Highway/Gateway Street intersection will be required (Phase II), to protect investment in the state highway system. This policy promotes access management, which protects the roadway system in terms of capacity and safety by concentrating turning movements onto a mainline roadway (controlling congestion). This is relevant for local roadways within the interchange management area, especially those located within 1,320' of the interchange ramps, such as the Gateway Street intersection (located 625' from the northbound exit ramp).

**TransPlan Policy: TSI Bicycle Policy #1 – Bikeway System and Support Facilities**

**Metro Plan Policy F-22:** Construct and improve the region's bikeway system and provide bicycle system support facilities for both new development and redevelopment/expansion.

*Findings:* This policy supports interchange management through the promotion of non-vehicle transportation modes, which can help to mitigate congestion. This policy also

supports the IAMP project recommendations due to the proposed pedestrian and bicycle facilities as part of the project, including a nonmotorized linkage over I-5.

**TransPlan Policy: TSI Pedestrian Policy #1 – Pedestrian Environment**

**Metro Plan Policy F-26:** Provide for a pedestrian environment that is well integrated with adjacent land uses and is designed to enhance the safety, comfort, and convenience of walking.

*Findings:* This policy supports interchange management through the promotion of non-vehicle transportation modes, which can help to mitigate congestion. This policy also supports the IAMP project recommendations due to the proposed pedestrian and bicycle facilities as part of the project.

**TransPlan Policy: TSI Pedestrian Policy #2 – Continuous and Direct Routes**

**Metro Plan Policy F-26:** Provide for a continuous pedestrian network with reasonably direct travel routes between destination points.

*Findings:* This policy supports interchange management through the promotion of non-vehicle transportation modes, which can help to mitigate congestion. This policy also supports the IAMP project recommendations due to the proposed pedestrian and bicycle facilities as part of the project, including a nonmotorized facility over I-5.

**TransPlan Policy: TSI Pedestrian Policy #3 – Sidewalks**

**Metro Plan Policy F-27:** Construct sidewalks along urban area arterial and collector roadways, except freeways.

*Findings:* This policy supports interchange management through the promotion of non-vehicle transportation modes, which can help to mitigate congestion. This policy also supports the IAMP project recommendations due to the proposed pedestrian and bicycle facilities as part of the project.

**TransPlan Policy: TSI Goods Movement Policy #1 – Freight Efficiency**

**Metro Plan Policy F-29:** Support reasonable and reliable travel times for freight/goods movement in the Eugene-Springfield region.

*Findings:* This policy supports the intentions of the IAMP to manage freight movement in an efficient and cost-effective manner. IAMP recommendations are intended in part to protect the function of the interchange, which means that freight movement is also protected, particularly along Interstate 5 (a designated international trade route).

**TransPlan Policy: Finance Policy #2 – Operations, Maintenance and Preservation**

**Metro Plan Policy F-34:** Operate and maintain transportation facilities in a way that reduces the need for more expensive future repair.

*Findings:* This policy supports interchange influence area management and the IAMP by endorsing a plan for interchange improvements, access management, and monitoring that forecasts future travel demand and recommends a series of improvements to head off expensive and uncoordinated future repair. The IAMP is intended in part to streamline efficiency regarding the spending of public transportation funds, consistent with ODOT's Major Investment Policy. One of the primary intentions of the IAMP is to minimize the need for additional major improvements to the existing interchange.

**TransPlan Policy: Finance Policy #3 – Prioritization of State and Federal Revenue**

**Metro Plan Policy F-35:** Set priorities for investment of ODOT and federal revenues programmed in the region’s Transportation Improvement Program to address safety and major capacity problems on the region’s transportation system.

*Findings:* This policy supports the IAMP, because the I-5/Beltline interchange is one of the highest priority project in the region through the TIP process. The interchange is listed in TransPlan, which is the primary regional transportation planning document.

**TransPlan Policy: Finance Policy #4 – New Development**

**Metro Plan Policy F-36:** Require that new development pay for its capacity impact on the transportation system.

*Findings:* This policy ensures that developers mitigate anticipated impacts on the transportation system with regard to new development. This policy supports local mechanisms that ensure mitigation for capacity impacts from new developments, thereby supporting tools for roadway congestion management in the interchange area. This helps to control congestion near the interchange.

**TransPlan Policy: Finance Policy #6 – Eugene-Specific Finance Policy**

**Metro Plan Policy F-38:** The City of Eugene will maintain transportation performance and improve safety by improving system efficiency and management before adding capacity to the transportation system under Eugene’s jurisdiction.

*Findings:* This policy supports the IAMP by limiting the additional capacity that Eugene can add to the transportation system while exploring other options; the policy also promotes TDM measures, which is a tool to preserve capacity and safety that can be applied in the interchange management area.

**Willakenzie Area Plan, September 1992, and Ordinances 20265, 20302, 20305**

The Willakenzie Area Plan (WAP) is a City of Eugene subarea plan that addresses the 5,708-acre portion of Eugene and unincorporated county west of I-5 and east of the Willamette River. Boundaries include the Willamette River to the south and west, the UGB to the north, and Interstate 5 to the east. The WAP is a refinement of the Metro Plan, specific to the Willakenzie area. The WAP includes a transportation element that includes existing conditions and policies and addresses proposed transportation projects in the area. Several amendments have been made to the plan through the years, specifically via Ordinances No. 20265 (Chase Nodal Development Area), No. 20302 (Crescent Village PUD, land use change) and No. 20305 (Summer Oaks Crescent Center PUD).

The Plan recognizes that development of the Gateway commercial area in Springfield will have impacts on the transportation system and on commercial land demand in the Willakenzie study area. The Plan also states that a substantial amount of commercial development had occurred recently within the study area. The I-5/Beltline IAMP was developed using the framework of land uses as specified in the Willakenzie Area Plan, and therefore, all IAMP project recommendations would be consistent with anticipated growth expected according to the WAP.

Certain goals and policies included within the Plan support interchange area management, including the following:

### **Plan Section 2: Willakenzie Planning Area Goals**

Develop a transportation network that: (a) facilitates safe and convenient vehicular access; (b) minimizes through traffic on residential streets; (c) minimizes traffic impacts on existing and future land uses; and (d) encourages alternative modes of transportation. (Page 6).

*Findings:* This goal emphasizes the need for a cohesive transportation network that promotes safety and mobility, and that focuses through traffic on streets (such as Beltline Highway or Interstate 5) on non-residential roadways. The goal also discusses the need to plan for future land uses in relation to transportation impacts. The goal supports the I-5/Beltline IAMP by promoting projects such as the proposed interchange improvements that intend to facilitate safe access, concentrate through traffic on the interstate and regional arterial system, and encourage alternative modes via the construction of new nonmotorized facilities.

### **Plan Section 3: Land Use Element**

#### ***Land Use Policies and Proposed Actions (Page 15):***

**Policy #4:** Recognize Coburg Road, the Ferry Street Bridge, Beltline Road, Delta Highway, Interstate 5 and the Eugene-Springfield Highway (I-105) as designated entrance corridors to the city as identified in the adopted City of Eugene Entrance Beautification Study.

*Findings:* This policy holds implications for the I-5/Beltline interchange in that there is also a desire that the interchange area function as a gateway to the cities of Eugene and Springfield. This means that attention will be paid to the interchange from an aesthetic, congestion and safety point of view at the local level.

#### ***Residential Policies and Proposed Actions (Page 16):***

**#3:** Ensure that development plans include street sizes adequate to meet future demands.

*Findings:* This policy asks that development provides facilities adequate to meet future traffic volumes. This promotes the protection of the interchange in that new development is to include plans for increases in traffic on local roadways, which in turn provides a congestion management tool for the interchange management area.

#### ***General Commercial and Industrial Policies and Proposed Actions:***

**#3:** Encourage the consolidation of parking lots, development of joint access, and use of access controls on commercial and industrial developments.

*Findings:* This policy discusses the need for access management – including access/driveway sharing and promotion of internal circulation between multiple properties. These types of practices help to preserve roadway capacity and can enhance the safety of a roadway corridor due to a reduction in the number of potential conflict points. Although not directly relevant to the interchange management area, since access is controlled along Beltline Highway in Eugene,

## **Plan Section 4: Transportation Element**

### ***Transportation Policies and Proposed Actions:***

**Major Streets, #1:** The transportation network within the Willakenzie area shall be planned and designed to ensure: a) preservation of existing neighborhoods; b) an adequate system of arterials and collectors for the efficient movement of through traffic; and c) the preservation of the use of local streets for local traffic. (Page 97).

**Findings:** This policy promotes preservation of the functional classification system. The functional classification system can be used as a tool for management of the interchange area, because certain roadways are to be designed to certain standards or to carry certain levels of traffic, which helps to ensure that the local and regional street system is in place to accommodate local and regional trips. The IAMP was developed within the framework of the existing functional classification system, and is consistent with this policy.

**Major Streets, #2:** The City shall maintain and encourage the safe and efficient operation of major streets by limiting private, direct access to these streets when necessary. (Page 97).

**Findings:** This policy promotes access management techniques along primary corridors, which is a long-range traffic management tool that works to preserve capacity and enhance safety. This policy fits closely with the intent of the I-5/Beltline IAMP, and means that no additional private access will be allowed to Beltline Highway within the interchange management area.

**Major Streets, #5:** The City shall work with major developers and employers to ensure that transportation demand management strategies are incorporated into their facilities planning and operations.

**Findings:** This policy emphasizes the use of TDM as a long-term transportation management tool for the Willakenzie area. This type of long-term approach helps to support interchange area management goals, in that TDM works as a tool to preserve infrastructure (capacity and safety), which could pull traffic from the interchange.

**Major Streets, #6:** The city shall work with developers to provide and participate in transportation mitigation measures which are necessary to resolve direct traffic impacts resulting from new development. Mitigation measures could include such things as traffic control, street widenings, turn lanes, and other access improvements.

**Findings:** This policy emphasizes the use of TDM as a long-term transportation management traffic levels. The policy supports long-term management of the interchange area, by identifying the need for a resolution to traffic impacts related to new development through mitigation.

**Major Streets, #7:** To the greatest extent possible, the City shall encourage regional and intercity traffic to use major rather than minor arterials.

**Findings:** This policy promotes preservation of the functional classification system, which supports the intentions of the I-5/Beltline IAMP. The functional classification system can be used as a tool for management of the interchange area, because certain roadways are to be designed to certain standards or to carry certain levels of traffic, which helps to ensure that the local and regional street system is in place to accommodate local and regional trips.

## **Gateway Refinement Plan, November 1992, and Gateway Refinement Plan Text Amendments (Jo.No. 2002-08-244), 1/10/05**

The Gateway Refinement Plan is a City of Springfield subarea plan of the Metro Plan that addresses the area bound by I-5 to the west, Pioneer Parkway to the east, Eugene-Springfield Highway to the south, and Game Farm Road to the north. The Plan emphasizes the significance of development in the Gateway area for Springfield. The Gateway-Beltline intersection is listed as a continued focus of redevelopment and new development. The Plan supports the viability of Gateway Mall and long-term development trends. The Plan lists proposed transportation projects for the Gateway area.

Recent amendments to the Gateway Refinement Plan have allowed for the development of a large medical services complex in the area, which has implications for regional traffic. Specific new policies relate directly to the I-5/Beltline IAMP and promote interchange management by implementing trip caps and trip monitoring plans for master plans for property at the McKenzie-Gateway MDR site. The amendments primarily affected the Residential Element, Commercial Element, Transportation Element and Public Facilities Element of the Plan.

Certain goals and policies from the Plan are particularly relevant to I-5/Beltline interchange area management:

### **Plan Section: Community and Economic Development**

**Goal 2a.** Enhance opportunities for industrial, commercial, recreational, and tourism-related property to be developed, redeveloped, improved, rehabilitated, conserved and protected in ways that will:

a. ensure that public improvements and infrastructure in the Refinement Plan area are sufficient to accommodate current and future development, while mitigating any adverse impacts of such development on residential, school, park, and other uses. (Page 10).

*Findings:* This goal identifies the relationship between development and adequate infrastructure. This goal supports the IAMP by promoting the sufficiency of infrastructure to support current and future development. IAMP recommendations were developed to support existing and future growth as outlined in local and regional plans, and to improve existing and future safety and operations conditions at the interchange.

### **Plan Section: Residential Element**

#### ***Policies and Implementation Actions:***

Policy and Implementation Action 13.4. In addition to the requirements of SDC Article 37, the Master Plan shall address, at a minimum, the following development issues:

- a) Preservation and enhancement of natural assets identified in this Refinement Plan;
- b) Access and circulation needs;
- c) Access to arterial and collector streets;
- d) Provision of public facilities and services;
- e) Development needs of future users;
- f) Provision of open space areas; and
- g) Public access to the McKenzie River. (Amended, Page 17).

*Findings:* This implementation action states that any development in the Master Plan area for the “McKenzie-Gateway MDR Site” must implement appropriate access management standards and must account for development needs for future users, meaning mitigation for impacts on the transportation system that could create barriers for future developments if left unmitigated (e.g. roadway capacity). The implementation action supports interchange management at the I-5/Beltline interchange by promoting transportation management tools for new development near the interchange.

**Policy and Implementation Action 13.5.** In addition to the requirements of SDC Article 37, the initial Master Plan application in the Mc-Kenzie Gateway MDR site shall include a conceptual street map an bicycle and pedestrian circulation system plan for all annexed property in the McKenzie-Gateway MDR site and shall be exempt from the requirements of Section 3.050(2)(b) of the SDC. (Amended, Page 18).

*Findings:* This implementation action supports interchange area management by promoting nonmotorized transportation within the interchange area, which encourages nonmotorized travel and can result in a certain percentage of trips made via bicycle or foot rather than vehicle in the interchange area, thus preserving capacity.

**Policy and Implementation Action 13.7.** Master Plans for property at the McKenzie-Gateway MDR site that proposes to apply the MUC and/or MS zoning district pursuant to Residential Policies and Implementation Actions 12.1 and 12.6 shall be subject to the following requirements:

1. An approved trip monitoring plan shall be a requirement of Master Plan approval.
2. The trip monitoring plan shall demonstrate compliance with all conditions contained within applicable plan amendment adoption ordinance(s), and trip-generation estimates shall be performed using assumptions and methods which are consistent with those employed in the plan amendment traffic impact analysis.
3. Traffic generated by land uses within the Master Plan boundaries where the MS and MUC zoning districts that are proposed in Phase 1 of the Development shall, prior to 2010, be limited to a maximum of 1,457 vehicle trips. Beginning in 2010 for Phase 2 of the Development, traffic generated from site development within the subject districts shall be limited to 1,840 PM Peak-Hour vehicle trips. Vehicle trips are defined as the total of entering plus exiting trips as estimated or measured of the PM Peak Hour of Adjacent Street Traffic. This trip monitoring plan limits allowed land uses to be consistent with the planned function, capacity and performance standards of affected transportation facilities.
4. Subsequent Site Plan Review applications for sites within the Master Plan boundaries shall be in compliance with the approved trip monitoring plan.
5. Any proposal that would increase the number of allowable PM Peak Hour vehicle trips for the MS and MUC area beyond the limits specified in section 3 above shall be processed as a refinement plan amendment, a zoning map amendment or Master Plan approval pursuant to SDC 37.040 or modification

pursuant to SDC 37.040 and 37.060(3) and regardless of which type of process is sought, each shall demonstrate compliance with applicable provisions of the Transportation Planning Rule for such proposal.

**Findings:** This policy/implementation action directly supports the IAMP and interchange management by providing local mechanisms to limit the number of trips generated by specific land uses in a specific location within the interchange area. This gives assurance that future development at this location will not skyrocket beyond anticipated levels, thereby helping to preserve interchange capacity and function. The policy/implementation action provides interchange protection through trip caps, as well as trip monitoring plans and site plan review. Also, proposals that increase the number of allowable PM peak hour trips must notice ODOT per TPR procedure and prove that the development meets TPR requirements. These are interchange protection measures, because they control the amount of congestion in the interchange area and allow for both local ODOT review of any significant development.

### **Plan Section: Industrial Element**

#### ***Policies and Implementation Actions:***

**Policy and Implementation Action 3.0:** Ensure adequate emergency vehicle access to the McKay Site while protecting neighboring residential development from the potential adverse impacts of through industrial traffic on local neighborhood streets.

**Findings:** This policy emphasizes the need to ensure emergency access. This is in consistent the I-5/ Beltline IAMP, because the IAMP seeks to enhance traffic operations, which in turn enhances the mobility of emergency vehicles.

**Policy and Implementation Action 8.0:** Provide for an efficient and flexible transportation system for the McKenzie-Gateway SLI Site.

**Findings:** This policy promotes a comprehensive transportation system for a specific location, providing guidance relating to congestion management in the interchange influence area. Specific implementation actions include the inclusion of an east-west collector between International Way and Deadmond Ferry Road; inclusion of a north-south collector from a point near the existing intersection of Game Farm Road East, Game Farm Road South and Deadmond Ferry Road; and that this intersection become the interim primary access point pending future development to the central and eastern portions of the site.

### **Plan Section: Transportation Element**

#### ***Goals:***

**Goal 1:** Provide for a safe and efficient transportation system in the Gateway Refinement Plan area. (Page 48).

**Goal 4:** Plan and design and efficient and flexible transportation system for undeveloped lands within the Refinement Plan area to ensure minimum traffic impacts. (Page 48).

**Goal 5:** Reduce future traffic congestion, air pollution, and noise by establishing Transportation Demand Management (TDM), Transportation Supply Management (TSM), and Traffic Reduction Ordinances (TRO) Programs. (Page 48).

*Findings:* These goals are consistent with the intent of the I-5/Beltline IAMP, including the promotion of a safe and efficient transportation system that is flexible enough to accommodate anticipated future development. The goals also support interchange management by promoting TDM and TSM, which are management tools that can help to preserve capacity.

***Policies and Implementation Actions:***

**Policy and Implementation Action 4.0:** Limit access to minor arterials as redevelopment occurs. (Page 49).

**Policy and Implementation Action 4.1:** Encourage the use of joined driveways during the site plan review process. (Page 49).

**Policy and Implementation Action 4.2:** Require large subdivisions or retail outlets with direct access on arterial roads to use “right in right out” drives as appropriate. (Page 49).

*Findings:* These policies and implementation actions promote access management, which functions to preserve roadways and enhance corridor safety. Access management can be used as a tool to control circulation, congestion and safety in the interchange influence area.

**Policy and Implementation Action 13.0:** Future transportation system development in the McKenzie-Gateway Campus Industrial and the 180 acre MDR sites should occur as needed in conjunction with CI and MDR, MUC and MS development. (Amended, Page 51).

**Policy and Implementation Action 13.3:** Upgrade Beltline Road between Gateway and Game Farm Road, widening as needed, including sidewalks only between Gateway Street and Hutton Way, and excluding bicycle lanes. (Page 51).

**Policy and Implementation Action 13.4:** Upgrade Game Farm Road North between Belt Line and I-5 overcrossing to urban standards, including sidewalks and bike lanes. (Page 51).

**Policy and Implementation Action 13.6:** Through the site plan review process, ensure that all plans for development of the McKenzie-Gateway SLI and 180-acres MDR sites plan for and maintain the opportunity to achieve efficient and effective road systems. (Page 51).

**Policy and Implementation Action 13.7:** Implement the following road system improvements, consistent with the recommendations of the Gateway Neighborhood Transportation System Analysis, and proposed TransPlan amendments needed to incorporate them into the TransPlan project list: Develop a collector road that connects the extensions of Beltline Road and Raleighwood Avenue; Extend Beltline Road eastward, mitigating the impact on existing homes to the maximum extent practical, to connect with the McKenzie-Gateway MDR Area’s collector system; Develop an east-west collector within the McKenzie-Gateway SLI site. (Page 52).

*Findings:* These policies and implementation actions outline future planning for the area northeast of the I-5/Beltline interchange. In general, the intent is that adequate roadway improvements are made to accommodate any future new development. This supports the IAMP by providing local road improvements that will enhance the operations and functionality of the interstate system; local roadway connectivity can draw trips off the state or regional system.

**Policy and Implementation Action 16.0:** Explore the feasibility of a Transportation Demand Management program to reduce demand on the transportation system. (Page 52).

*Findings:* This policy promotes the use of long-term transportation management tools (TDM) that will enhance management of the interchange management area. The policy/implementation action supports interchange management by providing a mechanism to minimize congestion in the interchange area.

**Policy and Implementation Action 18.0:** Explore the possibility and feasibility of providing incentives for employers who encourage their employees to commute to work in ways other than driving along during morning and afternoon peak travel periods. (Page 52).

*Findings:* This policy promotes the use of long-term traffic management tools that will enhance management of the interchange management area. Flexible schedules can contribute to congestion reduction during peak hour travel, which promotes interchange management.

**Policy and Implementation Action 19.0:** Establish Traffic Reduction Ordinances in the future to reduce peak hour vehicle trip generation by major employers in the area. (Page 52).

*Findings:* This policy promotes the use of long-term traffic management tools that will enhance management of the interchange management area. This supports the IAMP by providing a congestion management tool for the interchange area.

**Policy and Implementation Action 25.0:** Facilitate the efficient operation of transportation systems serving the commercially developed area. (Page 54).

**Policy and Implementation Action 25.1:** Provide for the future expansion of the intersection of Gateway Street and Beltline Road when reviewing site plans for developments fronting this intersection. (Page 54).

**Policy and Implementation Action 25.3:** Work with the City of Eugene, Lane County, the State of Oregon, and the Lane Transit District in developing regional transportation solutions to accommodate traffic generated by the Gateway mall and other commercial developments in the planning area. (Page 54).

*Findings:* These policies and implementation actions underscore the importance of linking efficient transportation operations with commercial land uses in the Gateway area. This policy language provides support for the I-5/Beltline IAMP, in that the importance of planning for increased traffic at the Gateway Street/Beltline Road intersection area is recognized.

## Local Development Codes

This section describes relevant code provisions from local development codes (City of Springfield and City of Eugene) relating to I-5/Beltline interchange management. These local jurisdictions have development approval and land use decision procedures that are designed to ensure that consistent standards are applied to new development and redevelopment, and that new development and redevelopment fit within the policy framework and vision of the jurisdiction and area. The jurisdictions also all have

requirements for traffic impact studies, depending on the type and level of new development (e.g. public/private school uses, industrial sites, special uses, etc). The development codes work to implement local, regional and state policies regarding growth and development.

## **Springfield Development Code**

The Springfield Development Code is a stand-alone document, available from the City of Springfield. The following provisions from the Springfield Development Code work to promote interchange capacity protections or long-term interchange management tools:

### **Discretionary Uses**

**Criteria. 10.030(2).** A Discretionary Use proposal may also be required to comply with the following Site Plan Review criteria of approval in accordance with Section 31.060 of this Code:

- (b) Proposed on-site and off-site public and private improvements are sufficient to accommodate the proposed development as specified in Articles 31, 32, the appropriate zoning and/or zoning overlay district Article and any applicable refinement plan.
- (d) Parking areas and ingress-egress points have been designed so as to facilitate traffic and pedestrian safety, to avoid congestion and to minimize curb cuts on arterial and collector streets as specified in Articles 31, 32, the appropriate zoning and/or zoning district Article and any applicable refinement plan.

*Findings:* This provision requires access management and congestion mitigation requirements for discretionary uses. This code provision supports the IAMP by assuring a level of congestion and access protection for the transportation system and interchanges when discretionary uses are developed. This is important for the IAMP, in terms of knowing that future discretionary uses will need to mitigate for congestion and enact access management.

**Discretionary Use Criteria for Multi-Unit Developments. 10.035(10)(b)(4).** Where practicable, consolidate or share driveways and internal streets with driveways or internal streets serving abutting sites.

*Findings:* This provision encourages shared driveways and accesses, which works to preserve roadway capacity and enhance safety. This supports interchange management by providing a tool to promote internal circulation rather than multiple accesses, which can cause congestion and safety issues.

### **Multi-Unit Design Standards**

**Vehicular Circulation. 16.110(4)(i)(2).** Shared driveways shall be provided whenever practicable to minimize cross turning movements on adjacent streets. On-site driveways and private streets shall be stubbed to abutting MDR/HDR properties, at locations determined during Site Plan Review process to facilitate development of shared driveways.

*Findings:* This provision encourages shared driveways and accesses, which works to preserve roadway capacity and enhance safety. This supports the IAMP, by providing a congestion management and safety tool for traffic in the interchange area.

### **Minimum Development Standards**

**Site Plan Review – Information Requirements. 31.050(3).** An Access, Circulation and Parking Plan complying with the standards of this Code.

**Site Plan Review – Information Requirements. 31.050(5).** An Improvements Plan complying with the standards of Article 32 of this Code.

*Findings:* This provisions outline requirements for access and improvement plans for development, in conformance with Article 32 of the Springfield Code. These minimum development standards support the IAMP by ensuring that all developments are consistent with local and state access, circulation and planned improvements (e.g. those recommended in the IAMP).

**Site Plan Review – Criteria. 31.060(3).** Parking areas and ingress-egress points have been designed to: facilitate vehicular traffic, bicycle and pedestrian safety to avoid congestion; provide connectivity within the development area and to adjacent residential areas, transit stops, neighborhood activity centers, and commercial, industrial and public areas; minimize curb cuts on arterial and collector streets as specified in Articles 31, 32, the appropriate zoning and/or zoning overlay district Article and any applicable refinement plan; and comply with the ODOT access management standards for state highways.

*Findings:* This provision requires access management plans for site plans, and requires compliance with ODOT access standards for state highways. This code provision supports the IAMP by requiring coordination with ODOT and other access standards. Access standards are a tool used for mitigation against congestion and safety issues related to multiple turning movements.

### **Article 32. Public and Private Improvements**

**Streets – Public. 32.020(1)(a).** The street system shall ensure efficient traffic circulation that is convenient and safe.

**32.020(1)(a)(1)(a).** Streets shall be designed to efficiently and safely accommodate all modes of travel including emergency fire and medical service vehicles.

**32.020(1)(a)(1)(c).** Streets shall be interconnected to provide for the efficient provision of public facilities and for more even dispersal of traffic.

**32.020(1)(a)(1)(g).** The street design shall enhance the efficiency of the regional collector and arterial street system by providing relatively uniform volumes of traffic to provide for optimum dispersal.

**32.020(1)(c).** A developer may be required to prepare a Traffic Impact Study to show how the design and installation of on-site and off-site improvements will minimize identified traffic impacts. The study shall be included with a development application, in any of the following instances:

1. When requesting a Variance from the transportation specifications of this Code.
2. When a land use will generated 250 or more vehicle trips per day in accordance with the current version of the Institute of Transportation Engineers Trip Generation

Informational Report. Descriptions of the requirements of a minor/major Traffic Impact Study are described in the Department of Public Works Standard Operating Procedures.

3. When the installation of traffic signals may be warranted.
4. The Public Works Director may require a Traffic Impact Study for a land use when the proposed development creates a hazardous situation or degrades existing conditions to an unacceptable level of service.
5. The Public Works Director will determine the nature and the extent of the TIA requirements relating to the number of trips associated with a specific development and potential traffic hazards.

*Findings:* These provisions in Article 32 outline requirements for public streets that are constructed or reconstructed in coordination with development, and also outline Traffic Impact Study requirements. This is important for maintaining the basic functionality of the transportation system as new development or redevelopment occurs. These provisions support the IAMP by requiring Traffic Impact Studies for developments with a specific number of trips. It is assumed that the Public Works Director will ensure that new developments will be consistent with the IAMP and IAMP recommendations, along with other state and local plans and codes.

### **Subdivision Standards**

**Tentative Plan – Criteria for Approval. 35.050(4).** Parking areas and ingress-egress points have been designed to: facilitate vehicular traffic, bicycle and pedestrian safety to avoid congestion; provide connectivity within the development area and to adjacent residential areas, transit stops, neighborhood activity centers, and commercial, industrial and public areas; minimize curb cuts on arterial and collector streets as specified in Articles 31, 32, the appropriate zoning and/or zoning overlay district Article and any applicable refinement plan; and comply with the ODOT access management standards for state highways.

*Findings:* This provision requires access management plans for site plans, and requires compliance with ODOT access standards for state highways. This code provision supports the IAMP by requiring coordination with ODOT and other access standards. Access standards are a tool used for mitigation against congestion and safety issues related to multiple turning movements.

### **Master Plan Standards**

**Criteria – 37.040(2).** The request as conditions conforms to the applicable Springfield Development Code requirements, Metro Plan policies, functional or refinement plan policies, applicable state statutes and administrative rules.

*Findings:* This provision requires conformance of a master plan (as conditioned) with other local and state plans and policies. This means that any master plan in Springfield must be consistent with the IAMP and IAMP recommendations, and therefore, supports the IAMP.

**Criteria – 37.040(3).** Proposed on-site and off-site public and private improvements are sufficient to accommodate the proposed phased development and any capacity

requirements of public facilities plans; and provisions are made to assure construction of off-site improvements in conjunction with a schedule of the phasing.

*Findings:* This provision requires that public improvements proposed as part of master plan developments are adequately planned to accommodate capacity requirements. This provision helps to protect interchange function by assuring that development does not impact the capacity of the transportation system without mitigation. This provides a level of protection for proposed projects in the IAMP.

### **General Development Standards for Mixed-Use Districts.**

Street Connectivity and Internal Circulation. 40.100(5). In mixed use developments:

(a) Streets and accessways of any one development of site shall interconnect with those of adjacent developments or sites . . .

*Findings:* This provision encourages shared driveways and accesses, which works to preserve roadway capacity and enhance safety. This code provision supports the IAMP by requiring access management as a tool used for mitigation against congestion and safety issues related to multiple turning movements. Internal circulation can pull local trips from the state/regional system, which preserves capacity.

## **Eugene Development Code**

The Eugene Land Use Code is Chapter 9 of the City's municipal code (Eugene Code). Chapter 7 of the municipal code is the Public Improvements code section. The following provisions from the Eugene Development Code work to promote interchange capacity protections or long-term interchange management tools:

### **Standards for Streets, Alleys and Other Public Ways**

**Street Connectivity Standards. 9.6815(2)(b).** The proposed development shall include street connections in the direction of all existing or planned streets within  $\frac{1}{4}$  mile of the development site. The proposed development shall also include street connections to any streets that abut, are adjacent to, or terminate at the development site. Secondary access for fire and emergency medical vehicles is required.

*Findings:* This provision promotes street connectivity, which helps to maintain the local street network, which places less pressure on major arterials in terms of congestion levels. This serves to preserve the improvements recommended as part of the I-5/Beltline IAMP.

### **Traffic Impact Analysis Review**

**Applicability. 9.8670.** Traffic Impact Analysis Review is required when one of the following conditions exists:

- (1) The development will generate 100 or more vehicle trips during any peak hour as determined by using the most recent edition of the Institute of Transportation Engineer's Trip Generation Manual. In developments involving a land division, the peak hour trips shall be calculated based on the likely development that will occur on all lots resulting from the land division.

- (2) The increased traffic resulting from the development will contribute to traffic problems in the area based on current accident rates, traffic volumes or speeds that warrant action under the city's traffic calming program, and identified locations where pedestrian and/or bicyclist safety is a concern by the city that is documented.
- (3) The city has performed or reviewed traffic engineering analyses that indicated approval of the development will result in levels of service of the roadway system in the vicinity of the development that do not meet adopted level of service standards.
- (4) For development sites that abut a street in the jurisdiction of Lane County, a Traffic Impact Analysis Review is required if the proposed development will generate or receive traffic by vehicles of heavy weight in their daily operations.

**Findings:** These provisions outline Traffic Impact Analysis Review, and when it is required. These provisions are important for maintaining the basic functionality of the transportation system as new development or redevelopment occurs. These provisions support the IAMP by requiring Traffic Impact Studies for developments with a specific number of trips. It is assumed that the Public Works Director will ensure that new developments will be consistent with the IAMP and IAMP recommendations, along with other state and local plans and codes.

**Approval Criteria. 9.8680.** The planning director shall approve, conditionally approve, or deny an application for Traffic Impact Analysis Review following a Type II process, or as part of a Type III process when in conjunction with a CUP or PUD. Approval or conditional approval shall be based on compliance with the following criteria:

- (1) Traffic control devices and public or private improvements as necessary to achieve the purposes listed in this section will be implemented. These improvements may include, but are not limited to, street and intersection improvements, sidewalks, bike lanes, traffic control signs and signals, parking regulation, driveway location, and street lighting.

**Findings:** These provisions describe the types of mitigation acceptable for development with impacts on the transportation system. These mitigation measures are ways to maintain the transportation system structure, which supports the IAMP by providing means to preserve the surrounding transportation system.

**TABLE D-1**  
 Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p><b>734-051-0125 Access Management Spacing Standards for Approaches in an Interchange Area</b></p> <p>(1) Access management spacing standards for approaches in an interchange are:</p> <p>(a) Based on classification of highway and highway segment designation, type of area, and posted speed;</p> <p>(b) Apply to properties abutting state highways, highway or interchange construction and modernization projects, planning processes involving state highways, or other projects determined by the region Manager; and</p> <p>(c) Do not apply to approaches in existence prior to April 1, 2000. <u>Exception:</u> (C) Where a highway or interchange construction or modernization project or other roadway or interchange project determined by the Region Manager, the project will improve spacing and safety factors by moving in the direction of the access management spacing standards, with the goal of meeting or improving compliance with the access management spacing standards.</p>	<p>Interchange area is within the Urban Growth Boundary of both the City of Springfield and the City of Eugene with a posted speed of 55 miles per hour on I-5. The interstate segment is the demarcation line running north-south between the two cities. The interstate would be considered urban with respect to the spacing to the next adjacent interchange 1.2 miles farther south.</p> <p>The cross road of Interstate 5 is OR 69 ("Beltline Highway"), which is a Region Level highway between I-5 and Gateway Street. The interchange is in an urban setting with commercial and traveler related services. OR 69 becomes "Beltline Road" 0.22 miles (1,162 feet) east of I-5. The Highway has an operating speed of 55 mph, while the Road has a posted speed of 35 miles per hour.</p> <p>This interchange area management plan is required as part of a modernization project programmed in the STIP. Therefore, the access spacing must move in the direction of the standards, which it does.</p>
<p>(2) Spacing standards in Tables 5, 6, 7 and 8 and Figures 1, 2, 3, and 4, adopted and made a part of this rule, identify the spacing standards for approaches in an interchange area.</p>	<p>There is no prior access management plan or Interchange Area Management Plan. In Division 51, Table 6 and Figure 2 for Minimum Spacing Standards Applicable to Freeway Interchanges with Multi-Lane Crossroads define the minimum distance to the next adjacent interchange ramp to ramp distance is approximately 1 mile and crossroad ramp distance to nearest public road is less than 1320 feet.</p>
<p>(3) When the Department approves an application:</p> <p>(a) Access management spacing standards for approaches in an interchange area must be met or approaches must be combined or eliminated resulting in a net reduction of approaches to the state highway and an improvement of existing</p>	<p>Approaches would not meet standards and a major deviation has been approved from the interchange ramp to the nearest public street (Gateway). Public road accesses would be reduced with some turning movements prohibited. Private approaches will be restructured and reduced with proposed improvements to the local system. The access spacing is moving in the direction of the access spacing standards.</p>

**TABLE D-1**  
Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
I-5/Beltline Interchange Project  
OAR 734-051

Requirement	How Addressed
<p>interchange management areas spacing standards; and</p> <p>(b) The approach must be consistent with any applicable access management plan for an interchange.</p>	
<p>(4) Deviations must meet the criteria in OAR 734-051-0135.</p>	See 734-051-0135.
<p>(5) Location of traffic signals within an interchange management area must meet the criteria of OAR 734-020-0400 through 734-020-0500.</p>	Proposed traffic signal spacing on Beltline Highway and Beltline Road requires a progression analysis, which was performed as part of the traffic analysis for the Environmental Assessment.
<p>(6) The Department should acquire access control on crossroads around interchanges for a distance of 1320 feet. In some cases it may be appropriate to acquire access control beyond 1320 feet.</p>	The Department has access control 1,320 feet from the NB off ramp at Beltline Highway to and including the intersection of Beltline/Gateway.
<p><b>734-051-0135 Deviations from Access Management Spacing Standards</b></p> <p>(1) A deviation will be considered when an approach does not meet spacing standards and the approach is consistent with safety factors in OAR 734-051-0080(9).</p> <p>Roadway character, Traffic character, Geometric character, Environmental character, and Operational character</p>	<p>A deviation has been approved. The roadway character is urban with travel (gas, food, and lodging) related businesses in the immediate interchange vicinity. The built environment immediately adjacent to the interchange is commercial and heavily dependant upon the interstate and travel related exposure. Other nearby developments include the many major retail stores of the Gateway Mall, which serve regional and greater service areas heavily dependant upon interstate access.</p> <p>Travel patterns in the interchange are a mixture of local trips, regional east-west trips, and interstate related trips. The vehicle types and travel modes include trucks, recreational vehicles, cars, bicycles, pedestrians, and transit.</p> <p>The existing geometry is deficient for all vehicle types and travel modes. Without improvements to the interchange geometry, these conditions could lead to an increase in the number of crashes, particularly along I-5 and Beltline Road through the weave sections, between interchange loop ramps.</p> <p>The EA investigated potential impacts of the project to natural and human resources. Because the project area is compact, already disturbed, and committed to urban use, few environmental issues were found to be of concern. Proposed mitigation and conservation measures were addressed in the EA and REA. The Interchange Build Alternative would include direct impacts to two jurisdictional wetland sites of approximately 7,160 square meters (1.8 acres) total.</p>

**TABLE D-1**  
 Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
	<p>The operational deficiencies parallel the geometric deficiencies identified above and include the relationship between the Interchange and the nearby Beltline/Gateway intersection. The operational characteristics will be improved to a multimodal transportation facility in an urban setting complementing the roadside character.</p>
<p>(2) For a private approach with no reasonable alternate access to the property, as identified in OAR 734-051-0080(2), spacing standards are met if property frontage allows or a deviation is approved as set forth in this section. The Region Manager shall approve a deviation for a property with no reasonable alternate access if the approach is located:</p> <p>(a) To maximize the spacing between adjacent approaches; or</p> <p>(b) At a different location if the maximized approach location: (A) Causes safety or operation problems; or (B) would be in conflict with a significant natural or historic feature including trees and unique vegetation, a bridge, waterway, park, archaeological area, or a cemetery.</p>	<p>Properties with frontage along Beltline Road will be provided alternative access from local streets.</p>
<p>(3) The Regional Access Management Engineer shall approve a deviation if:</p> <p>(a) Adherence to spacing standards creates safety or traffic operation problems;</p> <p>(b) The applicant provides a joint approach that services two or more properties and results in a net reduction of approaches to the highway;</p> <p>(c) The application demonstrates that existing development patterns or land holdings make joint use approaches impossible;</p> <p>(d) Adherence to spacing standards will cause the approach to conflict with a significant natural or historic feature including trees and unique vegetation, a bridge,</p>	<p>The interchange area management plan is being prepared under the project development guidelines rather than an application for an individual permit application.</p> <p>The basis of deviation for access spacing is being pursued on the basis that the improvements are being designed to improve safety and operations while moving toward the access spacing standards.</p> <p>Full compliance with the access spacing standards would result in significantly more investment to reconstruct local streets, relocate utilities, and additional displacements of building improvements beyond those already part of the selected alternative.</p> <p>The Regional Access Management Engineer was directly involved in analyzing and establishing the project specific access spacing parameters to reach an acceptable compromise to move in the direction of the access spacing standards. A deviation has been approved.</p>

**TABLE D-1**  
 Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p>waterway, park, archaeological area, or cemetery</p> <p>(e) The highway segment functions as a service road</p> <p>(f) On a couplet with directional traffic separated by a city block or more, the request is for an approach at mid-block with no other existing approaches in the block or the proposal consolidates existing approaches at mid-block; or</p> <p>(g) Based on the region Access Management Engineer's determination that: (A) Safety factors and spacing significantly improve as a result of the approach; and (B) Approval does not compromise the intent of these rules as set forth in OAR 734-051-0020.</p>	
<p>(4) When a deviation is considered, as set forth in section (1) of this rule, and the application results from infill or redevelopment:</p> <p>(a) The Region Access Management Engineer may waive the requirements for a Traffic Impact Study and may propose an alternative solutions where: (A) The requirements of either section (2) or section (3) of this rule are met; or (B) Safety factors and spacing improve and approaches are removed or combined resulting in a net reduction of approaches to the highway; and</p> <p>(b) Applicant may accept the proposed alternative solution or may choose to proceed through the standard application review process.</p>	<p>A traffic analysis was performed as part of project development. The proposed build alternatives would improve both safety and operations over the no build. The selected build alternative would correct or improve geometric, operational, and safety deficiencies, and would accommodate safe bike and pedestrian movements while improving mobility.</p>
<p>(5) The Region Access Management Engineer shall require any deviation for an approach located in an interchange access management area, as defined in the Oregon Highway Plan, to be evaluated over a 20-year horizon from the date of application and may approve a</p>	<p>The I-5/Beltline Interchange Environmental Assessment is based on a transportation analysis. The analysis considered existing conditions, future no build and future build alternatives for year 2025. The results indicate that safety and operations for the selected alternative would improve safety and operations within the interchange vicinity.</p>

**TABLE D-1**  
 Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p>deviation for an approach located in an interchange access management area if:</p> <ul style="list-style-type: none"> <li>(a) A condition of approval, included in the Permit to operate, is removal of the approach when reasonable alternate access becomes available;</li> <li>(b) The approach is consistent with an access management plan for an interchange that includes plans to combine or remove approaches resulting in a net reduction of approaches to the highway;</li> <li>(c) The applicant provides a joint approach that services two or more properties and results in a net reduction of approaches to the highway; or</li> <li>(d) The applicant demonstrates that existing development patterns or land holdings make utilization of a joint approach impracticable.</li> </ul>	<p>A deviation has been approved for the access spacing on the intersection of Beltline/Gateway.</p> <p>It is assumed that ODOT's design process would fine tune the location, dimensions and construction details based on actual field conditions. Addressing changes in road approaches would be subject to right-of-way laws governing property owner rights</p>
<ul style="list-style-type: none"> <li>(6) The Region Access Management Engineer may approve a deviation for a public approach that is identified in a local comprehensive plan and provides access to a public roadway if:                             <ul style="list-style-type: none"> <li>(a) Existing public approaches are combined or removed; or</li> <li>(b) Adherence to the spacing standards will cause the approach to conflict with a significant natural or historic feature including trees and unique vegetation, a bridge, waterway, park, archaeological area, or cemetery</li> </ul> </li> </ul>	<p>The selected alternative is consistent with the local comprehensive plan and transportation system plan. Approaches requiring deviation are public roads providing network connections with the local system facilitating travel flow through the interchange vicinity.</p> <p>Full adherence to access spacing standards would cost significantly more for the relocation of local streets, public utilities, and displacement of additional building improvements. A deviation has been approved.</p>
<ul style="list-style-type: none"> <li>(7) The Region Access Management Engineer may require that an access management plan, corridor plan, transportation system plan, or comprehensive plan identifies measures to reduce the number of approaches to the highway to approve a deviation for a public approach.</li> </ul>	<p>The intent is to seek Interchange Area Management Plan concurrence by the City of Springfield and the Oregon Transportation Commission prior to the start of construction of Phase 1 of the selected alternative.</p>

**TABLE D-1**  
Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
I-5/Beltline Interchange Project  
OAR 734-051

Requirement	How Addressed
<p>(8) The Region Access Management Engineer shall not approve a deviation for an approach if any of the following apply:</p> <p>(a) Spacing standards can be met even though adherence to spacing standards results in higher site development costs.</p> <p>(b) The deviation results from a self-created hardship including: (A) Conditions created by the proposed site plan, building footprint or location, on-site parking, or circulation; or (B) Conditions created by lease agreements or other voluntary legal obligations.</p> <p>(c) The deviation creates a significant safety or traffic operation problem.</p>	<p>The Environmental Assessment addresses right-of-way displacements, local circulation, and business access.</p>
<p>(9) The Region Access Management Engineer shall not approve a deviation for an approach in an interchange access management area where reasonable alternate access is available and the approach would increase the number of approaches to the highway.</p>	<p>The number of accesses will be reduced to improve safety, flow of traffic and improvement of operations.</p> <p>Public road approaches have been analyzed. The analysis results indicate there would be safety and operational benefits to the selected alternative and intersection option that includes a local access couplet design.</p>
<p>(10) Where section (2), (3), (4), (5) or (6) of this rule cannot be met, the Region Manager, not a designee, may approve a deviation where:</p> <p>(a) The approach is consistent with safety factors; and</p> <p>(b) The Region Manager identifies and documents conditions or circumstances unique to the site or the area that support the development.</p>	<p>Noted.</p>
<p>(11) Approval of a deviation may be conditioned upon mitigation measures set forth in OAR 734-051-0145.</p>	<p>See OAR 734-051-0145.</p>
<p>(12) Denial of a deviation is an appealable decision.</p>	<p>Noted.</p>

**TABLE D-1**

Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p><b>734-051-0145 Mitigation Measures</b></p> <p>(1) The Department may require mitigation measures on the state highway or the subject property to comply or improve compliance with the Division 51 rules for the continued operation of the existing approaches or construction of a new approach.</p>	<p>The number of accesses will be reduced to improve safety, flow of traffic and improvement of operations.</p> <p>Public road approaches have been analyzed. The analysis results indicate there would be safety and operational benefits to the selected alternative and intersection option that includes a local access couplet design.</p>
<p>(2) Unless otherwise set forth in Division 51 rules, the cost of mitigation measures is the responsibility of the applicant, permittee, or property owner as set forth in OAR 734-051-0205.</p>	<p>Mitigation costs are incorporated as part of project development and factored into the estimated construction costs.</p>
<p>(3) Mitigation measures may include:</p> <ul style="list-style-type: none"> <li>(a) Modifications to an approach;</li> <li>(b) Modifications of on-site storage of queued vehicles;</li> <li>(c) Installation of left turn or right turn channelization or deceleration lanes;</li> <li>(d) Modifications to left turn or right turn channelization or deceleration lanes;</li> <li>(e) Modifications required to maintain intersection sight distance;</li> <li>(f) Modification or installation of traffic signals or other traffic control devices.</li> <li>(g) Modification of the highway;</li> <li>(h) Modification or installation of curbing;</li> <li>(i) Consolidation of existing approaches or provisions for joint use accesses;</li> <li>(j) Installation of raised medians;</li> <li>(k) Restriction of turn movements for circumstances including: (A) The proximity of existing approaches or offset of opposing approaches; (B) Approaches within an Interchange Management Area, (C) Approaches along an Expressway; (D) Areas of insufficient decision sight distance for speed; (E) The proximity of railroad grade crossings; (F) Approaches with a crash history involving turning movements; (G) The functional area of an intersection ; and (H) Areas</li> </ul>	<p>Mitigation factors would include signal modifications, left turn or right turn channelization, and raised medians. Kruse Way and Hutton Road would be realigned.</p>

**TABLE D-1**

Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p>where safety or traffic operation problems exist.</p> <ul style="list-style-type: none"> <li>(l) Installations of sidewalks, bicycle lanes, or transit turnouts;</li> <li>(m) Development of reasonable alternate access; and</li> <li>(n) Modifications of local streets or roads along the frontage of the site.</li> </ul>	
<ul style="list-style-type: none"> <li>(4) Mitigation measures are directly related to the impacts of the particular approach on the highway and the scale of the mitigation measures will be directly proportional to the those impacts, as follows:           <ul style="list-style-type: none"> <li>(a) Where safety standards can be met by mitigation measures located entirely within the property controlled by the applicant or within existing state right of way, that will be the preferred means of mitigation.</li> <li>(b) Where safety standards cannot be met with measures located entirely within the property controlled by the applicant or within existing state right of way, ODOT will make an effort to participate in negotiations between the applicant and other affected property owners or assist the applicant to take necessary actions.</li> <li>(c) When cumulative effects of the existing and planned development create a situation where approval of an application would require mitigation measures that are not directly proportional to the impacts of the proposed approach, the Region Manager may allow mitigation measures to mitigate impacts as of the day of opening and defer mitigation of future impacts to ODOT project development provided the applicant conveys any necessary right of way to ODOT prior to development of the subject approach.</li> </ul> </li> </ul>	Not applicable

**TABLE D-1**  
 Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
(5) Mitigation to an alternate access may be more significant where the property fronts a highway classification of highway than where the property fronts a lower classification of highway.	Noted.
(6) An applicant may propose an Access Mitigation Proposal or an Access Management Plan to be implemented by the applicant or the local jurisdiction.	<p>The number of accesses would be reduced to improve safety, flow of traffic and improvement of operations.</p> <p>Public road approaches have been analyzed. The analysis results indicate there would be safety and operational benefits to the selected alternative and intersection option that includes a local access couplet design.</p>
(7) The Department will work with the local jurisdiction and the applicant to establish mitigation measures and alternative solutions including: (a) Changes to on-site circulation; (b) On-site improvements; and (c) Modifications to the local street network.	<p>The number of accesses would be reduced to improve safety, flow of traffic and improvement of operations.</p> <p>Public road approaches have been analyzed. The analysis results indicate there would be safety and operation benefits to the selected alternative and intersection option that includes a local access couplet design.</p>
(8) Where mitigation measures include traffic controls: (a) The applicant bears the cost of the controls and constructs required traffic controls within a timeframe identified by the Department or reimburses the Department for the cost of designing, constructing, or installing traffic controls; and (b) An applicant that is a lessee must provide evidence of compliance with required traffic controls and must identify the party responsible for construction or installation of traffic controls during and after the effective period of the lease.	Mitigation for project development was considered an integral part of the Environmental Assessment and was integrated into the selected alternative.

**TABLE D-1**

Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p>(9) Traffic signals are approved in the following priority:</p> <p>(a) Traffic signals for public approaches.</p> <p>(b) Private approaches identified in a Transportation System Plan to become public.</p> <p>(c) Private approaches.</p>	<p>Location of traffic signals within an interchange management area must meet the criteria of OAR 734-020-0400 through 734-020-0500. The selected alternative considers the criteria.</p>
<p>(10) Traffic signals are approved with the following requirements:</p> <p>(a) A signalized private approach must meet spacing standards for signalization relative to all planned future signalized public road intersections; and</p> <p>(b) The effect of the private approach must meet traffic operations standards, signals, or signal systems standards in OAR 734-020-0400 through 734-020-0500 and OAR 734-051-0115 and 734-051-125.</p>	<p>Traffic signals of the selected alternative would be a modification/replacement of existing traffic signals.</p>
<p>(11) All highway improvements within the right of way resulting from mitigation constructed by the permittee, and inspected and accepted by the Department, become the property of the Department.</p>	<p>ODOT, as owner, is responsible for final acceptance of project construction and would include the City of Springfield for acceptance of improvements to local facilities.</p>
<p>(12) Approval of an application with mitigation measures is an appealable decision.</p>	<p>Noted.</p>
<p><b>734-051-0155 Access Management Plans, Access Management Plans for Interchanges, and Interchange Area Management Plans</b></p> <p>(1) The Department encourages the development of Access Management Plans, Access Management Plan for Interchanges, and Interchange Area Management Plans to maintain highway performance and improve safety by improving system efficiency and management before adding capacity consistent with the 1999 Oregon Highway Plan.</p>	<p>The operational analysis for the I-5/Beltline Interchange Environmental Assessment meets the mobility standards for the Oregon Design Manual, which are more stringent than the mobility standards indicated in the 1999 Oregon Highway Plan. The selected alternative access management and moving toward the access spacing standards. The selected alternative would improve safety and operations before adding capacity.</p>

**TABLE D-1**  
 Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p>(2) Access Management Plans and Access Management Plans for Interchanges are developed for a designated section of highway with priority placed on facilities with high volumes or providing important statewide or regional connectivity where:</p> <ul style="list-style-type: none"> <li>(a) Existing developments do not meet spacing standards;</li> <li>(b) Existing development patterns, land ownership patterns, and land use plans are likely to result in a need for deviations; or</li> <li>(c) An access management plan would preserve or enhance the safe and efficient operation of a state highway.</li> </ul>	<p>OR 69 (Beltline Highway) is designated a Region level highway between I-5 and Gateway Street. Access spacing standards have been analyzed and reviewed with the Oregon Transportation Commission, City of Springfield, City of Eugene, Lane County, and property owners and businesses as a part of the I-5/Beltline Interchange Environmental Assessment. The selected alternative minimizes adverse impacts to existing business while providing necessary capacity for the planning horizon of 20 years after construction. The direction to ODOT staff was to proceed in resolving interchange access and circulation issues by coordinating efforts with the agencies and stakeholders.</p>
<p>(3) Access Management Plans and Access Management Plans for Interchanges may be developed:</p> <ul style="list-style-type: none"> <li>(a) By the Department;</li> <li>(b) By local jurisdictions; or</li> <li>(c) By consultants.</li> </ul>	<p>The Beltline Management Team (BMT) (ODOT and consultant management staff) in coordination with the City of Springfield, City of Eugene, and ODOT technical staff worked with the Beltline Decision Team (BDT) comprised of FHWA Operations Engineer, ODOT Area 5 Manager, Lane County Commissioner, City of Springfield Councilor, and City of Eugene Councilor as the decision making body.</p> <p>The Stakeholder Working Group (SWG) represented a wide range of interests, including affected user groups and communities. The SWG reviewed detailed aspects of the project design, provided guidance to technical staff, and made recommendations to the BDT for alternatives addressing access management that were studied in the Environmental Assessment. The selected alternative incorporates access management. The number of accesses would be reduced to improve safety, flow of traffic and improvement of operations.</p>
<p>(4) Access Management Plans and Access Management Plans for Interchanges comply with all of the following:</p> <ul style="list-style-type: none"> <li>(a) Are prepared for a logical segment of the state highway and include sufficient area to address highway operation and safety issues and development of adjoining properties including local access and circulation.</li> <li>(b) Describe the roadway network, right of way, access control, and land parcels in the analysis area.</li> </ul>	<p>The transportation influence area is generally the portion of the Metro Urban Growth Boundary east of I-5 and north of Harlow Road.</p> <p>The number of accesses would be reduced to improve safety, flow of traffic and improvement of operations.</p> <p>Public road approaches were analyzed. The analysis results indicate there would be safety and operational benefits to the selected alternative and intersection option that includes a local access couplet design.</p>

**TABLE D-1**

Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
(c) Are developed in coordination with local governments and property owners in the affected area.	
(d) Are consistent with any applicable adopted Transportation System Plan, Local Comprehensive Plan, Corridor Plan, or Special Transportation Area or Urban Business Area designation, or amendments to the Transportation System Plan.	
(e) Are consistent with the 1999 Oregon Highway Plan.	
(f) Contain short, medium, and long-range actions to improve operations and safety and preserve the functional integrity of the highway system.	
(g) Consider whether improvements to local street networks are feasible	
(h) Promote safe and efficient operation of the state highway consistent with the highway classification and zoning of the area.	
(i) Consider the use of the adjoining property consistent with the comprehensive plan designation and zoning of the area.	
(j) Provide a comprehensive, area-wide solution for the local access and circulation.	
(k) Are approved by the Department through an intergovernmental agreement and adopted by the local government, and adopted into a Transportation System Plan.	
(l) Are used for evaluation of development proposals	
(m) May be used in conjunction with mitigation measures.	

**TABLE D-1**  
 Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p>(5) The Department encourages the development of Interchange Area Management Plans to plan for and manage grade-separated interchange areas to ensure safe and efficient operation between connecting roadways:</p> <p>(a) Interchange Area Management Plans are developed by the Department and local government agencies to protect the function of interchanges by maximizing the a capacity of the interchanges for safe movement from the mainline facility, to provide safe and efficient operations between connecting roadways, and to minimize the need for major improvements of existing interchanges;</p> <p>(b) The department will work with local governments to prioritize the development of Interchange Area Management Plans to maximize the operational life and preserve and improve safety of existing interchange not scheduled for significant improvements; and</p> <p>(c) Priority should be place on those facilities on the Interstate system with cross roads carrying high volumes or providing important statewide or regional connectivity.</p>	<p>Geometric deficiencies and no build operational analysis indicate and justify the purpose and need to improve traffic flow through the interchange area safely and efficiently. Short term measures have been put into place as a stop gap until facility improvements can be constructed to meet today's and future travel demands.</p> <p>ODOT and the Cities of Springfield and Eugene have a long history of coordinating improvements to the interchange. In 1986, there was a major reconstruction of I-5 at the Beltline Interchange, including additional lanes and ramp modifications. In 1999, a safety improvement project separated northbound off-ramp freeway traffic. The I-5/Beltline Interchange study and design is shown as programmed project number 606 in the July 2002 TransPlan. In the spring of 1996, ODOT began a Facility Plan for the I-5/Beltline Interchange Project. In the year 2000, ODOT began a highly structured public and agency project evaluation screening process leading to the selection of environmental study alternatives for documentation in an environmental assessment. In the year 2000, ODOT and the local agencies began a highly structured public and agency project evaluation screening process leading to the selection of environmental study alternatives for documentation in the Environmental Assessment, which was approved in 2003The volume and impacts to the interstate continue to cause this interchange to rank highly for STIP funding.</p>
<p>(6) Interchange Area Management Plans are required for new interchanges and should be developed for significant modifications to existing interchanges consistent with the following:</p> <p>(a) Should be developed no later than the time an interchange is designed or is being redesigned;</p> <p>(b) Should identify opportunities to improve operations and safety in conjunction with roadway projects and property development or redevelopment and adopt strategies and development standards to capture those opportunities;</p>	<p>The proposed Interchange Area Management Plan has been developed prior to start of construction of the selected alternative of the Environmental Assessment. Consideration to local circulation and property accesses were carefully considered in coordination with adjacent property owners and local government staff. The Transportation Operational Analysis Report analyzed existing conditions and future needs through 2025 consistent with local plans and Oregon Highway Design Manual for mobility for the purposes of determining lane configurations. Queuing and progression have been considered to determine auxiliary lane lengths for right and left turn lanes. Capacity preservation measures have been developed considering the land use zoning and potential risk for using up the excess capacity prematurely. Local, state, and federal plans, rules, policies, and codes create an effective web of interchange management strategies for the 20-year planning period. A key component of the selected alternative is the IGA for traffic monitoring and improvements of the Beltline/Gateway</p>

**TABLE D-1**  
 Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p>(c) Should include short, medium, and long-range actions to improve operations and safety in the interchange area;</p> <p>(d) Should consider current and future traffic volumes and flows, roadway geometry, traffic control devices, current and planned land uses and zoning, and the location of all current and planned approaches;</p> <p>(e) Should provide adequate assurance of the safe operation of the facility through the design traffic forecast period, typically 20 years;</p> <p>(f) Should consider existing and proposed uses of all property in the interchange area consistent with its comprehensive plan designations and zoning;</p> <p>(g) Are consistent with any adopted Transportation System Plan, Corridor Plan, Local Comprehensive Plan, or Special Transportation Area or Urban Business Area designation, or amendments to the Transportation System Plan</p> <p>(h) Are consistent with the 1999 Oregon Highway Plan, and</p> <p>(i) Are approved by the Department through an intergovernmental agreement and adopted by the local government and adopted into a Transportation System Plan</p>	<p>intersection.</p>
<p><b>734-051-0285 Project Delivery</b></p> <p>(1) This rule applies to construction of new highways and interchanges, highway or interchange modernization projects, highway and interchange preservation projects, highway and interchange operations projects or other highway and interchange projects. Access Mitigation Strategies, Access Management Plans, and Access Management Plans for Interchanges are developed during project delivery to maintain highway performance and improve safety by</p>	<p>The project was developed with the goal of working towards achieving the access spacing standards. Access controls were included as part of the selected alternative to preserve capacity.</p>

**TABLE D-1**  
 Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p>improving system efficiency and management before adding capacity, as provided by this rule and consistent with the 1999 Oregon Highway Plan. All approaches identified to remain open in an area that is not access controlled in an Access Management Strategy, Access Management Plan, or Access Management Plan for an Interchange Area are presumptively found to be in compliance with Division 51 rules once any measures prescribed for such compliance by the plan are completed, and subsequent changes will be measured from that status. However, that status does not convey a grant of access.</p>	
<p>(2) The Region Manager shall develop Access Management Strategies for modernization projects, projects within an influence area of an interchange where the project includes work along the crossroad, or projects on an expressway and may develop Access Management Strategies for other highway projects.</p>	<p>Access management strategies for Beltline Highway and Beltline Road and included in the selected alternative would prohibit private accesses, reduce public approaches, and provide raised median and access control within the interchange influence area</p>
<p>(5) The Region Manager may require modification, mitigation, or removal of approaches within project limits:</p> <p>(a) Pursuant to either: (A) An Access Management Plan or an Access Management Plan for an Interchange adopted by the Department or (B) An approve Access Management Strategy; and</p> <p>(b) If necessary to meet the classification of the highway or highway segment designation, mobility standards, spacing standards, or safety factors; and</p> <p>(c) If a property with an approach to the highway has multiple approaches and if a property with an approach to the highway has alternate access in addition to the highway approach.</p> <p>(d) The determination made under subsections (a) through (c) of this section must conclude that the net result of the project including</p>	<p>The number of accesses would be reduced to improve safety, flow of traffic and improvement of operations.</p> <p>Public road approaches were analyzed. The analysis results indicate there would be safety and operational benefits to the selected alternative and intersection option that includes a local access couplet design.</p>

**TABLE D-1**

Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p>closures, modification and mitigations will be that access will remain adequate to serve the volume and type of traffic reasonably anticipated to enter and exit the property, based on the planned uses for the property.</p>	
<p>(6) Access Management Strategies comply with all of the following:</p> <ul style="list-style-type: none"> <li>(a) Are developed for the project limits, a specific section of the highway within the project limits, or to address specific safety or operational issues within the project limits.</li> <li>(b) Must improve access management conditions to the extent reasonable within the limitation, scope, and strategy of the project and consistent with design parameters and available funds.</li> <li>(c) Promote safe and efficient operation of the state highway consistent with the highway classification and the highway segment designation.</li> <li>(d) Provide for reasonable use of the adjoining property consistent with the comprehensive plan designation and zoning of the area.</li> <li>(e) Are consistent with any applicable adopted Access Management Plan, Transportation System Plan or Corridor Plan.</li> </ul>	<p>Conditions have been met as described in previous responses.</p>
<p>(7) Access Management Plans comply with all of the following:</p> <ul style="list-style-type: none"> <li>(a) Must include sufficient area to address highway operation and safety issues and the development of adjoining properties including local access and circulation.</li> <li>(b) Must improve access management conditions to the extent reasonable within the limitation and scope of the project and be consistent with the design</li> </ul>	<p>Noted, see prior discussion</p>

**TABLE D-1**  
 Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p>parameters and available funds.</p> <p>(c) Describe the roadway network, right-of-way, access control, and land parcels in the analysis area.</p> <p>(d) Are develop in coordination with local governments.</p> <p>(e) Are consistent with any applicable adopted Transportation System Plan, corridor Plan, or Special Transportation area or Urban Business Area designation, or amendments to the Transportation System Plan.</p> <p>(f) Are consistent with the 1999 Oregon Highway Plan.</p> <p>(g) Contain short, medium, and long-range actions to improve operations and safety and preserve the functional integrity of the highway system.</p> <p>(h) Consider whether improvements to local street networks are feasible.</p> <p>(i) Promote safe and efficient operation of the state highway consistent with the highway segment designation.</p> <p>(j) Consider the use of the adjoining property consistent with the comprehensive plan designation and zoning of the area.</p> <p>(k) Provide a comprehensive, area-wide solution for local access and circulation.</p> <p>(l) Are approve by the Department through an intergovernmental agreement and adopted by the local government, and adopted into a Transportation System Plan.</p>	
<p>(8) In the even of a conflict between the access management spacing standards and the access management spacing standards for approaches in an interchange areas the more restrictive provision will prevail. These spacing standards are used to develop Access Management Plans for Interchanges and where appropriate:</p>	<p>Access spacing considerations have been site specific and considered travel patterns, roadway and adjacent properties. Enhancements to alternative modes are included in the selected alternative by providing sidewalks and bike lanes. The selected alternative considers planned transit development.</p>

**TABLE D-1**

Interchange Area Management Plan Requirements (OAR 734-051) and Project Compliance  
 I-5/Beltline Interchange Project  
 OAR 734-051

Requirement	How Addressed
<p>(a) Support improvements such as road networks, channelization, medians, and access control, with an identified committed funding source, and consistent with the 1999 Oregon Highway Plan;</p> <p>(b) Ensure that approaches to cross streets are consistent with spacing standards on either side of the ramp connections; and</p> <p>(c) Support interchange designs that consider the need for transit and park-and-ride facilities and the effect of the interchange on pedestrian and bicycle traffic.</p>	
<p>(9) Notwithstanding other provisions of this Division, the Region Manager, not a designee, may recognize an approach to be in compliance where there is no Access Control, and where construction details for a Department project show the intention to preserve the approach as part of that project, as documented by plans dated before the original effective date of Division 51, April 1, 2000.</p>	<p>Not applicable.</p>

APPENDIX E

# **Decision Summary and Correspondence**

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# Project Decision Summary

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## 1.1 BDT Decision Recommendation

The following are proposed actions to complete the Revised Environmental Assessment (REA):

### Noise – Build a wall in the SW quadrant

1. Place a copy of EWEB's and ODOT's letter in the REA.
2. Specify that the proposed mitigation includes berm removal, wooden fence replacement, and bike/pedestrian facility location.
3. Update the noise impacts to reflect removal of berm and fence. Include the updated readings in the REA as appropriate.
4. Update figures to include the placement of the new walls for consistency to the commitment and mitigation.
5. Indicate the wall will be built as part of Phase 1 in the REA.
6. The Metropolitan Policy Committee (MPC) will request funding for wall construction as part of its federal funding earmark proposal.

### PeaceHealth – Traffic impacts will be accommodated through 2025, according to preliminary forecasts

7. Specify that ODOT will continue its coordination and monitoring program with PeaceHealth and the City of Springfield to stay current on the status and to review information.
8. Update the secondary impacts section of the REA with current facts at the time of document preparation.

### Phase 2 Implementation – City to be lead for Phase 2 implementation

9. Update the response to comments to reflect the modified language from Phase 2 implementation and be included as an appendix to the REA.
10. Include the Modified Phase 2 Implementation language in the mitigation section of the REA.

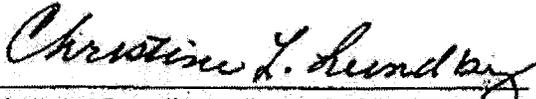
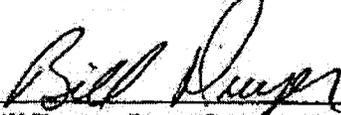
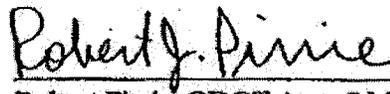
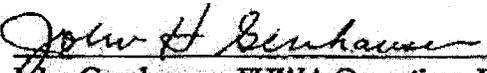
### Costs – A TransPlan Amendment is not required. The project is consistent with TransPlan

11. Include a letter with LCOG staff and FHWA endorsement that TransPlan is consistent with REA in the Appendix of the REA.

IGA Process - The process steps and timelines have been agreed to between ODOT and the City of Springfield in concept.

12. Complete the language for the final IGA by March 2003, prior to FHWA approval of the REA.

### 1.2 BDT Signatures

		Vote
 Christine Lundberg, Springfield City Councilor	<u>12/3/02</u> Date	Yes
 David Kelly, Eugene City Councilor	<u>11/21/02</u> Date	Yes
 Bill Dwyer, Lane County Commissioner	<u>11/25/02</u> Date	Yes
 Robert Pirrie, ODOT Area 5 Manager	<u>12/3/02</u> Date	Yes
 John Gernhauser, FHWA Operations Engr.	<u>11/18/02</u> Date	Yes

### 1.3 Decision

The Beltline Decision Team agrees to recommend that ODOT select and FHWA approve the interchange build alternative and modified Option 3 of Springfield city street improvements as the preferred alternative, assuming actions are taken on items listed in Section 1.1.

November 7, 2002

Fred Patron, Senior Transportation Planner  
Federal Highway Administration  
Oregon Division  
530 Center Street NE, Suite 100  
Salem, OR 97301

Dear Fred:

As you know, the Beltline Decision Team (BDT) is scheduled to discuss the I-5/Beltline Interchange Revised Environmental Assessment (REA) on November 14<sup>th</sup>. An issue that has been raised has to do with the consistency between the REA and TransPlan. We understand that demonstrating consistency between the EA and plan is a requirement before FHWA can take action on the EA. The purpose of this letter is to outline the MPO's assessment of this issue and to seek your concurrence.

#### Status of I-5/Beltline Project in TransPlan

As adopted, TransPlan includes the I-5/Beltline project as Project 606, categorized as a Major Interchange Improvement in the list of Financially Constrained 20-year Capital Improvement Actions (Table 1a). The TransPlan planning horizon is 2021. TransPlan includes the following detail on the project:

*I-5 @ Beltline Highway - Reconstruct interchange and I-5, upgrade Beltline Road East to 5 lane urban facility, and construct I-5 bike and pedestrian bridge.  
Responsibility: ODOT; Cost: \$53,300,000.*

#### Current Status of Revised Environmental Assessment

In materials being provided to the BDT for discussion on November 14<sup>th</sup>, a section on Transportation Improvement Costs outlines the most current phasing and cost analyses for the project. Three phases were identified. Based upon traffic analysis conducted for the EA, the first two phases are required by 2015 to meet safety and operational needs. The same analysis indicates that the third phase, originally timed for year 2020, can be deferred to 2022 and still meet it's intended need by 2025. The REA will list the third phase as needed by 2022, which puts it beyond the TransPlan planning horizon.

The cost analysis provided in the materials to the BDT indicate that the construction costs for phases 1 and 2 come to \$52.2 Million in 2002 dollars. This equates to \$49.2

Million in year 2000 dollars (TransPlan's base year for financial constraint), less than the \$53.3 Million planning cost estimate used in TransPlan for the project. The third phase construction cost equals \$26.4 Million in 2002 dollars, or \$24.9 Million in year 2000 dollars.

Summary of MPO Assessment of Consistency

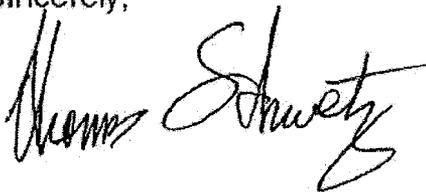
As refined in the EA process, the project scope remains consistent with TransPlan's goals and policies. The refinements indicate that there are increased costs and extended timing of the project compared to what was indicated in TransPlan. Given that the REA indicates that the costs for improvements needed during the planning horizon fall within the planning cost estimates in TransPlan, we see no implications on the plan's financial constraint assumptions.

What remains different between the two documents is that the third phase, by virtue of it's falling outside the TransPlan planning horizon, would be considered a future project. In TransPlan, we assumed that the entire project would be completed within the planning horizon. In some cases, an extension of a project's timing might affect a region's air quality conformity. However, the extended phasing of this project has no air quality conformity implications for the plan or TIP given that it is outside the region's conformity boundary (downtown Eugene). Beyond possible air quality concerns, we see

Given that the REA does not impact either the Plan's financial constraint or air quality conformity we see no reason for amendment of the current plan and are proposing that issues associated with the third phase of the project be taken up as part of the three year update process. The first phase of project construction is not due to begin until 2005. We expect the three-year update of TransPlan to be complete by that time, and will have included the third phase of the project within the financially constrained project list of the update.

The coordination of the plan and environmental processes is complex and, unfortunately, often leads to confusion. We appreciate your review and feedback on the issues described above. Please review this memo and provide us with your response at your earliest convenience.

Sincerely,



Thomas Schwetz  
Program Manager  
Transportation and Public Infrastructure

**RECEIVED**

NOV 12 2002



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
THE OREGON DIVISION  
The Equitable Center, Suite 100  
530 Center Street NE  
Salem, Oregon 97301  
503-399-5749  
Fax: 503-399-5838

November 13, 2002

IN REPLY REFER TO

HPL-OR

39048

Mr. Thomas Schwetz, Program Manager  
Lane Council of Governments  
99 East Broadway, Suite 400  
Eugene, Oregon 97401-3111

RE: I-5/Beltline Interchange

Dear Mr. Schwetz:

Your November 7, 2002, letter assessed the consistency between the Revised Environmental Assessment (REA) for the I-5/Beltline Interchange and TransPlan and asked for concurrence by the Federal Highway Administration (FHWA). To summarize, you noted that:

- The I-5/Beltline project is identified in the financially constrained list of projects included in the current TransPlan, reflecting project details and costs that were available when the plan was last updated. The TransPlan planning horizon is 2021.
- More recent analysis conducted for the REA indicates the following:
  - Total construction costs for the project will be greater than previously estimated in TransPlan
  - The project lends itself to construction in three phases (two within the current TransPlan planning horizon and the third after 2021)
  - The scope and costs of the first two project phases remain consistent with the financially constrained list of projects included in TransPlan

Lane Council of Governments (LCOG) is committed to reflecting the third phase of the project in the financially constrained TransPlan during the next scheduled three-year update cycle (2005)

- The new information from the REA has no regional air quality conformity implications
- LCOG concludes that the construction phases in the REA are consistent with TransPlan

We agree with your statement that the coordination of the regional transportation plan and environmental processes is complex and can often be confusing. A primary reason for this confusion is that while neither process is static, both must describe details, as they are known at a

particular point in time. Because the process is iterative, it is expected that plan and/or project adjustments will be needed periodically as details are refined. The question of whether the plan needs to be adjusted immediately or during the next routine update depends upon the significance of the changes that are at hand.

FHWA's primary concern is that information provided through the regional transportation plan and the environmental process remains consistent. Based on the information provided in your letter of November 7, 2002, we agree that the first two phases of the I-5/Beltline Interchange project described in the REA are consistent with the financially constrained list of projects currently shown in TransPlan. In addition, we concur in LCOG's proposal to reflect issues associated with the third phase of the project during the next scheduled TransPlan update.

Sincerely,



Fred P. Patron  
Senior Transportation Planner

cc:

ODOT (Bob Pirrie, Region 2)  
(Eric Havig, Region 2)  
(John DeTar, Region 2)  
(Jerri Bohard, TDD)  
(Jim Cox, Enviro)

APPENDIX F

# **Region Access Manager Engineer Approval**

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## INTEROFFICE MEMO

**TO:** Jeff Scheick, P.E., Region-2 Manager

**FROM:** Dave Warren, P.E., Region-2 Access Management Engineer

**DATE:** July 29, 2005

**SUBJECT:** Standards Deviations for I-5/Beltline Interchange Area Access Management

I have reviewed the access management measures for the I-5/Beltline 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 approved Environmental Assessment. The deviation for access spacing is on the basis that the improvements are being designed to 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 additional displacements of building improvements beyond those already part of the selected alternative. The authorized deviations are listed below:

1. Table 6 of OAR Chapter 734, Division 51 establishes Spacing Standards Applicable to Freeway Interchanges with Multi-Lane Crossroads. The recommended distance to first intersections where left turns are allowed is 1320 feet. This spacing standard would apply to the distance between the northbound ramp terminal and the Gateway Street/North Game Farm Road intersection. Upon completion of the project this distance will be approximately 820 feet, which is 500 feet less than the required 1320-feet.

OAR 734-051-0125(6) recommends that access control be acquired on crossroads around interchanges for a distance of 1,320 feet. Upon completion of this project access control will be maintained for a distance of 820 feet along the Beltline Highway from the northbound ramp terminal to the Gateway Street/Beltline Road intersection. To meet the recommended 1,320 feet, ODOT would need to purchase access control on Beltline Road east of the Gateway Street/Beltline Road intersection. Beltline Road east of Gateway Street is under the jurisdiction of the City of Springfield.

Cc: Karl Wieseke, Project Leader  
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