

Interchange Area Management Plan

**Albany OTIA Lyon/Ellsworth (US-20/ORE-99E)
Interchange Improvement Project**

City of Albany, Linn County, Oregon

Prepared for

Oregon Department of Transportation, Region 2

Prepared by

David Evans and Associates, Inc.
2100 SW River Parkway
Portland, Oregon

May 24, 2004

Albany OTIA
Interchange Access Management Plan

Table of Contents

	Page
EXECUTIVE SUMMARY	ES-1
1.0 INTRODUCTION.....	1
1.1 IAMP PLANNING AREA	1
1.2 PUBLIC AND AGENCY PARTICIPATION	1
2.0 PROJECT DESCRIPTION, PURPOSE, AND GOALS AND OBJECTIVES	2
2.1 PROJECT DESCRIPTION	2
2.2 ALTERNATIVES CONSIDERED	3
2.3 PURPOSE OF IAMP	4
2.4 IAMP GOALS AND OBJECTIVES	4
2.5 INTERCHANGE FUNCTION	5
3.0 ACCESS MANAGEMENT.....	5
3.1 ACCESS MANAGEMENT STRATEGY AND ACTIONS	7
3.2 OTHER SHORT-TERM ACCESS MANAGEMENT ACTIONS	7
3.3 MEDIUM-TERM AND LONG-TERM ACCESS ACTIONS	7
4.0 PLAN AND POLICY REVIEW.....	8
4.1 STATEWIDE PLANNING GOALS	9
4.2 OREGON TRANSPORTATION PLAN	9
4.3 OREGON HIGHWAY PLAN.....	9
4.4 OREGON ADMINISTRATIVE RULE 734-051-0010 ET SEQ. (DIV. 51)	10
4.5 OTIA PROJECT CONDITIONS OF APPROVAL	11
4.6 CITY OF ALBANY TRANSPORTATION SYSTEM PLAN	11
4.7 CITY OF ALBANY COMPREHENSIVE PLAN AND DEVELOPMENT CODE.....	12
4.8 TRAFFIC ANALYSIS AND TRAFFIC SIGNAL WARRANTS TECHNICAL MEMORANDUMS FOR THE ATC13	13
5.0 CHARACTERISTICS OF THE PLANNING AREA	13
5.1 TRANSPORTATION FACILITIES	13
5.1.1 <i>Existing and Forecast Traffic Operations in the Planning Area</i>	14
5.1.2 <i>Crash History</i>	15
5.1.3 <i>Planning Area Improvements</i>	19
5.1.4 <i>Future 2023 Operations Analysis</i>	20
5.1.5 <i>Existing and Future Non-Motorized Transportation Facilities</i>	21
5.2 LAND PARCELS AND PLANNING.....	22
5.2.1 <i>City of Albany Comprehensive Plan Designations</i>	22
5.2.2 <i>City of Albany Development Code Designations</i>	22
5.2.3 <i>Existing Land Uses</i>	23
5.2.4 <i>Future Land Use</i>	25

5.3 NATURAL AND CULTURAL RESOURCES	25
5.3.1 <i>Natural Resources</i>	25
5.3.2 <i>Cultural Resources</i>	26
6.0 IMPLEMENTATION OF THE IAMP.....	28
7.0 REFERENCES.....	28

List of Tables

TABLE 1. US-20/ORE-99E SUMMARY OF CRASH TYPE BY INTERSECTION, JAN 2000-DEC 2002.....	18
TABLE 2. NRHP PROPERTIES	27

List of Figures

Follows page

FIGURE 1. VICINITY MAP AND IAMP PLANNING AREA	1
FIGURE 2. IAMP PLANNING AREA MAP.....	1
FIGURE 3. OTIA PROJECT INTERCHANGE IMPROVEMENTS AND PROPOSED SHORT-TERM ACCESS MANAGEMENT ACTIONS	2
FIGURE 4A. HIGHWAY APPROACH INVENTORY—WEST	6
FIGURE 4B. HIGHWAY APPROACH INVENTORY—EAST	6
FIGURE 5. 2002 AVERAGE DAILY TRAFFIC VOLUMES	14
FIGURE 6. 2023 AVERAGE DAILY TRAFFIC VOLUMES	14
FIGURE 7. 2003 AM AND PM PEAK HOUR INTERSECTION TRAFFIC VOLUMES	15
FIGURE 8. 2023 AM AND PM PEAK HOUR TRAFFIC VOLUMES.....	15
FIGURE 9. CRASH HISTORY DIAGRAMS (1998 TO 2002)	16
FIGURE 10. CITY OF ALBANY COMPREHENSIVE PLAN DESIGNATIONS.....	22
FIGURE 11. DEVELOPMENT CODE DESIGNATIONS AND HISTORIC DISTRICTS.....	22

List of Appendices

Appendix A. March 18, 2004 Town Hall Meeting Display Advertisement, Democrat-Herald Article, and Comment Sheets	
Mailed Notice of May 13, 2004 Public Meeting on Draft IAMP	
Appendix B. Project Access Inventory	
Appendix C. Roadway Inventory	

List of Acronyms

AADT	Annual Average Daily Traffic
ATC	Albany Transit Center
CALUTS	Central Albany Land Use and Transportation Study
CC	Central Commercial District
EB	east bound
HDM	Highway Design Manual
HM	Hackleman-Monteith Historic District
IAMP	Interchange Area Management Plan
IGA	Intergovernmental Agreement
LE	Lyons-Ellsworth District
LI	Light Industrial District
MVMT	million vehicle miles traveled
NRHP	National Register of Historic Places
OAR	Oregon Administrative Rule
ODOT	Oregon Department of Transportation
OHP	Oregon Highway Plan
OP	Office Professional
OR	Oregon Route
OTC	Oregon Transportation Commission
OTIA	Oregon Transportation Investment Act
PB	Pacific Boulevard District
P+W	Pacific and Western Railroad
RM-3	Residential Multiple Family, 20 to 40 units per acre
SHPO	State Historic Preservation Office
SPIS	Safety Priority Index System
UGB	Urban Growth Boundary
UPRR	Union Pacific Railroad
US	United States (Highway)
V/C	volume/capacity ratio
Vpd	Vehicles per day
WB	west bound

Executive Summary

The City of Albany and the Oregon Department of Transportation (ODOT) Region 2 have determined that the existing Lyon/Ellsworth (US-20/ORE-99E) Interchange in the city of Albany, Linn County, Oregon requires modifications and improvements to operate more efficiently and safely, and to provide appropriate access for the multi-modal Albany Transit Center (ATC) at the site of the existing Albany Train Station. The interchange improvement project was developed during the site planning process for the ATC project. The ATC project includes the restoration of the existing historic train station and the construction of additional facilities to accommodate multi-modal traffic. One of the two primary entrances to this new ATC is located at this interchange.

An Interchange Area Management Plan (IAMP) is necessary in order to use the Oregon Transportation Investment Act (OTIA) funding approved for the project. This IAMP will guide the City and ODOT with long-term transportation system and access management in the area around the interchange area, including affected segments of the state highways. This IAMP has been prepared with participation of the public in two town hall meetings, the City of Albany, and a variety of stakeholders.

The Albany OTIA Project

The existing Lyon/Ellsworth interchange is over capacity resulting in significant delays during peak hours resulting in traffic being backed up into the downtown area. Congestion inhibits access to downtown and the ATC. Currently, there is one northbound lane (Lyon Street) and one southbound lane (9th Avenue) through the Lyon Street underpass at the center of the partial interchange and there are limited pedestrian and bicycle facilities within the interchange area. By reconfiguring the undercrossing and roadway approaches to the interchange, vehicular capacity will be increased and pedestrian and bicycle facilities can be accommodated. Capacity improvements include signal and ramp modifications to improve traffic operations at the congested intersection of Lyon Street and the eastbound Pacific Boulevard (ORE-99E) on- and off-ramp located directly north of the ATC.

The interchange improvement project will consist of actions to modify and improve the existing partial diamond interchange into a partial single-point urban diamond interchange. The modifications include:

- Improving traffic flow in and out of the City of Albany's downtown area from the south on US-20 by providing two lanes of traffic flow through the intersection as compared to the existing single lane of traffic capacity;
- Widening the area under the existing ORE-99E overpass structure to accommodate additional vehicular, pedestrian, and bicycle traffic;
- Installation of a new traffic signal at the intersection of 9th Avenue at Ellsworth Street;
- Realignment of the ORE-99E exit to northbound Lyon Street (US-20); and
- Addition of connecting sidewalks, crosswalks and bike lanes along each roadway segment within the construction zone.

Access Management

The goal of this IAMP is to develop a set of short, medium, and long-term access management actions that meet Oregon Highway Plan (OHP) requirements and the access spacing standards in Oregon Administrative Rule (OAR) 734-051. Considering the need to maintain reasonable access to existing properties while addressing safety priorities, the access management strategy and actions presented in this plan are intended to improve highway conditions by moving towards meeting the appropriate access management standards. The short-term strategy would be implemented with the US-20/ORE-99E interchange Improvement Project. Medium- and long-term actions are recommended as land use changes and redevelopment occurs or in concurrence with future roadway improvement projects.

Within the study area, US-20 and ORE-99E have posted speeds of 25 mph, 35 mph and 45 mph. The OAR 734-051 and the OHP identify access spacing standards of 450 feet (25 mph), 600 feet (35 mph), and 750 feet (45 mph). Approach road spacing is worse than this condition throughout the planning area because the established urban roadway network is built on a grid system with spacing between blocks of less than 300 feet, and the number of existing approach roads to private properties throughout the Lyon/Ellsworth planning area reduces the spacing further. Spacing between approach roads varies from approximately 40 feet to 180 feet, with an average spacing of approximately 80 feet. It is not feasible to bring all the approaches into conformance with the 450-, 600-, and 750-foot spacing standards.

Short-Term Access Management Strategy and Actions

The short-term access management strategy protects traffic operations and safety within the IAMP area that includes operation of the signalized intersections. Short-term access management actions for individual approaches will result in permits for approach roads that do not already have permits and in changes that will limit the direction of travel on Lyon Street south of 9th Street to southbound travel only.

Other work will result in changes to approach roads within the IAMP planning area in the short-term. The 12th Avenue traffic signal project will result in turn restrictions at two approach roads, and the ATC project will close existing approach roads to the site and permit other ones that are consistent with site redevelopment.

Medium-term and Long-term Access Actions

Throughout the IAMP planning area, medium-term and long-term actions consist of the following:

- Permitting approach roads;
- Encourage redevelopment opportunities that consolidate access points on US-20 and ORE-99E;
- Encourage sharing of access points between adjacent properties;
- Offset approach roads at proper distances to minimize the number of conflict points between through traffic and the traffic using the approach roads;
- Provide driveway access via local roads where possible;
- Enforce access management spacing standards to extent possible;
- Minimize driveway widths;

- For higher volume developments, provide controlled access service drives to prevent spill-over of vehicle queues onto the adjoining roadways;
- Restrict turning movements and the direction of use of approach roads to improve traffic safety;

Medium-term and long-term actions will be evaluated based upon future changes of use or redevelopment of property, or if a safety issue occurs.

Interchange Access Management Plan Analysis

An evaluation of existing and future transportation operations within the OTIA project construction was completed as part of the IAMP. A “no-build” alternative and a “build” alternative were evaluated. The “build” alternative includes the Albany OTIA project improvements. The traffic analysis showed that the current traffic congestion on US-20 caused by the Lyon/9th Street intersection will be substantially worse in the future without significant changes. Current traffic conditions substantially exceed the acceptable mobility standard established in the Oregon Highway Design Manual. The 2023 scenario “build” analysis adds the three new traffic signals to the interchange area that are part of the OTIA project: the intersection of Ellsworth Street and 9th Avenue, the realigned ORE-99E westbound off-ramp T-intersection with Lyon Street, and the intersection of 12th Avenue with ORE-99E. The “build” analysis shows that the Lyon/9th Street intersection only slightly exceeds the applicable standard in 2023.

Traffic safety is a substantial concern because crashes are often related to approach road conditions. The history of vehicle crashes was reviewed to determine if approach roads were a significant cause of traffic safety problems. For the three-year period from 2000 through 2002, 64 crashes were reported in the planning area. The highest number of crashes (13) at a single location occurred at the intersection of Pacific Boulevard (ORE-99E) and Ellsworth Avenue, but four other locations were identified as problematic: Pacific Boulevard between Hill Street and northbound Lyon Street (US-20) exit, Ellsworth Street at ORE-99E, Ellsworth Street at 9th Avenue, and southbound US-20. This analysis did not identify that closing any approach road would substantially improve traffic safety.

Travel needs for pedestrians, bicyclists, and transit were evaluated. The proposed improvements for these modes of travel were evaluated to determine if access issues would adversely affect them. Land use, cultural and natural resource conditions also were evaluated to determine if access conditions in the area would have adverse impacts. The actions proposed by this plan do not result in such impacts.

Implementation

The following are the steps that need to occur in order to implement the Albany OTIA Lyon/Ellsworth (US-20/ORE-99E) IAMP:

- As specified in the OTIA project conditions of approval, the City of Albany will adopt the IAMP as part of a legally binding, enforceable IGA between the City of Albany and ODOT.
- The IGA will include a provision that the City of Albany will coordinate with ODOT in evaluating land use actions that would affect the function of the US-20/ORE-99E interchange.
- The City of Albany will adopt the OTIA Lyon/Ellsworth (US-20/ORE-99E) IAMP by reference into the next update of the city’s transportation system plan.

1.0 INTRODUCTION

The City of Albany and the Oregon Department of Transportation (ODOT) Region 2 have determined that the existing Lyon/Ellsworth (US-20/ORE-99E) Interchange in the city of Albany, Linn County, Oregon requires modifications and improvements to operate more efficiently and safely, and to provide appropriate access for the multi-modal Albany Transit Center (ATC) at the site of the existing Albany Train Station. The first phase of construction of the ATC is scheduled to begin in the summer of 2004.

ODOT Region 2 identified the Lyon/Ellsworth (US-20/ORE-99E) Interchange Improvement Project as a priority construction project eligible for Oregon Transportation Investment Act (OTIA) funding. The Oregon Transportation Commission (OTC) approved the OTIA funding for this interchange modernization project. Pursuant to direction of the OTC, an interchange area management plan (IAMP) is required for this interchange project. This IAMP will assist the City and ODOT with the long-term transportation system management in the area around the interchange including affected segments of the state highways. The Albany OTIA Lyon/Ellsworth (US-20/ORE-99E) IAMP will comply with the OTIA project conditions of approval.

The OTIA project conditions of OTC approval are:

- ODOT shall develop an IAMP following the provisions of Oregon Administrative Rule (OAR) 734-051-0010 et seq. for the project to be consistent with the 1999 Oregon Highway Plan (OHP).
- The City of Albany (the City) shall adopt the IAMP as part of an intergovernmental agreement (IGA) with ODOT (Section 8.0, Implementation of the IAMP describes the contents of the IGA).
- The IAMP will provide for the protection of safe and efficient operation of the interchange between connecting roadways and will minimize the need for major improvements to existing interchanges.

1.1 IAMP Planning Area

The interchange improvement project is located at the partial interchange of US-20/ORE-99E directly north of the planned ATC (multi-modal center) at the Albany Train Station in the City of Albany (see Figure 1. Vicinity Map and IAMP Planning Area).

The IAMP planning area is generally bounded by 6th Avenue between Ferry and Baker Streets, Baker Street between 6th and 8th Avenues, 8th Avenue between Baker and Jackson Streets, the Union Pacific Railroad (UPRR) mainline between Jackson and Hill Streets, Hill Street between 6th and 11th Avenues, 11th Avenue and the south edge of the UPRR property between Hill Street and 12th Avenue, 12th Avenue between the south edge of the UPRR property and Ferry Street, and Ferry Street between 6th and 12th Avenues. Figure 2, IAMP Planning Area Map shows the planning area.

1.2 Public and Agency Participation

This IAMP has been prepared with participation of the City of Albany and with input from a variety of stakeholders and the general public. Contacts were made with stakeholders interested in or concerned

about the proposed interchange modifications and possible effects on existing land uses, access, and the local road system. In addition, a Town Hall meeting providing information on the interchange project and the IAMP was held in the City Council Chambers at City Hall on March 18, 2004. A display advertisement appeared in the Albany Democrat-Herald on March 14, and an article about the project and Town Hall meeting appeared in this newspaper on March 18. All owners of property adjacent to the interchange improvements also were notified of the meeting by telephone. Appendix A contains the display advertisement for the town hall meeting, the Albany Democrat-Herald article about the meeting, and the meeting comment sheet. Approximately 40 people attended the Town Hall meeting.

The Albany City Council reviewed the Draft IAMP at its April 26, 2004 meeting. The council decided that an additional public meeting should be held to allow property owners the opportunity to understand the effect of the plan on their property. Mailed notice of the meeting was provided by the City of Albany to the property owners within the IAMP planning area. The meeting was held May 13, 2004 at the Albany City Council Chambers. Approximately twelve people attended. Appendix A includes the notice mailed to property owners.¹

2.0 PROJECT DESCRIPTION, PURPOSE, AND GOALS AND OBJECTIVES

2.1 Project Description

The interchange improvement project will consist of actions to modify and improve the existing partial diamond interchange into a partial single-point urban diamond interchange (see Figure 3). The modifications include:

- Provision of two travel lanes for each interchange approach that experiences the most severe traffic;
- Widening the area under the existing ORE-99E overpass structure to accommodate additional vehicular, pedestrian, and bicycle traffic;
- Installation of a new traffic signal at the intersection of 9th Avenue at Ellsworth Street;
- Realignment of the ORE-99E exit to northbound Lyon Street (US-20); and
- Addition of pedestrian and bicycle facilities along each roadway segment within the construction zone.

The interchange improvement project was developed during the site planning process for the ATC project. The ATC project includes the restoration of the existing historic train station and the construction of additional facilities to accommodate multi-modal traffic. One of the two primary entrances to this new ATC is located at this interchange. Construction of the first phase of the ATC will commence in the summer of 2004.

¹ The attachments referenced in the notice are Figures 4A, 4B and Appendix B of this report.

In conjunction with the development of the ATC, ODOT has identified OTIA funding to upgrade transportation facilities in the vicinity of the signalized intersection of Lyon Street and the eastbound Pacific Boulevard (ORE-99E) off- and on-ramps located directly north of the ATC. This intersection handles traffic movements through the existing partial interchange of ORE-99E and US-20. Traffic operations at the intersection are currently failing in the PM peak hour, creating significant delays for drivers leaving the City of Albany's downtown area on US-20 via Ellsworth Street. This project proposes to improve traffic operations by reconfiguring the existing intersection into a single-point intersection. In addition to the single-point intersection, additional improvements will be implemented within the planning area to improve vehicular, bicycle and pedestrian access to the ATC.

In contrast to the existing intersection of Lyon Street and the eastbound ORE-99E off- and on-ramps, the proposed improvements would:

- Improve traffic flow in and out of the City of Albany's downtown area from the south on US-20 by providing two lanes of traffic flow through the intersection as compared to the existing single lane of traffic capacity.
- Provide increased traffic capacity between ORE-99E and US-20 while maintaining the existing ORE-99E overpass.
- Improve access to the ATC by providing direct access to the ATC at the single-point intersection.
- Improve pedestrian and bicycle access to the ATC by providing connecting sidewalks, crosswalks and bike lanes.

2.2 Alternatives Considered

In addition to the recommended interchange area improvements, another alternative concept for improving operations through the Lyon/Ellsworth interchange was developed and considered during the ATC planning process in 2000-2001. This alternative would have altered the configuration and traffic circulation within the interchange area to provide a signalized access to ORE-99E and the ATC. Under this alternative Ellsworth south of 9th Avenue would have been converted to one-way southbound with a new signalized intersection at ORE-99E, the segment of Lyon Street south of 9th Avenue would have been converted to one-way northbound, and the length of the eastbound ORE-99E off-ramp would have reduced to accommodate the signalized intersection at Ellsworth. This alternative was rejected because:

- it was not compatible with the recommended ATC site plan;
- the signal at ORE-99E/Ellsworth Street was considered to be safety concern due to the relatively steep grade and vertical curvature that would not have provided adequate sight distance and stopping distance for drivers on ORE-99E westbound approaching Ellsworth Street; and
- the signal at ORE-99E/Ellsworth Street would have substantially reduced the operating capacity of ORE-99E.

During the development of the interchange improvement project, ODOT and the City of Albany considered alternative design options under the concept advanced to preliminary engineering. In addition to the recommended design configuration, two other design options were developed for the segment of Ellsworth between 8th and 9th avenues: no action, and widening Ellsworth Street on both sides without removing parking to accommodate an additional vehicle travel lane and striped bicycle lane.

The no action option consisted of no improvements to the existing US-20/ORE-99E intersection or the highway approaches. Ellsworth Street would remain two lanes with no signal. This option was not advanced because it would not address the existing and future operations problems and safety improvement needs on Ellsworth Street at 9th Avenue.

A second option would have provided an additional third lane on Ellsworth Street between 8th and 9th Avenues, a striped bike lane on Ellsworth Street, and a traffic signal at the Ellsworth Street/9th Avenue intersection. In order to retain on-street parking on the east and west sides of Ellsworth Street, this option would have required elimination of planter strips and narrowing the sidewalks on both sides of Ellsworth Street. This option was not advanced primarily because there are parking spaces for the disabled on the west side of Ellsworth Street. The church requires a wide sidewalk adjacent to this on-street parking to provide an adequate loading and access area for people with disabilities who attend or visit the church.

In addition to the recommended westbound ORE-99E to northbound Lyon Street (US-20) ramp configuration, another option to maintain a free-flow (not signal-controlled), right-turn movement was considered. This option was not carried forward because it would have required displacement of on-street parking on the east side of Lyon Street to accommodate an additional travel lane north of 8th Avenue.

2.3 Purpose of IAMP

An IAMP is required as a condition of approval to use the Oregon Transportation Investment Act funds for the proposed Lyon/Ellsworth interchange improvement project authorized by the Oregon Transportation Commission. The IAMP must be adopted by the City of Albany before the funding can be used to construct the interchange improvements. The IAMP must be developed in accordance with the Oregon Highway Plan Policy 3C, Oregon Administrative Rule 734-051, and the Oregon Transportation Investment Act (OTIA) conditions for interchanges adopted by the Oregon Transportation Commission (OTC) on January 6, 2002.

The IAMP focuses on existing and future land use and transportation conditions, and access management in the interchange area. The IAMP will need to be adopted by the City of Albany before funding will be released for the Lyon/Ellsworth interchange reconstruction project.

2.4 IAMP Goals and Objectives

The goal of this IAMP is to develop a set of short, medium, and long-term access management actions that meet OHP requirements and the access spacing standards in Oregon Administrative Rule (OAR) 734-051. The objectives of this IAMP are defined by OAR 734-051. As described in the Plan and Policy Review section (Section 4.0, below), this IAMP addresses OAR 734-051:

The objectives of the IAMP are to:

- Protect the function of the interchange as specified in the OHP and City of Albany TSP.
- Protect the safe and efficient operation of the interchange between connecting roadways and to minimize the need for major improvements existing interchanges.

- Provide safe and efficient operations on US-20 and ORE-99E as specified in the OHP and City of Albany TSP.
- Enhance pedestrian and bicycle facilities in the planning area.
- Ensure ODOT is involved in future land use decisions that could affect the function of the interchange.

2.5 Interchange Function

Traffic volumes at the existing Lyon/Ellsworth interchange exceeds the capacity of the intersection, resulting in significant delays during peak hours and traffic queues that back up into the downtown area. Congestion inhibits access to downtown and the ATC. Currently, there is one northbound lane (Lyon Street) and one southbound lane (9th Avenue) through the Lyon Street underpass at the center of the partial interchange. Pedestrian and bicycle facilities are limited within the interchange area. By reconfiguring the undercrossing and roadway approaches to the interchange, vehicular capacity will be increased and pedestrian and bicycle facilities can be accommodated. Capacity improvements include signal and ramp modifications to improve traffic operations at the congested intersection of Lyon Street and the eastbound Pacific Boulevard (ORE-99E) on- and off-ramp located directly north of the ATC.

The signalized intersection of Lyon Street and the northbound Pacific Boulevard (ORE-99E) off- and on-ramps handles the predominant traffic movements through the partial interchange with the Albany/Corvallis Highway (US-20). The signal is fully actuated (capable of varying its timing to meet demand) with three phases. The first phase is pedestrian-actuated by a manual button and the pedestrian signal is skipped when the button is not pushed. Due to the very low volume of pedestrians who currently cross at this intersection, the pedestrian phase was not used to determine the intersection level-of-service (LOS) and lane group capacities. The second signal phase serves the southbound to eastbound left turn from 9th Avenue to the one-lane Pacific Boulevard (ORE-99E) on-ramp, and the southbound to westbound right-turn that serves vehicles entering the Albany Train Station. The third and final phase serves the eastbound Pacific Boulevard off-ramp including the left-turn movement to Lyon Street northbound and the eastbound through movement to the ORE-99E on-ramp. The southbound to eastbound left-turn from 9th Avenue entering eastbound ORE-99E has the highest volume of all turning movements during the PM peak hour. The southbound to eastbound left-turn also receives the maximum green time allowed in the signal timing plan located directly north of the train station.

3.0 ACCESS MANAGEMENT

Access management is the careful planning of the location, design, and operation of driveways, median openings, interchanges and street connections. The goal of this IAMP is to develop a set of short, medium, and long-term access management actions that meet OHP requirements and the access spacing standards in Oregon Administrative Rule (OAR) 734-051. However, if these requirements and standards cannot be met, the plan must demonstrate that the short, medium, and long-term actions will move access conditions toward the applicable standards. This section identifies the short-term access management strategy, other short-term access management actions expected to be concurrent with the OTIA interchange construction project, and medium- and long-term access management actions that would be

implemented under one or more of the conditions associated with the IAMP goal stated above. The recommended actions are divided into short-term, medium-term, and long-term actions. The short-term strategy would be implemented with the US-20/ORE-99E Interchange Improvement Project. Medium- and long-term actions are recommended as changes in land use or property redevelopment occurs, in concurrence with future roadway improvement projects, or in order to address transportation safety issues. References to individual approaches correspond to the inventory of existing and known proposed (i.e., committed) public and private approaches distinguished by identification (ID) numbers shown on the highway approach inventory maps of the west and east sides of the IAMP planning area (Figures 4a and 4b). The Approach Inventory, Appendix B, provides detailed descriptive information for each approach shown on the approach inventory maps. The Approach Inventory also details the short-, medium- and long-term actions called for in this plan as they are expected to apply to individual approach roads.

The short-term strategy and actions in the IAMP are based on the existing land use for each parcel. When a change-of-use occurs, an application for an approach road will be required if access is proposed from the state highway system. At that time, any existing approach road, and any new proposed approach road will be evaluated. The IAMP will guide ODOT when completing a change-of-use assessment.

For the highway segments within the IAMP planning area, ODOT owns and has jurisdiction over the ORE-99E right-of-way, and uses city street rights-of-way (Ellsworth Street, Lyon Street, and 9th Avenue between Ellsworth and Lyon streets) for US-20 through intergovernmental agreement. Access to the highways is not limited except by ODOT's approach road permit authority. OAR 734-051 and the OHP contain standards for private driveway and public road approach spacing based on highway classifications and speeds. According to these standards, the applicable access spacing standard is 450 feet where the posted speed is less than or equal to 25 mph. In areas where the posted speed limit is 35 mph, the access spacing standard is 600 feet. Where the posted speed limit is 45 mph, the access spacing standard is 750 feet. These access management spacing standards apply because OAR 734-51-0115 (1)(c)(C) and 734-051-0125 (1)(c)(C) require a highway or interchange construction or modernization project to improve spacing and safety factors by at least moving in the direction of the access management spacing standards, with the goal of meeting or improving compliance with the access management spacing standards. OAR 734-051 and OHP access spacing standards apply to both streets and private property approaches.

The established urban roadway network within the planning area is built on a grid system with spacing between blocks of less than 300 feet. There also are numerous approaches to private properties throughout IAMP planning area. Spacing between approaches varies from approximately 40 feet to 180 feet, with an average spacing of approximately 80 feet. The spacing of public roads and the manner in which private property has developed make it infeasible for the highways to conform to the 450-, 600-, and 750-foot spacing standards. The approaches within the IAMP planning area are consistent with safety factors in OAR 734-051-0080(9).

Considering the need to maintain reasonable access to existing development while addressing safety priorities, the access management strategy and actions presented in this section of the IAMP are intended to improve highway conditions by moving towards meeting the appropriate ODOT access management standards. This IAMP moves toward the applicable access management standards by relying upon

changes that will occur as part of future construction projects, when property is developed, redeveloped, or undergoes a change-of-use, or when traffic safety necessitates a change. Deviation findings will be prepared during the approach permit approval process, if necessary, and will meet the requirements of OAR 734-051-0135 (Deviations from Access Management Spacing Standards). Consistent with OAR 734-051-0135, this IAMP provides the rationale for a deviation that authorizes the approach roads within the IAMP planning area. This IAMP will be used as the deviation findings in the approach permits.

3.1 Short-Term Access Management Strategy and Actions

The short-term access management strategy will be implemented with the Lyon/Ellsworth (US-20/ORE-99E) Interchange Improvement Project. For this project, ODOT's short-term strategy protects traffic operations and safety within the interchange influence area that includes operation of the signalized intersections. Some approaches that do not already have an approach road permit will be provided with one as part of the project. Changes to the road system also will limit the direction of travel on Lyon Street south of 9th Street to southbound traffic only. All actions for individual approaches are summarized in Appendix B.

3.2 Other Short-term Access Management Actions

While not funded or implemented under the Lyon/Ellsworth Interchange OTIA project, additional access management actions are expected to occur during the construction phase of the OTIA project. These are:

- Approach #41, serving a commercial business at 265 12th Ave. SW: Turn restriction as result of raised median barrier to be constructed along ORE-99E as part of 12th Ave. intersection modifications
- Approach #44, serving Albany Auto Sales at 235 Pacific Blvd. SW: Turn restriction as result of raised median barrier to be constructed along ORE-99E as part of 12th Ave. intersection modifications
- Approach #39, Albany Transportation Center: Permit approach with 12th Ave. intersection modifications, cancel permits 12439, 27055 and 12510 and close five approaches serving former commercial uses that hold these permits.
- Approaches #42, 43, 45, 46, 48, 52, 53, and 54, Albany Transportation Center: Close approaches.

3.3 Medium-term and Long-term Access Actions

Medium-term to long-range actions are to be implemented as land use changes/redevelopment applications occur, in concurrence with future roadway improvement projects, or as needed to rectify safety problems. General medium-term actions throughout the planning area include:

- Encouraging redevelopment opportunities that consolidate access points on US-20 and ORE-99E.
- Encourage sharing of access points between adjacent properties.

- Offset driveways at proper distances to minimize the number of conflict points between traffic using the driveways and through-traffic.
- Provide driveway access via local roads where possible.
- Enforce access management spacing standards to extent possible.
- Minimize driveway widths.
- For higher volume developments, provide controlled access service drives to prevent spill-over of vehicle queues onto the adjoining roadways.

The recommended medium-term actions are not applicable for all types of redevelopment but will be considered for implementation as redevelopment occurs.

There are several approach-specific recommendations. The following factors will need to be considered for each approach before a recommended medium- long-term action is carried forward: safety concerns, existing and potential land use and the existing site development including access use and function, parking, and circulation. Also considered is whether or not the property has more than one approach road to the state highway and if the property had available or potential access to a local street. Specific medium-and long-term actions for individual approaches are provided in Appendix B.

4.0 PLAN AND POLICY REVIEW

The purpose of this section is to summarize pertinent information from documents and rules and regulations reviewed for preparation of the IAMP, and to identify how these documents will influence the IAMP. The following items were reviewed:

- Oregon Statewide Planning Goals;
- Oregon Transportation Plan (OTP);
- Oregon Highway Plan (OHP), particularly Policy 3C Interchange Access Management Areas and Policy 3D Access Management Deviations;
- Oregon Administrative Rule (OAR) 734-051-0200 (Interchange Access Management Area Spacing Standards for Approaches);
- Oregon Transportation Investment Act (OTIA) conditions for interchanges adopted by the Oregon Transportation Commission on January 6, 2002;
- City of Albany Transportation System Plan (TSP);
- City of Albany Comprehensive Plan and Zoning Ordinances; and
- Traffic Analysis and Traffic Signal Warrants Technical Memorandums for the ATC.

4.1 Statewide Planning Goals

The statewide planning program provides the overarching framework that guides all planning actions in Oregon. Two of the 19 statewide planning goals are relevant to the planning and management of the Albany OTIA Lyon/Ellsworth (US-20/ORE-99E) interchange. These include Goal 2 (Land Use Planning), which outlines the basic procedures of Oregon's statewide planning program including the requirement of local jurisdiction to prepare, and Goal 12 (Transportation), which establishes the goal of a safe, convenient, and economic transportation system.

The adopted City of Albany and Linn County comprehensive plans are consistent with the applicable statewide planning goals. To administer Goal 12, the Department of Land Conservation and Development (DLCD) adopted the Transportation Planning Rule in 1991, which, among other things, requires that jurisdictions prepare a Transportation System Plan (TSP). The proposed project is consistent with the applicable goals and policies outlined in the City of Albany's TSP, including the primary goal of providing "a safe, diversified economical, and efficient transportation system that protects and enhances Albany's economy, environment, neighborhood quality, cultural, and scenic values."

4.2 Oregon Transportation Plan

The Oregon Transportation Plan (OTP) was adopted by the Oregon Transportation Commission (OTC) in 1992. The OTP was intended to meet the requirements of ORS 184.618(1), which requires the development of a state transportation policy and a comprehensive, long-range plan for a multi-modal transportation system that addresses economic efficiency, orderly economic development, safety, and environmental quality (ODOT, 1992). The OTP consists of two elements: the Policy Element defines goals, policies, and actions for the state over the next 40 years; the System Element identifies a coordinated multi-modal transportation system and a network of facilities and services for different modes of transportation that are to be developed over the next 20 years to implement the goals and policies of the OTP.

The proposed modifications to the Albany OTIA Lyon/Ellsworth Interchange Improvement Project and the IAMP prepared in support of this project are consistent with the goals and policies of the OTP, including the general goal of the provision of an efficient, safe, and multi-modal transportation system that provides for connectivity among places and modes of travel. The OTP's Willamette Valley Preferred Transportation System by the Year 2012 map identifies the intercity passenger terminal and Amtrak service for Albany, and the OTIA project and IAMP are compatible with these provisions.

4.3 Oregon Highway Plan

The 1999 Oregon Highway Plan (OHP) establishes policies and investment strategies for Oregon's state highway system over a 20-year period and refines the goals and policies found in the OTP. Policies of the OHP emphasize the efficient management of the highway system to increase safety and to extend highway capacity, partnerships with other agencies and local governments, and the use of new

techniques to improve road safety and capacity. These policies also link land use and transportation, set standards for highway performance and access management, and emphasize the relationship between state highways and local road, bicycle, pedestrian, transit, rail, and air systems.

This project supports a number of policies found in the OHP, including Policy 1B (state and local government collaboration relating to state highway system management), through the IAMP process; Policy 1C (State Highway Freight System), by enhancing freight mobility within the area through a reduction in congestion; Policy 1F (Highway Mobility Standards), by identifying necessary improvements that would allow the interchange to function in a manner consistent with OHP mobility standards; Policy 2F (Traffic Safety), by making modifications to the interchange that would improve overall safety within the area; Policy 3C (Interchange Access Management Areas), by developing an IAMP that identifies and addresses current interchange deficiencies; and Policy 4B (Alternative Passenger Modes), by improving bicycle and pedestrian facilities within the area.

This project is an OHP Policy 1G.1 Priority Three project that addresses current constraints to traffic flow and deficiencies in pedestrian/bicycle facilities within the interchange area. Various criteria have been established to determine which projects are eligible for funding under OTIA. These criteria include adherence to the policies of applicable transportation plans, including Policy 1G of the 1999 OHP. This policy is meant to ensure an efficient investment of limited transportation resources and provides that minor improvements to the highway system be implemented before making more substantial improvements, such as adding lanes. Policy 1G does not require that minor improvements be implemented before adding capacity when the addition of capacity is justified on the basis of cost efficiency and other environmental and transportation considerations. The proposed modifications to the Albany OTIA Lyon Ellsworth interchange have been found by the OTC to be necessary to address and remedy constraints to traffic flow and alternative modes of travel within the interchange area.

OHP Policy 3D (Deviations) establishes general policies and procedures for deviations from adopted access management standards and policies. This project would not meet the adopted access management standards for interchange areas in Policy 3C, and would therefore need to comply with the deviation process outlined in Policy 3D and OAR 734-051-0320 through OAR 734-051-0340.

4.4 Oregon Administrative Rule 734-051-0010 et seq. (Div. 51)

Oregon Administrative Rule (OAR) 734-051-0125, Access Management Spacing Standards for Approaches in an Interchange Area, establishes interchange management area access spacing standards and specifies elements that are to be included in IAMPs, such as short-, medium-, and long-range actions to improve and maintain safe and efficient roadway operations within the interchange area. OAR 734-051 governs the permitting, management, and standards of approaches to state highways to ensure safe and efficient operation of the state highways. Specifically, OARs 734-051-0080, -0085, -0115, -0135, -0145, -0155, -0165, -0245, -0255, -0265, -0275, and -0285 guide the development of access management plans. OAR 734-051 policies address the following:

- How to bring existing and future approaches into compliance with access spacing standards, and ensure the safe and efficient operation of the highway;
- The purpose and components of an access management plan; and

- Requirements regarding mitigation, modification and closure of existing approaches as part of project development.

This project would improve traffic operations within the Albany OTIA Lyon/Ellsworth interchange area in a manner that is consistent with OHP mobility standards. However, the project would not meet access spacing standards outlined in OAR 734-051-0125, and would therefore require deviations to interchange and roadway approach (public and private streets and driveways) access management spacing standards.

4.5 OTIA Project Conditions of Approval

OTIA provides \$500 million for transportation infrastructure construction projects throughout the state. It was passed by the Oregon Legislature in 2001 and is funded through bond proceeds derived from Department of Motor Vehicles (DMV) fees. Using criteria established by House Bill 2412, OTIA projects are selected by the OTC, which also adopts conditions of approval for each project.

The conditions of approval for this project are:

- ODOT shall develop an IAMP following the provisions of OAR 734-051 for the project to be consistent with the 1999 OHP.
- The City of Albany shall adopt the IAMP as part of a legally binding, enforceable intergovernmental agreement (IGA) between the city and ODOT. The IGA shall include the following elements:
 - If the IGA is terminated, the City of Albany shall give notice to ODOT in advance of a public hearing on the matter and that the public hearing is held prior to the expiration of the agreement.
 - Changes or termination of the IGA in advance or expiration shall require formal affirmative action by the OTC and the City of Albany.
 - The IGA can expire if the City of Albany incorporates the IAMP in its adopted TSP.
- The IAMP will provide for the protection of safe and efficient operation of the interchange between connecting roadways and will minimize the need for major improvements to existing interchanges.

The IAMP is consistent with the conditions of approval. The discussions of compliance with the OARs and the OHP are found above. Section 8.0, Implementation of the IAMP, includes the requirement that an IGA be established. The third condition of approval is incorporated as an objective of the IAMP (Section 3.0, IAMP Objectives).

4.6 City of Albany Transportation System Plan

The City of Albany's Transportation System Plan (TSP) establishes a system of transportation facilities and services that is adequate to meet local transportation needs. The TSP includes a determination of transportation needs; road, transit, bicycle, pedestrian, air, water, rail, and pipeline plans; policies and regulations for the implementation of the TSP; and a transportation funding program.

This project is consistent with the goals and policies of the City of Albany's TSP, which include the development of both a roadway system that is efficient and safe for the public and a connected bicycle and pedestrian system to encourage the use of alternative modes of travel.

Although the proposed interchange project is not included in the TSP, one of the short-term priority needs identified in the TSP is for the expansion or replacement of the 9th Avenue/Pacific Boulevard overpass. The TSP determined that after 2015, the overpass will need to be reconstructed to provide additional capacity as well as mobility improvements for transit, bikes, and pedestrians. Identified funding was from ODOT and SDCs.

The City of Albany is initiating the process to update its TSP. The City is starting a sub-area analysis for the area east of I-5, which it anticipates will be completed in the fall of 2004. The full TSP update would begin after completion of the sub-area analysis and the City anticipates that it would be completed in one to two years.

4.7 City of Albany Comprehensive Plan and Development Code

The City of Albany has land use planning jurisdiction for the entire project area. The City of Albany prepared the Central Albany Land Use and Transportation System Plan (CALUTS, also known as the Town Center Plan) in 1995 in order to initiate a set of public improvement projects to make downtown function efficiently and look more attractive. The ultimate goal was to stimulate development. The study area centered around the Lyon/Ellsworth couplet and included the Monteith and Hackleman Historic Districts, the commercial areas along Pacific Boulevard, and the former Amtrak station. The plan included concept plans with circulation, land use, and special elements. The City amended the comp plan and development code to implement the districts established in the CALUTS plan. The plan identified the US-20/ORE-99E interchange area as a problem.

The city's comprehensive plan identifies several land use designations for this area. These include Light Industrial, General Commercial, Residential Low Density, Residential Medium Density, Village Center, Public and Semi-Public, and Open Space. The Albany Development Code implements these designations through the following zoning districts: Town Center districts, including Hackleman Monteith (HM), Pacific Boulevard (PB), and Lyon Ellsworth (LE); Heavy Commercial (CH); Community Commercial (CC); Light Industrial (LI); Residential Limited Multiple Family (RM-5) (10-20 units per acre); Residential Multiple Family (RM-3) (20-40 units per acre); and City Park. Articles 3 through 7 of the city's development code describe permitted and conditional uses and development standards within these districts.

The City of Albany Development Code provides a combination of non-discretionary and discretionary standards and criteria for the city to use in evaluating land use proposals for compliance with the use and development requirements of the code. Review criteria set the bounds for issues that must be addressed by a project applicant. Projects must meet applicable review criteria identified in the city's development code. These criteria are derived from the comprehensive plan, and fulfilling the requirements of the development code and review criteria means that the proposal is in conformance with the comprehensive plan.

4.8 Traffic Analysis and Traffic Signal Warrants Technical Memorandums for the Albany Transportation Center (ATC)

Traffic analysis was initially conducted during the preliminary engineering stage for the major roadway segments and intersections within the OTIA project construction limits. This initial analysis was expanded to include the IAMP planning area and the results are summarized in Section 5.1, Transportation Facilities.

As part of the ATC project, a new signal is proposed at the intersection of 12th Avenue with ORE-99E (Pacific Boulevard). The proposed traffic signal is for a reconfigured four legged intersection with an approach to the ATC at the south end of the ATC site. The proposed signal, associated turning restrictions, and driveway reductions are intended to resolve the safety problem in the Pacific Boulevard corridor identified by ODOT. The Albany City Council unanimously passed Resolution Number 4408 in support of the Transportation Center Advisory Committee-recommended ATC site plan that includes a signalized approach at 12th Avenue for the ATC. The City of Albany will fund construction of the traffic signal at 12th Avenue as part of the ATC project. ODOT approved the new traffic signal. This signal is a critical component of the Albany Transportation Center (ATC) Project.

Analysis of available data along Pacific Boulevard between Queen Avenue and Lyon Street indicates that a traffic signal at the intersection of Pacific Boulevard and 12th Avenue is justified based on Manual on Uniform Traffic Control Devices (MUTCD) Warrants 2 (Interruption of Continuous Traffic), 5 (increases gaps in traffic for side streets), and 11, which are met in both the design year (2005) and after three years of operation (2008) as required by the MUTCD and ODOT. Benefits of this signal include improving bicycle, pedestrian, and transit access to the ATC and more bus routing options between the ATC and other destinations; and reducing accident potential along Pacific Boulevard by reducing the number of unprotected left turns and driveways along Pacific Boulevard.

Implementation of a traffic signal at 12th Avenue will include changes to the existing access management at 12th Avenue and surrounding intersections and driveways, which will improve access control and safety along Pacific Boulevard. The following access control measures have been assumed:

- Prohibiting left-turns from southbound Washington Street to northbound Pacific Boulevard;
- Prohibiting left-turns to and from Ferry Street to northbound Pacific Boulevard;
- Prohibiting left turns to and from 11th Avenue and Pacific Boulevard; and
- Elimination of seven driveways along the east side of Pacific Boulevard between Lyons Street and 12th Avenue.

5.0 CHARACTERISTICS OF THE PLANNING AREA

5.1 Transportation Facilities

Information for this section is from the Albany OTIA Lyon/Ellsworth (US-20/ORE-99E) Interchange Improvement Project Traffic Analysis Report (DEA, 2004) and from additional inventory data collected for the IAMP.

5.1.1 Existing and Forecast Traffic Operations in the Planning Area

The primary roadways in the planning area are US-20 and ORE-99E. According to the 1999 Oregon Highway Plan (OHP), ORE-99E and US-20 are regional highways. Regional highways typically provide connections and links to regional centers, Statewide or Interstate highways, or economic or activity centers of regional significance. Within the planning area, US-20 and ORE-99E are co-located on Pacific Boulevard and on 9th Avenue from the ramps to Hill Street.

Both US-20 and ORE-99E carry local and commuter traffic, as well as long-distance recreational and commercial traffic. Figure 5 shows 2002 annual average daily traffic (AADT) volumes (vehicles per day [vpd]) for segments of US-20 and ORE-99E in the IAMP planning area. US-20 carries approximately 35,200 vehicles (both directions) daily on 9th Avenue at Ellsworth and on Lyon Street at 8th Avenue. ORE-99E carries approximately 39,100 vehicles (both directions) daily at Madison Street. Within the planning area, about two percent of the vehicular volume on both highways is truck traffic.

Within the planning area, US-20 operates as a one-way couplet with southbound traffic on Ellsworth Street and northbound traffic on Lyon Street. Drivers on US-20 destined for westbound ORE-99E utilize Ellsworth Street to access ORE-99E. However, drivers on US-20 destined for eastbound ORE-99E are directed onto 9th Avenue, then under ORE-99E through the intersection of Lyon Street and the eastbound ORE-99E off- and on-ramps to access eastbound ORE-99E.

US-20/ORE-99E connects from I-5 west toward downtown Albany. At the railroad tracks, US-20 connects north then west toward Corvallis, and ORE-99E connects southwest toward Eugene. The other roadways within the planning area form a grid. The City of Albany TSP classifies the highways, including Pacific Boulevard, Ellsworth, Lyon, and 9th Avenue between Ellsworth and Lyon as principal arterials. Ninth Avenue west of Ellsworth and 7th Avenue are collectors. Within the planning area, Hill Street is a minor arterial. The remaining streets in the planning area are classified as local streets (see Appendix C). The planning area is entirely within the City of Albany Urban Growth Boundary. Land parcels are developed with a mixture of residential, commercial, and industrial uses at urban densities (see Section 5.2).

In 2023, US-20 is forecast to carry approximately 50,000 vehicles (both directions) daily on 9th Avenue at Ellsworth and on Lyon Street at 8th Avenue. ORE-99E is forecast to carry approximately 55,500 vehicles (both directions) daily at Madison Street. Figure 6 shows 2023 forecast ADT volumes.

The traffic analysis report presents results of analysis of ten intersections in the IAMP planning area. Three are signalized and seven are unsignalized. The existing traffic signals are fully actuated (meaning green times for each approach vary depending on the traffic volume) with a maximum cycle length of 110 seconds. The intersections are as follows:

- Lyon Street (US-20) and the eastbound ORE-99E off- and on-ramps (signalized)
- Pacific Boulevard (westbound ORE-99E) and Hill Street (signalized)
- 9th Avenue (eastbound ORE-99E) and Hill Street (signalized)
- Lyon Street (US-20) and 9th Avenue
- Lyon Street (US-20) and 8th Avenue

- Lyon Street (US-20) and 7th Avenue
- Ellsworth Street (US-20) and 7th Avenue
- Ellsworth Street (US-20) and 9th Avenue
- Ellsworth Street and Pacific Boulevard (ORE-99E)
- 12th Avenue and Pacific Boulevard (ORE-99E)

Existing 2003 traffic volumes for the ten study area intersections are shown in Figure 7. 2003 AM and PM Peak Hour Intersection Traffic Volumes.

ODOT has established policies in the Highway Design Manual (HDM) that set traffic analysis procedures and standards for design projects on ODOT facilities. The v/c ratio represents the ratio of measured traffic demand (volume) divided by the maximum volume for the roadway or intersection (capacity). Volume to capacity ratios range from close to zero too greater than 1.0. When the v/c ratio approaches 0.0, traffic conditions are generally good with free flow travel conditions present. As the v/c ratio approaches 1.0, traffic becomes more congested along roadways and “platoons” of traffic are formed, while at intersection traffic conditions become more unstable with longer delays. The HDM policy specifies that v/c standards be maintained for ODOT facilities through a 20-year horizon. The HDM standard that applies to ORE-99E and US-20 within the planning area is for intersections, where the v/c ratio for the overall intersection considering all critical movements shall not exceed 0.75. This is for the existing roadway and city designations. In the future year 2023, the City of Albany status will change to a Metropolitan Planning Organization (MPO). This will change the requirement for overall intersection v/c ratio to 0.80.

Existing AM peak hour traffic operations v/c ratios at all ten intersections analyzed meet the HDM v/c ratio standard of 0.75. In the PM peak hour, however, the signalized intersection of Lyon Street (US-20) and the eastbound ORE-99E off- and on-ramps currently operates with an overall intersection v/c ratio of approximately 0.95, which exceeds the HDM v/c ratio standard of 0.75. In addition the unsignalized intersection of Lyon Street at 8th Avenue and OR99E off-ramp operates with a v/c of 1.01. The v/c ratios of the signalized intersections are shown in Figure 7.

The signalized intersection of 9th Avenue at Hill Street operates with a v/c ratio of 0.84, which slightly exceeds the HDM requirement. Pacific Boulevard at Hill Street and 12th Avenue at ORE-99E operate with an overall intersection v/c ratio of 0.69 and 0.48, respectively.

The unsignalized intersection of Ellsworth Street at ORE-99E operates with an overall intersection of 0.81 in the PM peak hour, which slightly exceeds the HDM standard. The remaining unsignalized movements were found to meet the HDM v/c ratio standard of 0.80.

5.1.2 Crash History

Crash data was analyzed for three primary reasons: (1) to identify existing crash patterns that may reveal a specific safety deficiency, (2) to determine the probable causes of crashes with respect to drivers, highways, and vehicles, and (3) to develop measures that will reduce the rate and severity of crashes.

The crash analysis for the planning area intersections is based on crash data for the three-year period from January 1, 2000 through December 31, 2002 that coincides with Oregon Department of Transportation Safety Priority Index System (SPIS) database.

For the three-year period from 2000 through 2002, there were 64 reported crashes within the planning area. Table 1 provides a summary of crash statistics and Figure 9 shows crash locations. The majority of the crashes involved more than one vehicle. Of the reported crashes, there were no fatalities. Twenty-four of the crashes resulted in injury and forty resulted in property damage only. Crash information collected represents crashes that occurred within 265 feet of the subject intersection and only those crashes that were reported.

The primary crash types were rear-end, angle, and turning type crashes. The highest number of crashes (13) at a single location occurred at the intersection of Pacific Boulevard (ORE-99E) and Ellsworth Avenue, and eight of the 13 crashes at this location were rear-end collisions. The intersections of westbound Pacific Boulevard (ORE-99E) at Madison Street and 9th Avenue (ORE-99E) at Ellsworth Street (US-20) each had nine reported crashes. Seven crashes were reported at the intersection of Ellsworth Street and 7th Avenue. Nearly two-thirds (40) of the 64 total planning area crashes resulted in property damage only. More than one-third (24) of the crashes resulted in injuries, and no crashes resulted in fatalities.

The comparable crash rate average from the 2002 Oregon State Highway Crash Rate tables for urban, primary state highways (ORE-99E and US-20) is 3.02. Three segments have higher than average rates. Southbound US-20 from 1st Avenue to the ORE-99E interchange has a crash rate of 3.41 crashes per million vehicle miles traveled (MVMT); westbound ORE-99E from Main Street to the end of the couplet (approximately Jackson Street) has a crash rate of 7.82 crashes per MVMT. Northbound US-20 (Lyon Street) from 1st Avenue to ORE-99E has a crash rate of 3.12 crashes per MVMT.

The ODOT SPIS method for prioritizing funding for safety improvements is based on three or more crashes at the same location, or one or more fatal crashes at the same location. Within the planning area, the areas in the top 10 percent SPIS score were located on ORE-99E on the east end of the project. The remainder of the planning does not contain SPIS locations.

Based on the numbers and types of crashes, comparison to state-wide averages, SPIS scores, four locations within the planning area were identified as problematic:

- Pacific Boulevard between Hill Street and northbound Lyon Street (US-20) exit
- Ellsworth Street at ORE-99E
- Ellsworth Street at 9th Avenue
- Southbound US-20

Safety issues and mitigation of these issues are discussed for each of these locations in Sections 5.1.2.1 through 5.1.2.4.

5.1.2.1 Pacific Boulevard between Hill Street and Northbound Lyon Street (US-20) Exit

Since a high SPIS score indicates an area of safety concern, the section of ORE-99E rating in the top 10% indicates a serious safety problem. The PRC report indicates that several turning type and angle type crashes were located at the intersections with Hill Street and Madison Street. According to ODOT staff, possible mitigation includes:

- signing and striping improvements
- signal improvements, i.e., timing and phasing changes, possible new signals at select intersections;
- lane usage changes; and
- limited access management (since the ORE-99E couplet project addressed many of the access issues already).

In discussions with City of Albany Staff, it was explained that many people traveling north and south are avoiding the signals at Hill Street and opting for the unsignalized intersections due to long delays caused by long signal cycle lengths. Addressing this concern may help draw these drivers back to the signalized intersections, helping to reduce the angle and turning type crashes. This can be achieved in the short-term by adjusting the cycle lengths and phasing to allow for easier progression from Hill Street to ORE-99E (or vice versa) and across the couplet.

5.1.2.2 Ellsworth Street at ORE-99E

Southbound traffic on Ellsworth must turn right onto ORE-99E. Thirteen crashes were reported at the intersection of ORE-99E and Ellsworth Street—a high crash frequency. The majority of the crashes were rear-end type crashes, which is expected in an area with long queues. Of the rear-end type crashes, almost all of them were on southbound Ellsworth, which encroaches into the intersection of 9th Avenue and Ellsworth during the PM peak hour. The crash history also shows 5 turning and angle type crashes. The wait times at this intersection may be influencing drivers to become impatient, leading to entering the highway without a sufficient gap between vehicles. Combined with the relatively high speeds of ORE-99E (45 mph) at this intersection, this factor could lead to these crash occurrences.

One possible future mitigation action would be to add an acceleration lane for the Ellsworth traffic turning onto ORE-99E. This would limit the speed differential between the merging vehicles and the through traffic. It would also decrease the delay, reducing driver impatience and risky decisions. Given the proximity of Ellsworth to the intersection of ORE-99E at 11th Avenue, this measure would probably require closing access to ORE-99E from 11th Avenue. This would eliminate weaving in the acceleration lane caused by southbound ORE-99E traffic attempting to turn onto 11th Avenue.

Another mitigation option involves changing lane usage patterns. Currently southbound ORE-99E has two through lanes at the intersection with Ellsworth. An exit ramp is located approximately 200 feet upstream of the intersection, allowing traffic to exit southbound ORE-99E to northbound Ellsworth. It may be possible to create an exit-only lane, whereby the right travel lane must exit to this off-ramp, leaving a single through lane. This would provide southbound traffic turning right onto ORE-99E with a dedicated acceleration lane, reducing the conflict with through traffic. With this option, 11th Avenue would not need to be closed. This option has two major drawbacks: Southbound ORE-99E traffic

wishing to exit to 11th Avenue must weave into the new acceleration lane and the throughput capacity of ORE-99E would be reduced to only one lane for a short segment.

Table 1. US-20/ORE-99E Summary of Crash Type by Intersection, Jan 2000-Dec 2002

Intersection	Angle	Rear-end	Turning	Non Collision	Sideswipe/overtaking	Pedestrian	Totals
Ellsworth St. at 6 th Ave	3	0	0	0	0	0	3
Ellsworth St. at 7 th Ave	2	3	1	0	1	0	7
Ellsworth St. at 8 th Ave	1	1	0	0	0	0	2
Ellsworth St. at 9 th Ave	5	1	2	1	0	0	9
ORE-99E at Ellsworth St	2	8	3	0	0	0	13
Lyon St at 6 th Ave	1	0	0	0	1	0	2
Lyon St at 7 th Ave	0	1	0	0	1	0	2
Lyon St at 8 th Ave	0	1	0	0	1	1	3
Lyon St at 9 th Ave	0	0	0	0	0	0	0
Lyon St at 99E EB on/off ramps	0	1	0	0	0	0	1
Pacific Blvd (ORE-99E) at Hill St	2	1	3	0	0	0	6
Pacific Blvd (ORE-99E) at Madison	2	3	2	0	2	0	9
9 th Ave (ORE-99E) at Hill St	3	0	1	0	1	0	5
Pacific Blvd (ORE-99E) at 11 th Ave	0	0	1	0	0	0	1
Pacific Blvd (ORE-99E) at 12 th Ave	0	0	0	0	1	0	1
Totals	21	20	13	1	8	1	64

Source: Planning Research Corporation, 2002

5.1.2.3 Ellsworth Street at 9th Avenue

Another intersection with high crash frequency is the intersection of Ellsworth Street at 9th Avenue. The crash history indicates nine crashes during the study period, seven of which are turning and angle type crashes. Currently the intersection is stop controlled, with traffic traveling southbound on Ellsworth Street having free movement and eastbound traffic on 9th Avenue and northbound traffic on Ellsworth Street (turning east and west) having to stop sign control. A warning beacon shows flashing yellow to southbound traffic and flashing red for all other movements. Although these streets have relatively low speeds (25 mph), high traffic volumes in the peak hours of operation can cause long delays for the minor movements. As with the intersection of Ellsworth Street at ORE-99E, long delays can lead to drivers making risky decisions that lead to the angle and turning type crashes seen in the crash history.

The addition of a traffic signal at this intersection is expected to reduce the angle and turning type accidents. A properly designed signal gives each movement access to the intersection, reducing

excessive queues and delay². Given the high volumes, especially during peak hours, a signal at this location is a promising mitigation measure, and it is planned under the OTIA budget.

5.1.2.4 Southbound US-20

Southbound US-20 (Ellsworth Street) between 1st Avenue and ORE-99E has a sectional crash rate of 3.12, which is slightly larger than the statewide average of 3.02 for comparative highway facilities. The intersections within the planning area contributing to that rate include Ellsworth Street at ORE-99E, 9th Avenue, and 7th Avenue. Seven crashes were reported at 7th Avenue, with three angle and turning type crashes. Other than high volumes during peak hour, a site visit gave no indication of physical attributes (such as sight distance) of the intersection being a factor in these crashes. The remaining two intersections have been already been discussed within this section. The improvements listed should increase safety along this roadway section and reduce the frequency and severity of the crashes.

5.1.3 Planning Area Improvements

5.1.3.1 Lyon/Ellsworth Interchange Project Improvements

The 2023 scenario analysis adds three new traffic signals to the interchange area, as provided by the OTIA project. The existing unsignalized intersection of Ellsworth Street and 9th Avenue would be signalized and coordinated with the traffic signal at the single point intersection. The ORE-99E westbound off-ramp would be realigned to form a signalized T-intersection with Lyon Street. The signal controller at the single point intersection would operate this traffic signal. The single point intersection improves traffic flow in and out of the City of Albany's downtown area from the south on US-20 by providing two lanes a traffic flow through the intersection as compared to the existing single lane of traffic capacity. These two new signals will be fully actuated and will run with a 90-second cycle length. The third new signal is located at the intersection of 12th Avenue with ORE-99E, which will provide access to the ATC.

5.1.3.2 Albany Transit Center (ATC) Improvements

The ATC will provide a local and regional hub for coordination of high-speed rail service, public transportation and commercial bus services, and non-motorized traffic. ODOT and Cascades West Council of Governments (CWCOG) have identified this project as critical to the success of high-speed rail transportation in the Willamette Valley. The ATC will provide a means to avoid principal reliance upon any one mode of transportation and to help meet the needs of the transportation disadvantaged. The 1995 Central Albany Transportation Study (CALUTS) built included an analysis of the potential ATC Project, and the in Albany City Council adopted of the proposed site plan on April 11, 2001.

5.1.3.3 ORE-99E Safety Project

As a result of a Safety Priority Index System (SPIS) investigation, ODOT identified several deficiencies at the intersection of Pacific Boulevard with Hill Street. Proposed modifications to the intersection are to

²Manual on Uniform Traffic Control Devices, Millennium Ed., Section 4B.03

modify the northbound signal indication to a left-turn arrow instead of a ball-only, change signal timing, and to remove the west approach crosswalk.

The traffic signal at the intersection currently is split-phased on the side street due to the need of a northbound dual left-turn with an optional through movement in the right-most left-turn lane. At the time the signal was installed, the standards for slit-phased signal indications did not require the use of left-turn arrows. The existing ball-only signal indications cause motorist confusion and delay. Changing the signal indication to an arrow will indicate to motorists that the left turn from Hill Street onto Pacific is protected. The crosswalk closure will enable efficient signal timing and eliminate the potential for the signal system to “get out of step” (Black, 2004).

5.1.4 Future 2023 Operations Analysis

Traffic growth rates for future year 2023 were developed using historical traffic counts, review of the EMME/2 Transportation System Plan traffic forecast and through discussions with ODOT, City of Albany staff, and other members of the project team. Based on the available traffic information, the following growth rates were used:

- 2 percent average annual linear growth rate for “background” (i.e., all traffic not generated by the ATC) roadway system traffic;
- 900 percent growth in ATC-generated traffic based on Willamette Valley Transportation Strategy passenger train ridership projections for the ultimate (assumed to be year 2023) service year; and
- Additional traffic associated with 15,000 square feet of new general office space on the ATC site.

Future 2023 AM and PM peak hour volumes are shown in Figure 8. In addition, the v/c ratios for the signalized intersections are shown in this figure.

None of the ten intersections exceeds the HDM v/c ratio standard of 0.80 under 2023 Future Build AM peak hour conditions. As for the signalized intersections during the 2023 Future Build AM conditions, Ellsworth Street (US-20) and 9th Avenue operates with a v/c ration of 0.53, 9th Avenue at Hill Street operates with a v/c ration of 0.46, Pacific Boulevard at Hill Street operates with a v/c ration of 0.58, and 12th Avenue at ORE-99E operates with an overall intersection v/c ratio of 0.47. The critical movement v/c ratios at the unsignalized intersections were found to meet the HDM v/c ratio standard.

The signalized intersection of Lyon Street (US-20) and the eastbound ORE-99E off- and on-ramps would operate with v/c ratios slightly exceeding the HDM v/c ratio standard under both the 2023 Future Build AM and PM conditions. The westbound off-ramp also would exceed the standard in the AM peak hour.

Although the signalized intersection of Ellsworth Street (US-20) and 9th Avenue operates with an overall v/c ratio of 0.69 under 2023 Future Build PM peak hour conditions, there are delays in the second half of the peak hour caused by southbound traffic turning right backing up on Ellsworth past 7th Avenue. This excessive queue blocks the traffic wishing to use the southbound left-turn lanes, and causes extremely long delay during the PM peak hour. The v/c ratio standard would be exceeded at the signalized intersection of 9th Avenue at Hill Street, and the unsignalized intersection of Ellsworth Street at ORE-99E. The remaining intersections were found to meet the HDM v/c ratio standard in the 2023 PM peak hour.

5.1.5 Existing and Future Non-Motorized Transportation Facilities

5.1.5.1 Pedestrian Facilities

Sidewalks are prevalent within the interchange area. Sidewalks are provided on both sides of 8th and 9th avenues between Lyon Street and Ferry Street. They are also present on both sides of Ellsworth north of 9th Avenue, but only on the east side of the street south of 9th Avenue. On Lyon Street, north of 8th Avenue, sidewalks are located on both the east and west sides, but they are only on the west side of Lyon Street south of 8th Avenue. Sidewalks are present on the north side of the 99E westbound off-ramp from the 99E mainline until the off-ramp connects with Lyon Street at 8th Avenue. Sidewalks are also available on the 99E NB off- and on-ramps near the train station. They are present on the east and west sides of the off-ramp (south of the Lyon Street connection), and only on the east side of the on-ramp (north of the Lyon Street connection). A sidewalk from the intersection of 9th Avenue and Lyon Street connects to the junction of the 99E off- and on-ramps. West of the interchange, sidewalks are present on the north and south sides of Pacific Boulevard (westbound ORE-99E) and 9th Avenue (eastbound ORE-99E). While crosswalks occur in the interchange area, the lack of traffic control limits their effectiveness for providing safe and convenient crossing of segments of US-20 and ORE-99E.

A striped crosswalk is present on the north side of the intersection of 8th Avenue and Ellsworth Street. A mid-block crossing is available just west of 9th Avenue and Ellsworth Street. Full crosswalks exist at 9th Avenue and Broadalbin, 9th Avenue at Ferry Street, and 11th Avenue at Ferry Street. A crosswalk is provided on the south side of the intersection of the Lyon Street connection and the NB 99E ramps intersection, providing access to the train station. Full striped crosswalks are present at the intersections of 9th Avenue (eastbound ORE-99E) at Hill Street and Pacific Boulevard (westbound ORE-99E) at Hill Street.

As part of the interchange improvement project, crosswalks will be provided across Lyon Street, across the Lyon Street off-ramp, and across Ellsworth Street on the north and south sides of 9th Avenue. The Lyon Street underpass will also be widened with wider sidewalks on both sides between 9th Avenue and the approach to the ATC. As part of the ATC project, crosswalks will be provided on all three sides of the interchange access to the ATC, and on all four sides of the 12th Avenue intersection.

5.1.5.2 Bicycle Facilities

Bike lanes are limited in the planning area. Currently the only bike lanes are along 99E on the NB 99E off-ramp to Lyon Street (northbound US-20), along the train station, and on the NB 99E on-ramp from Lyon Street. East of the interchange, bike lanes are present on the south side of 9th Avenue (eastbound ORE-99E) and on the north side of Pacific Boulevard (westbound ORE-99E). As part of the interchange improvement project, bike lanes will be added on the west side of Ellsworth between 8th and 9th avenues and on the south side of 9th Avenue between Ellsworth and Lyon (southbound US-20). A multi-use pathway also will be constructed north of and parallel to the southbound ORE-99E ramp to northbound Lyon Street to provide a safe connection between the interchange area, ATC, and the residential area located north of Pacific Boulevard and east of Lyon Street.

5.2 Land Parcels and Planning

The Albany OTIA Lyon/Ellsworth (US-20/ORE-99E) interchange planning area is located entirely within the Albany city limits and urban growth boundary (UGB). The planning area covers approximately 104 acres. Within the planning area, approximately 12 acres are designated in the City of Albany Comprehensive Plan (1989, with amendments) as residential, 18 acres are designated commercial, 14 acres are designated industrial, and the remaining area is public use (including the City-owned ATC property) and public right-of-way (primarily highway and streets). Most of the planning area is developed at urban densities, and there are large undeveloped parcels. Some of these undeveloped parcels are surplus parcels owned by ODOT on commercial zoned land. Of the remaining undeveloped properties, about half are zoned for commercial development and half for industrial uses.

5.2.1 City of Albany Comprehensive Plan Designations

For the purpose of providing legible maps of the interchange planning area, this area is divided into two portions, west and east. The Lyon-Ellsworth area extends north from Pacific Boulevard between Ellsworth and Lyon streets, a one-way pairing or “couplet” of urban arterials that serve as US-20 through the Albany. This one-block wide area is at the center of the City’s main north-south corridor within the traditional urban street grid that connects Pacific Boulevard (ORE-99E) on the south to the historic Albany downtown core area located to the north. Parcels along the Ellsworth and Lyon couplet are designated on the comprehensive plan map as Village Center (see Figure 10, Comprehensive Plan Designations). The Comprehensive Plan does not provide a description of the Village Center designation. The surrounding residential area is designated as Residential – Low Density. Low density residential is predominately suited or used for single family development on lot sizes averaging from 5,000 to 10,000 square feet. Office Professional and Neighborhood Commercial zoning are permitted in residential-designated areas. The block between 9th and 11th and Ferry and Ellsworth, containing Central Elementary School, is designated Public and Semi-Public. This designation identifies existing public and semi-public uses including parks, schools, public buildings, and major utility facilities.

The central portion of the planning area is dominated by the ORE-99E, US-20, and Union Pacific railroad line rights-of-way and industrial uses. The area east of the interchange is designated as Light Industrial in the comprehensive plan. This designation identifies areas suitable for a wide range of light industrial manufacturing, warehousing, and wholesaling, and other accessory and compatible uses that have minimal environmental effects. The eastern portion of the planning area is mainly commercial in nature, with some residential. The northeast corner of the planning area (east of Lafayette) is designated Low Density Residential. Most of the remaining area is General Commercial. The comprehensive plan designates General Commercial in areas suitable for a wide range of retail sales and service establishments, from neighborhood services to heavy commercial establishments. The comprehensive plan intends to concentrate commercial uses in one central node and prevent strip commercial development. The wedge between the rail line and 8th Avenue, between the Jackson and Thurston Street alignments, has a Public and Semi-Public comprehensive plan designation, described above.

5.2.2 City of Albany Development Code Designations

West of the interchange planning area are the Lyon Ellsworth (LE) and the Hackleman-Monteith (HM) Historic districts (see Figure 11. City of Albany Development Code Designations and Historic Districts).

The City of Albany established the LE and HM mixed-use designations in the Albany Town Center Plan (Central Albany Land Use and Transportation Study [CALUTS], 1995).

Properties adjacent to Ellsworth and Lyon streets, along both sides of each street, are designated LE. CALUTS outlines the principal characteristics of the LE district as an emphasis on services for the Historic Downtown district and the Downtown Central Business district (both directly north of the planning area), parking structures with ground floor commercial uses, and screened surface parking lots.

The HM Historic district, along Broadalbin and Baker streets, flanks the LE district on both sides. It is intended primarily to preserve the existing single-family residential character of the Hackelman and Monteith historic districts. CALUTS outlines the principal characteristics of the HM Historic district as preserving historic buildings and landscapes, increasing residential density with accessory dwellings and infill, and encouraging neighborhood commercial uses along pedestrian, neighborhood connector, and collector roadways.

The area around the interchange and along ORE-99E is zoned Pacific Boulevard (PB). The PB district is intended as an auto-oriented commercial area along Pacific Boulevard in central Albany. The parcels southeast of the ORE-99E and UPRR alignment and east of the interchange are zoned Light Industrial (LI). The LI district is intended for a wide range of manufacturing and processing operations. The district is suited for areas having good access to highways and rail and as a buffer between the Heavy Industrial district and residential uses.

With a few exceptions, the east end of the planning area is zoned Community Commercial (CC). The CC district is designated mostly along arterials and highways to serve a diversity of small- to medium-scale businesses. The southeastern most parcel in the planning area is zoned Office Professional (OP). The OP district is intended to provide a mix of professional offices, personal services, and live-work uses between commercial and residential districts.

The other exceptions are the northeastern most parcels and the ODOT-owned parcel south of the rail line and west of the Thurston Street alignment (7AB TL 6200), which are zoned Residential Multiple Family, 20 to 40 units per acre (RM-3).

5.2.3 Existing Land Uses

With two minor exceptions, existing land uses in the planning area are consistent with current zoning and the function of US-20, ORE-99E, and the proposed interchange improvements. Land uses along Lyon and Ellsworth are mainly commercial with surface parking lots, in conformance with the LE zoning designation. The area supports commercial uses and serves as a transition between the “auto-dominating” character of the Pacific Boulevard corridor and the more “pedestrian-oriented” character of the historic downtown area and Hackleman-Monteith neighborhood situated west of Ellsworth Street. Along Ferry, Broadalbin, and Baker, uses mainly are residential, with some neighborhood commercial uses, as allowed in the HM district. This neighborhood is predominantly comprised of historic single-family houses that face onto tree-lined local streets with on-street parking and sidewalks.

Uses in the area include Central Elementary School located between Pacific Blvd. and 9th Ave., and Saint Mary’s Church and school located at the northwest quadrant of the Ellsworth St. /9th Ave. intersection. Across Ellsworth St. on the east side, properties consist of Mac’s Radiator Shop and Possum Autobody

and Paint located south of 9th Ave., and Aasum Funeral Home, located north of 9th Ave. Other large parcels in this area are used by Mid-Valley Newspapers (the Albany Democrat-Herald and the City of Albany Fire Station #11).

An active railroad mainline track and rail yard owned by Union Pacific Railroad (UPRR) run parallel to ORE-99E. UPRR freight trains and Amtrak passenger trains operate on the mainline track, and a short-line railroad operator, Portland & Western Railroad (P&W) operates the yard area. An industrial area that is generally comprised of large properties with warehouse-type buildings served by commercial vehicles is situated southeast of the track yard area. The proposed Albany Transportation Center, a city-owned multi-modal transportation facility, is located between ORE-99E and the UP railroad tracks and owned by the City of Albany. The purpose of the proposed multi-modal center is to maintain and support increased passenger rail use, including future high-speed rail. The parcel on the east side of ORE-99E between the 11th and 12th Avenue alignments is zoned PB (T11S R3W 7BC TL 4500). It is owned by the City of Albany and is part of the ATC. The PB zoning designation likely is inconsistent with the transit center and any development that would occur on the parcel. The City may consider approving a zoning amendment on this parcel for a mixed-use or commercial designation at the time of development.

Directly east of the interchange, the mainly industrial uses are consistent with the LI zoning and fewer accesses to the highway per parcel, as well as the proximity to the freight rail line. South of 9th Ave (the EB portion of the US-20 couplet), between Jackson and Hill streets, large parcels are owned by Southern Pacific Transportation Co. and Cenex Harvest States Cooperatives. North of 9th Avenue, between Jackson and what would be Thurston, an unimproved alley separates Albany Helping Hands shelter from several residences and undeveloped lots, including three owned by the City of Albany. ODOT owns the lots adjacent to the US-20 right-of-way. Both of these blocks are zoned LI.

The four parcels that form the southwestern corner of 9th Street and Hill Avenue are owned by Wilson Development LLC. There is a large building and a parking lot on the parcels currently used by the At Home Furniture Store. A smaller parcel to the south (the southeastern-most parcel within the planning area) is zoned Office Professional and is owned by Terry D. Shores. It contains a building remnant and half of a plywood storage warehouse—the other half is on the parcel to the south, outside the planning area.

In the east portion of the planning area, the Community Commercial zoning allows relatively intensive small- to medium-scale businesses consistent with current uses and the function of US-20. The Hill/Madison/RR/7th block has a residence in the southeast corner, and the Albany Bed and Beauty Pet Hotel and Albany Animal Hospital. The other parcels are vacant. The wedge-shaped block west of Madison Street contains two undeveloped lots for sale by the Kaiser-Callison Family and one parcel owned by L. Steckley that contains the Albany Stoves store. ODOT owns the undeveloped western half of the block to the south (bounded by 7th, Pacific Blvd, Thurston, and Madison) and Stephen Backer owns the east half of the block, which contains the Grooming Place, Protec Alarm, and a Shell gasoline station. The block bounded by 7th, Pacific, Madison, and Hill contains Pop's Branding Iron Restaurant, Jackson Hewitt Tax Services, and a former Papa John's Pizza restaurant (now for lease), and three residences in the northeast corner, under a variety of private ownership. The block to the south between Pacific and 9th contains a Key Bank branch on the eastern half and a mini-mall on the southwest corner on two parcels owned by Investment Mortgage Property LLC that contains a salon, a weight loss center, and two insurance offices. The parcel on the northwest corner is undeveloped, owned by Union Oil Co of

California. Adjacent to it (next to the Key Bank parking lot) is a business called Express Service. The blocks between Pacific Boulevard and 9th Street between Madison and where Thurston would be contain Town & Country Cleaners, a car wash, a stained glass shop, a residence, and two undeveloped lots, all under various ownership. ODOT owns the right-of-way and adjacent undeveloped lots (zoned LI) to the west of the block.

The RM-3 designation on the parcels in the northeastern-most corner extends north and east beyond the planning area boundaries. The zoning is consistent with their current residential use, and several parcels are vacant. The use of the ODOT-owned wedge shaped parcel between 7th Avenue, Pacific Boulevard, and the alignments of Jackson and Thurston streets is inconsistent with its zoning (T11S R3W 7AB TL 6200). The east portion of the parcel is designated CC, while the remainder is designated RM-3. The split zoning likely is a remnant prior to the vacation of Thurston Street for construction of the US-20 couplet. The parcels on the north side of the railroad line also are designated RM-3 (outside the planning area).

5.2.4 Future Land Use

There are few planned changes to land uses within the planning area. Mid-Valley Newspapers (includes Albany Democrat-Herald) anticipates the need to enlarge its current building complex located between Ellsworth and Lyon Streets and 6th and 7th Avenues. The expansion will displace parking spaces on this block. The newspaper anticipates relocating this displaced parking to its property southwest of the intersection at Lyon Street and 7th Avenue.

The Fire Department may relocate Downtown Fire Station 11 in the future, but it has not yet identified a site or secured any financing. Currently there are four stations serving Albany. The other three are the North End Station 14 on Gibson Hill Road NW, the East End Station 13 on Three Lakes Road, and the South End Station 12 on 34th Avenue SE.

The proposed improvements to the US-20/ORE-99E interchange are not anticipated to impact any land use patterns within the planning area. Land uses are consistent with zoning designations in the planning area. The proposed interchange improvements will improve mobility along US-20 and ORE-99E within the city of Albany, ensure accessibility to the highways by businesses and residences in the planning area, and improve bicycle and pedestrian accessibility throughout the planning area.

5.3 Natural and Cultural Resources

5.3.1 Natural Resources

The main portion of the City of Albany lies in a flat area along the south bank of the Willamette River. The two main waterways near the central part of the city are the Calapooia River, which runs south along the eastern edge of the city, and Periwinkle Creek, which runs south along Cleveland Street. Neither stream is within the IAMP planning area. However, there is a canal system that bisects the planning area.

Plate 3: Natural Vegetation and Wildlife Habitat, and Plate 4: Streams, Rivers, and Lakes in the comprehensive plan show a canal along Thurston Street between Water Avenue and the UPRR, and a canal along 8th Avenue that connects to the north-south aligned Vine Street Canal. The 8th Avenue Canal appears east of Lyon Street and west of Broadalbin Street, but not between those streets. The planning

area is not in a designated floodplain according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map. Other FEMA mapping indicates no wetlands within the planning area.

Implementation of the IAMP, including construction of the interchange improvements, is not expected to have any impacts on natural resources.

5.3.2 Cultural Resources

The National Register of Historic Places (NRHP) is the nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archaeological resources. The U.S. Department of the Interior, National Park Service administers the NRHP. Eligible properties include both properties formally determined as such by the Secretary of the Interior and all other properties that meet NRHP listing criteria (36 CFR 60.4). A review of the NRHP was conducted to determine if any historic properties are listed for the planning area.

Under terms of the National Historic Preservation Act, State Historic Preservation Offices (SHPOs) and participating tribes are delegated certain powers and duties by the National Park Service, along with annual apportionments to carry them out. The Oregon SHPO database was reviewed as well.

There are two historic districts within the planning area. Most of the parcels in the planning area west of Lyon Street are in the Monteith Historic District. About half the parcels between Lyon and Baker streets, north of 8th Avenue/Pacific Boulevard, are within the Hackleman Historic District (see Figure 11, Albany Development Code Designations and Historic Districts). According to the comprehensive plan, "these historic districts provide a visual span of Albany's history from 1848 to 1915; from the time of its first settlement through its years of growth as a river port and commercial trade center." The City of Albany incorporated the historic districts into its zoning designations with the establishment of the LE and HM mixed-use designations in the CALUTS plan. Article 7 of the Albany Development Code governs changes to historic structures. Only potential changes to structures are protected, and no such changes are proposed with the project.

Although the Alfred Dawson House is within the Monteith Historic District, the NRHP National Register Information System lists it separately because the house was listed prior to the district. The Alfred Dawson House is on the southeast corner of Broadalbin Street and 7th Avenue. The Oregon State Office of Historic Preservation gives the date of the house as 1910. In addition, the John Ralston House, which SHPO dates to 1889, is within the Hackleman Historic District. The Ralston House also was listed before the district.

The Albany Comprehensive Plan includes the following, "There has been no intensive archaeological site survey within the Albany Urban Growth Boundary, although the potential exists for an abundant concentration of prehistoric sites. Archaeologists believe the Albany area was a central camp site for a band of Kalapuyan Indians because of its easy access to major waterways for transportation and fishing and to the prairie land for small game and camas roots." (p. 73)

ODOT has determined that the ORE-99E/Pacific Boulevard overpass, constructed in the 1930's, is a historic structure that is eligible for inclusion on the NRHP. ODOT has prepared a "no effect" finding for the OTIA project, and the SHPO is reviewing this finding.

The implementation of the OTIA project and IAMP, including the access management recommendations, is not expected to adversely impact any historic structures or resources. Excavation for subsurface utilities and roadbed construction will occur in previously disturbed areas. Modifications to the ORE-99E overpass structure will retain design elements that contribute to its historic significance.

Table 2. NRHP Properties

Resource Name	Address	Parcel No.	Date Listed
Alfred Dawson House	731 SW Broadalbin St	7 BB 12500	2/12/80
John Ralston House	632 SE Baker St	7 BA 2500	12/9/81
Hackleman Historic District	Bounded by 2 nd , Pacific Blvd, Lyon, Madison	N/A	3/15/82
Monteith Historic District	Bounded by 2 nd , 12 th , Elm, Lyon	N/A	2/29/80

Source: National Park Service, 2004; State Historic Preservation Office, 2004

6.0 IMPLEMENTATION OF THE IAMP

The following steps will implement the Albany OTIA Lyon/Ellsworth (US-20/ORE-99E) IAMP:

- As specified in the OTIA project conditions of approval, the City of Albany shall adopt the IAMP as part of a legally binding, enforceable IGA between the City of Albany and ODOT as provided in Oregon Law. The IGA shall include the following elements:
 - If the agreement is to be terminated that the City of Albany gives notice to ODOT in advance of a public hearing on the matter and that the public hearing be held prior to the expiration of the agreement.
 - Changes or termination of the agreement in advance of the expiration shall require formal affirmative action by the OTC and the City of Albany.
 - The agreement can expire if the City of Albany includes the IAMP in its TSP.
- The IGA will include a provision that the City of Albany will coordinate with ODOT in evaluating land use actions that would affect the function of the US-20/ORE-99E interchange.
- The City of Albany will adopt the OTIA Lyon/Ellsworth (US-20/ORE-99E) IAMP by reference in the next update of the city's transportation system plan.

7.0 REFERENCES

- Albany, City of. 2003 (Adopted January; Effective February). Albany Development Code.
- _____. 1989 (January). City of Albany Comprehensive Plan.
- Black, Craig, PE, Interim Region Manager. 2004 (February 26). Interoffice Memo (with attachments) to Ed Fisher, PE, State Traffic Engineer re: Request for Approval of Traffic Signal Modifications, Albany-Junction City Highway (Pacific Blvd) at Hill Street, Albany.
- David Evans and Associates, Inc. 2002 (March) Draft Traffic Analysis Report, Lyon/Ellsworth (US-20/ORE-99E) Interchange Project. Prepared for the City of Albany.
- Federal Emergency Management Agency. 1999 (Revised July 7). Flood Insurance Rate Map. City of Albany, Oregon; Linn and Benton Counties. Community Panel Number 410137 0003 F.
- National Park Service. 2004 (February 5). National Register Information System.
- Oregon Department of Transportation. 2003 (Updated August 20). OTIA I & II, Region 3. City of Albany: U.S. 20/ORE-99E Interchange.

Project Meeting. 2003 (December 3). Kathy, Barbara, Larry, Tom Aasum, Aasum Funeral Home; Guy Mayes and Ron Irish, City of Albany; Don Whitehead, David Evans and Associates, Inc. at St. Mary's Church and School.

State Historic Preservation Office, 2004 (March 26). Database.

Appendix A

- 1. March 18, 2004 Town Hall Meeting Display Advertisement,
Albany Democrat-Herald Article, and Comment Sheets**

- 2. Mailed Notice of May 13, 2004 Public Meeting**

Town Hall Meeting

Albany OTIA Lyon/Ellsworth (US 20/OR 99E) Interchange Improvement Project Interchange Area Management Plan (IAMP)

Meeting Information

Thursday
March 18th, 2004
5:15 PM

Location:

*City Hall - Council Chambers
333 Broadalbin SW
Albany, OR 97321*

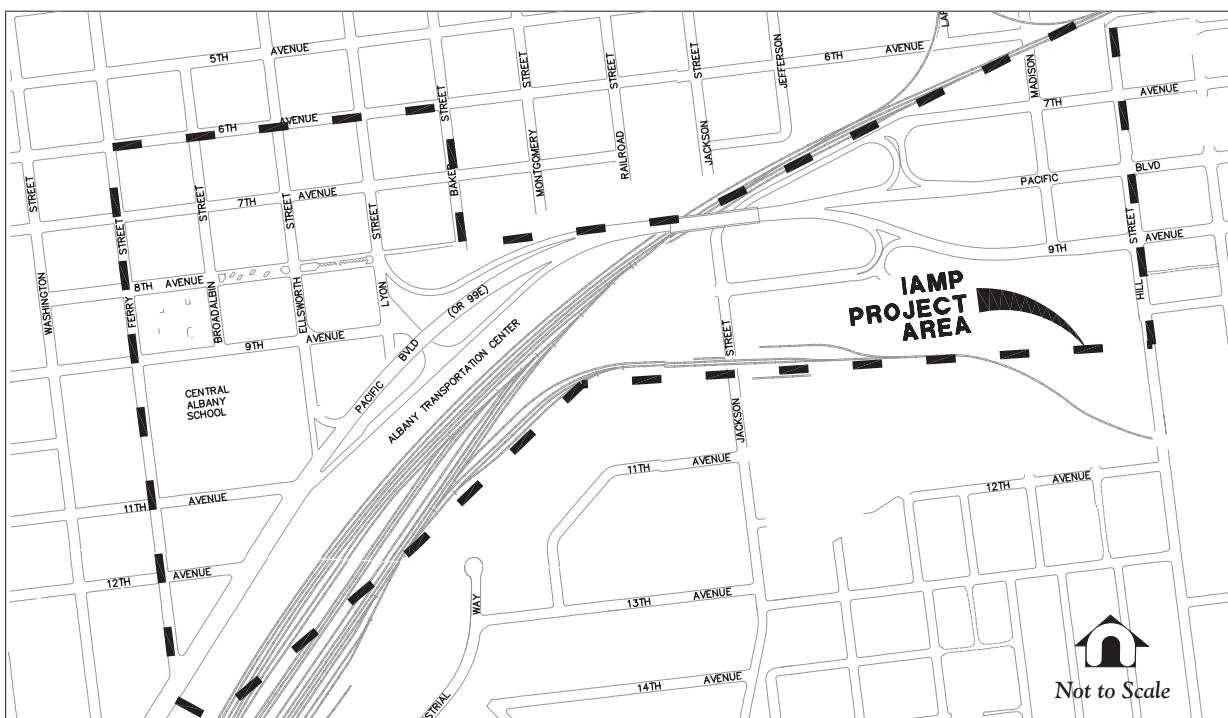
Contact Information:
John deTar
Oregon Department of
Transportation
(541) 757-4159

The City of Albany and Oregon Department of Transportation (ODOT) will host a town hall meeting to allow interested property owners, residents and businesses the opportunity to provide input on the IAMP for the Lyon/Ellsworth (US 20/OR 99E) Interchange Improvement Project. The town hall meeting will be conducted in an informal, "open house" format. A brief presentation by a project team representative will be made at 5:30 PM and again at 6:30 PM.

The Albany OTIA Lyon/Ellsworth (US 20/OR 99E) Interchange Improvement Project is funded by ODOT through the Oregon Transportation Investment Act (OTIA). As a condition of approval for OTIA funding of all highway modernization projects involving interchanges, the Oregon Transportation Commission (OTC) requires development of IAMPs. This project is considered to be a highway modernization project, and an IAMP is required.

The interchange improvements will include increased vehicular capacity and pedestrian and bicycle facility enhancements within the Lyon/Ellsworth interchange area. The IAMP will address short-term, medium-term, and long-term access management actions on Lyon and Ellsworth Streets from 6th Avenue SW south to Pacific Boulevard, and on Pacific Boulevard between 12th Avenue SW and Hill Street. The intent of these actions is to move towards meeting appropriate Oregon Highway Plan (OHP) requirements and ODOT access management standards.

Construction of the interchange improvement project is scheduled to begin in Summer 2004. The Albany City Council and by ODOT must both adopt the IAMP through an intergovernmental agreement (IGA) before construction funds for the interchange improvements are made available.



May 3, 2004

(Address Information)

PUBLIC MEETING – INTERCHANGE AREA MANAGEMENT PLAN (IAMP)

The City of Albany and Oregon Department of Transportation will host a public meeting to allow interested property owners, residents, and businesses the opportunity to ask questions about proposed short- and mid-term changes to driveway access being proposed with the US20/OR 99E Interchange project. The meeting will be held on May 13, 2004, in the Council Chambers at City Hall and is scheduled to begin at 5:30 p.m.

Included with this letter are maps showing existing driveways and street intersections, together with spreadsheets that identify anticipated short- and mid-term changes to driveway access. Short-term changes would occur with construction of the Interchange Project beginning in the summer of 2004. Mid-term changes would take place in the future as property redevelops or safety problems arise. The intent of these actions is to protect the capacity and operation of the interchange by moving towards meeting appropriate Oregon Highway Plan requirements and existing ODOT access management standards. Development of an access management plan was also a condition attached to the funding of the interchange improvement project.

The IAMP doesn't create any new driveway access restrictions or regulations. The plan does, however, show how ODOT and the City anticipate existing driveway access regulations would be applied along the highway corridor in the future as properties redevelop. The IAMP should help eliminate some of the guesswork and uncertainty regarding driveway access that property owners along the highway currently face when making long-term plans and decisions regarding their property.

If you have questions concerning the IAMP or Interchange Improvement Project, I can be reached at (541) 917-7656 or by e-mail at rirish@ci.albany.or.us.

Sincerely,

Ronald G. Irish

Transportation Systems Analyst

RGI:kw

Enclosure

c: City Council

Diane Taniguchi-Dennis, P.E., Public Works Director

Mark W. Shepard, P.E., City Engineer

Note: The attachments enclosed are Figures 4A, and 4B, and Appendix B of the IAMP.

Appendix B

Project Access Inventory

Appendix C. Roadway Inventory

Roadway	Functional Classification	Speed	One-way	Bike Lanes	Sidewalks	On-street Parking	Cross-section
6 th Ave	Local		N	N	Y	Y	
7 th Ave	Rural Major/Urban Collector (State FC)		N	N	Y	Y	2 lanes, unstriped
8 th Ave	Local		N	N	Y	Y	2 lanes, median
9 th Ave	W of Ellsworth - Rural Major/Urban Collector (State FC)		N	N	Y	Y	2 lanes, striped
	E of Ellsworth - Principal Arterial to Lyon (State FC)		Y	N	Y	N	3 lanes, striped
	Principal Arterial (City FC)						
11 th Ave	Local		N	N	Y	Y	2 lanes, unstriped
12 th Ave	Local		N	N	Y	Y	2 lanes, unstriped
Ferry Ave.	Local		N	N	Y	Y	
Broadalbin St.	Local		N	N	Y	Y	
Ellsworth St. (SB US-20)	Principal Arterial (State and City FC)		Y	N	Y	Y	2 lanes (one way), striped
Lyon St. (NB US-20)	Principal Arterial (State and City FC)	25	Y	N	Y	Y	2 lanes (one way), striped
Baker St.	Local		N	N		Y	
Madison St.	Local		N	N		Y	
Hill St.	Minor Arterial (State FC)		N	N			
	Minor Arterial S of Pacific Blvd (City FC)		N	N			
	Major Collector N of Pacific Blvd (City FC)		N	N			
Pacific Blvd (ORE-99E) WB*	W of Jackson – Principal Arterial (State and City FC)		N	Y	Y	N	4 lanes, striped/TWLTL
	E of Jackson – Principal Arterial (State and City FC)		Y	Y	Y	N	
Pacific Blvd (ORE-99E) SB*	W of Jackson – Principal Arterial (State and City FC)		N	Y	Y	N	4 lanes, striped/TWLTL
	E of Jackson – Principal Arterial (State and City FC)		Y	Y	Y	N	

* Pacific Blvd on the US-20 overpass has 2 lanes WB, 1 lane EB, sidewalks and bike lane