Oregon
Kate Brown, Governor

Oregon Transportation Commission
Office of the Director, MS 11
355 Capitol St NE
Salem, OR 97301-3871

DATE: May 6, 2016

TO: Oregon Transportation Commission

[Original signature on file]

FROM: Mathew L. Garrett
Director

SUBJECT: **Consent 6** – Adopt the Interstate 84: Exits 302 and 306 Interchange Area Management Plan

Requested Action

Request approval to adopt the Interstate 84: Exits 302 and 306 Interchange Area Management Plan (IAMP). Adoption of this plan will amend the Oregon Highway Plan (OHP) to include an Interchange Area Management Plan for Baker Interchanges (Exit 302 and 306) along Interstate 84. The Oregon Transportation Commission (OTC) adoption will establish policies for the interchange area to guide Oregon Department of Transportation (ODOT) and local governments for managing the interchange facility. This interchange area management plan has been adopted into all relevant local comprehensive plans and transportation system plans.

Background

The Interstate 84: Exit 302 and Exit 306 interchanges were constructed as rural interchanges serving the north and south ends of Baker City and surrounding areas. Development in the Baker City area is expected to expand northward; the Exit 302 interchange is a specific point of discussion for prospective developers. It is anticipated that phased improvements to this interchange and the surrounding road network will be required for the interchange to continue to operate acceptably as the surrounding area develops over the next twenty years and beyond.

A series of plan, policy, and ordinance amendments were adopted by Baker City and Baker County during the winter of 2015-2016 in support of this plan. OTC adoption of this facility plan will affirm its compatibility with the local comprehensive plans. Adoption of this facility plan will make local actions already taken consistent with the state transportation plan. Adoption by the OTC is the complementary action to support the legal proceedings and actions completed by the local agencies.

Attachments:

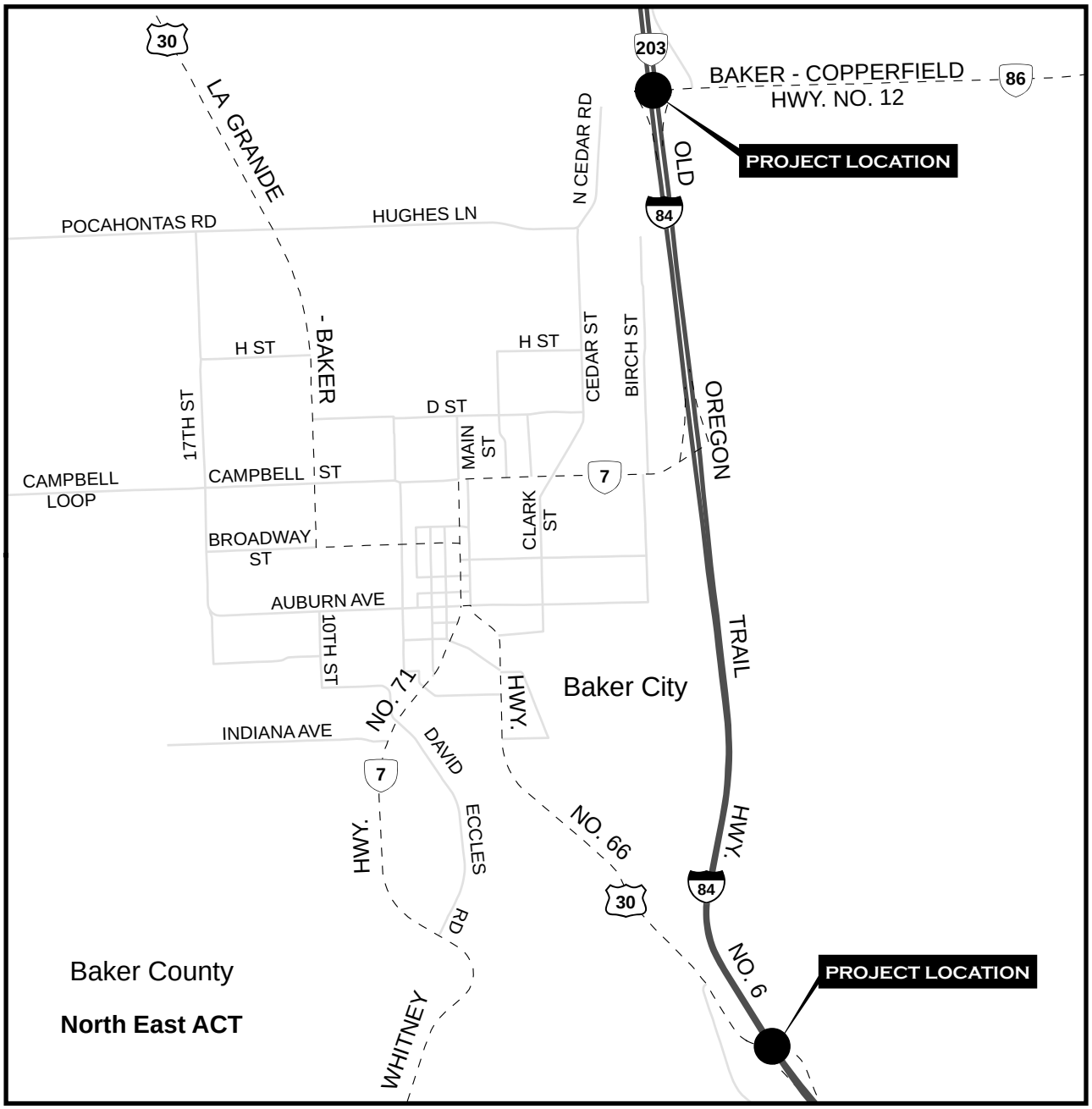
- Attachment 1: Staff Report
- Attachment 2: Finding of Fact
- Attachment 3 – Interstate 84 Exits 302 and 306 Interchange Area Management Plan Final Plan and Appendices.
- Attachment 4 – Location and Vicinity Maps

Copies (w/attachments) to:

Jerri Bohard	Travis Brouwer	Tom Fuller	Kurtis Danka
Paul Mather	Monte Grove	Patrick Knight	Jane Goode

PROJECT LOCATION

ODOT REGION 5



I84: EXITS 302 & 306 INTERCHANGE AREA MANAGEMENT PLAN KEY NO. TBD

LEGEND

PROJECT LOCATION

STATE HIGHWAY CLASSIFICATION

INTERSTATE

STATEWIDE

REGIONAL / DISTRICT

REGIONAL BOUNDARY

COUNTY BOUNDARY

ACT BOUNDARY

"This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information."

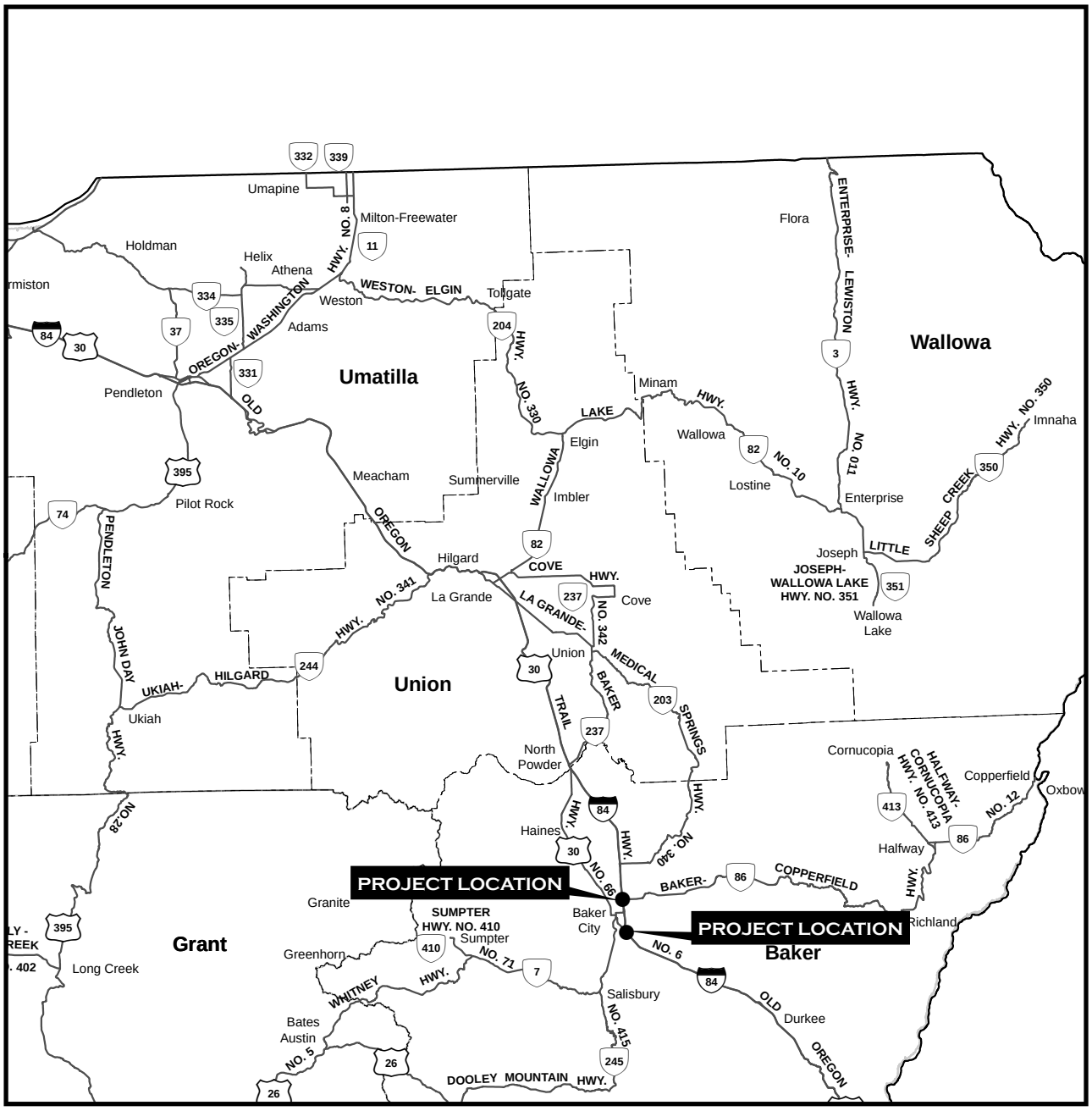
0 0.45 Miles

PRODUCED BY ODOT - GIS UNIT
(503) 986-3154 - APRIL 2016
GIS No. 23-52

\\gis_resources\giswork\GIS23_52_OTC_maps_and_graphics\OTC_MAPS\OTC_16_MAPS\REGION5\MXD

PROJECT VICINITY

ODOT REGION 5



I84: EXITS 302 & 306 INTERCHANGE
AREA MANAGEMENT PLAN
KEY NO. TBD

LEGEND

- SITE LOCATION
- STATE HIGHWAY
- COUNTY BOUNDARY
- STATE BOUNDARY

"This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information."

0 10 Miles

PRODUCED BY ODOT - GIS UNIT
(503) 986-3154 - APRIL 2016
GIS No. 23-52

\\gis_resources\giswork\GIS23_52_OTC_maps_and_graphics\OTC_MAPS\OTC_16_MAPS\REGION5\MXD

Attachment 1

Staff Report
I-84 Exit 302 and 306 Interchange Area Management Plan

Requested Action

Region 5 requests that the Oregon Transportation Commission (OTC) adopt the I-84 Exits 302 and 306 Interchange Area Management Plan (IAMP). Adoption of this Plan will amend the Oregon Highway Plan (OHP) to include an Interchange Area Management Plan for Baker Interchanges (Exit 302 & 306) along I-84.

Background

The I-84 Exit 302 and Exit 306 interchanges were constructed as rural interchanges serving the north and south ends of Baker City, respectively, and the surrounding areas. Development in the Baker City area is expected to expand northward and the Exit 302 interchange has been a specific point of discussion for prospective developers. It is anticipated that phased improvements to this interchange and the surrounding road network will be required for the interchange to continue to operate acceptably as the surrounding area develops over the next twenty years and beyond.

A series of plan, policy, and ordinance amendments were adopted by Baker City and Baker County during the winter of 2015-2016 in support of this plan. OTC adoption of this Facility Plan will affirm its compatibility with the local comprehensive plans. Adoption of this Facility Plan will make the local actions already taken consistent with the state transportation plan. Adoption into the state plan also helps protect the decisions made locally consistent with The Planning Rule (TPR) requiring local plans be consistent with the state plan. Adoption by the OTC is the complimentary action to support the legal proceedings and actions that have been completed by the local agencies.

Purpose and Intent

The I-84 Exits 302 and 306 IAMP is a strategic transportation plan designed to ensure growth can occur in the area surrounding the interchanges without compromising the long-term function and safety of both interchange areas. Potential development in the vicinity of Exit 302 originally triggered the need for this study. The IAMP will identify land use management strategies, short- and long-term transportation improvements, access management goals, and strategies to fund identified improvements. The intent is a planning effort that results in policies, ordinances, and other provisions that will be adopted into the Baker City and Baker County Transportation System Plans (TSPs) and Comprehensive Plans. The IAMP will also be adopted by the Oregon Transportation Commission (OTC) as an amendment to the Oregon Highway Plan (OHP).

Goals and Objectives

The primary goal of the IAMP process is to protect the function of both interchanges for the next 20 years while accounting for changes in land use and traffic patterns. As stated in Policy 3C of the 1999 Oregon Highway Plan, “it is the policy of the State of Oregon to plan for and manage grade-separated interchange areas to ensure safe and efficient operation between connecting roadways.” To this end, the following draft objectives have been developed based on the previous effort and the scope of work for this project:

1. Involve affected property owners in the interchange area, the City of Baker City, Baker County, the Oregon Department of Transportation (ODOT), and other stakeholders, including interchange users.
2. Evaluate local transportation, environmental, and land use conditions.
3. Identify needed transportation improvements within the Interchange Study Areas and propose alternatives that conform to current design standards and accommodate the long-term capacity and safety needs of the project study areas.
4. Develop the IAMP in accordance with the provisions and the policies of the 1999 Oregon Highway Plan, Oregon Administrative Rule Chapter 734, Division 51, and Baker City and Baker County transportation system plans and comprehensive plans.
5. Manage the allowed land uses within the vicinity of both interchanges to provide for future economic growth over the next 20 years.
6. Identify current accesses along the interchange crossroads and develop a phased access management plan for the crossroads based on a detailed and collaborative process involving the local jurisdiction and local property owners. The access management plan will be based on key principles that balance highway mobility and safety against:
    a. The findings of local TSPs and land use plans;
    b. Local economic development objectives for properties that require access to the state highways
7. Comply with the intent of Statewide Planning Goals including Goal 1: Public Involvement, Goal 2: Land Use Planning, Goal 5: Natural Resources, Goal 6: Air, Water and Land Resources Quality, Goal 7: Areas Subject to Natural Hazards, Goal 8: Recreation Needs, Goal 9: Economic Development, Goal 12: Transportation, and Goal 14: Urban Growth Boundaries.
8. Identify phased implementation strategies for identified near- and long-term improvements.
9. Develop implementation policies and regulations to be adopted into the City Comprehensive Plans, Transportation System Plans, and zoning ordinances, as appropriate.

These objectives were reviewed with and confirmed by members of the study's Project Management Team (PMT).

Adoption Elements

Implementation of I-84 Exits 302 and 306 IAMP will occur at several levels of government. Consistent with OAR 734-051, the City of Baker City and Baker County will identify legislative amendments to adopted transportation system plans and comprehensive plans to incorporate elements of the I-84 Exits 302 and 306 IAMP. In addition, new land use ordinances or amendments to existing ordinances or resolutions are required to ensure that the access management, land use management, and coordination elements of the IAMP are achieved. This adoption process included Planning Commission/City Council hearings at the City level and Planning Commission/Board of County Commissioners hearings at the County level.

Interchange Management Study Area

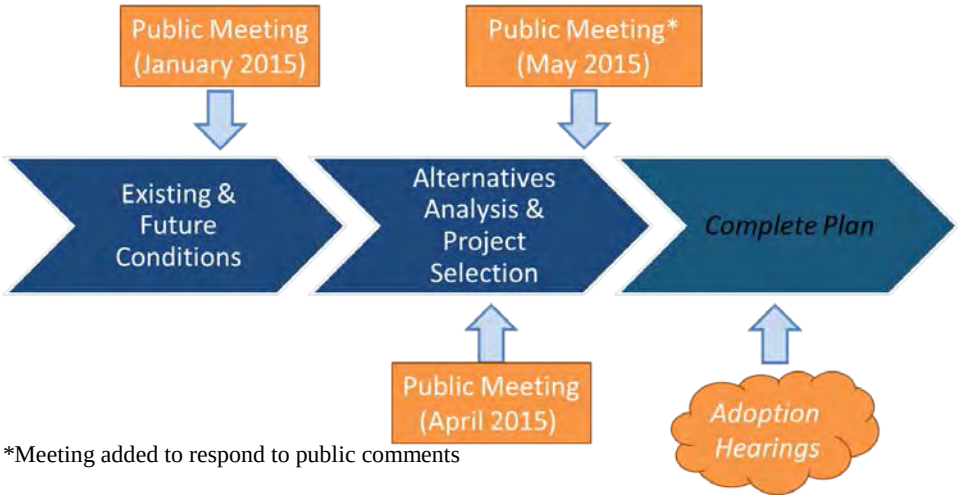
To provide a comprehensive study and to achieve effective results, the IMSA for each interchange includes developable and re-developable properties and major roadways that could significantly affect the function of both interchanges over the next 20 years. At a minimum, the

IMSA includes properties, as well as all access points within ½ mile from the existing interchanges as defined by the IAMP Guidelines.

Traffic Analysis

Traffic analysis for the IAMP was conducted pursuant to ODOT Transportation Planning Analysis Unit established standards. Population and employment growth rates were based on the adopted City/County Comprehensive Plans. Development applications located within either the Exit 302 or Exit 306 Interchange Management Areas that meet the criteria of Baker City Development Code 4.1.900 (for development inside the UGB) or Baker County Zoning Ordinance 340.07 (for development outside the UGB) shall be accompanied by a Transportation Impact Study that demonstrates the level of impact of the proposed development on the interchange and surrounding street system, and how the impact will be mitigated pursuant to ODOT and City or County standards.

Public Process Overview



*Meeting added to respond to public comments

The development of the IAMP used an open and on-going public and agency involvement process that included representatives from ODOT, Baker City, Baker County, Local land owners, and local business owners. These representatives were invited to participate on the Project Management Team (PMT) and Technical Advisory Team (AMT), and were sent copies of materials as they became available. The PMT/AMT each met as individual groups, and as a combined group in joint meetings. Public outreach included open houses newspaper advertisements, newspaper stories, a project website, and project flyers. Plan was adopted by the City and County December 2015 and January 2016

I-84 Exits 302 and 306 Interchange Area Management Plan Findings

Introduction

The I-84 Exits 302 and 306 Interchange Area Management Plan (IAMP) findings section is divided into three sections. The first addresses the I-84 Exits 302 and 306 Interchange Area Management Plans consistency with Federal laws; the second consistency with State of Oregon plans, policies, and rules; and the third consistency with applicable regional and local plans.

Through the development of I-84 Exits 302 and 306 Interchange Area Management Plan, the plan is in compliance with relevant federal and state planning goals and plans. These include Statewide Planning Goals and Guidelines, Oregon Transportation Plan, (1992), Oregon Highway Plan (1999) and amendments, Freight Moves the Economy (1999), Transportation Planning Rule (OAR 660-012), and the Access Management Rule (OAR 734-051).

FEDERAL LAWS COMPLIANCE

National Environmental Policy Act (NEPA), Pub. L. 91-190, 42 U.S. Code 4321- 43478

An environmental impact statement was not required to conduct the I-84 Exits 302 and 306 Interchange Area Management Plan.

> *Finding*: An environmental impact statement was not required to conduct the I-84 Exits 302 and 306 Interchange Area Management Plan.

State Plans, Policies, and Rules

OREGON STATEWIDE PLANNING GOALS COMPLIANCE

Relevant Statewide Planning Goals adopted by the Land Conservation and Development Commission (LCDC) include Goal 2 (Land Use Planning), Goal 5 (Open Spaces, Scenic and Historic Areas, and Natural Resources), Goal 11 (Public Facilities Planning), Goal 12 (Transportation), and Goal 14 (Urbanization).

Goal 2 requires that a land use planning process and policy framework be established as a basis for all decisions and actions relating to the use of land. Goal 5 requires that plans provide for the preservation of natural areas consistent with an inventory of the scientific, educational, ecological, and recreational needs. Goal 11 requires cities and counties to plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development. Goal 12 requires cities, counties, metropolitan planning organizations, and ODOT to provide and encourage a safe, convenient, and economic transportation system; this is the Goal implemented through the Transportation Planning Rule. Goal 14 regulates activities within urban growth boundaries.

> *Finding*: This IAMP is consistent with applicable Statewide Planning Goals as this project is consistent with the Department of Land Conservation and Development (DLCD) acknowledged plans and the City/County Comprehensive Plans. The project is compliant and compliments the City/County Transportation System Plans and local zoning and subdivision ordinances.

OREGON TRANSPORTATION PLAN COMPLIANCE

"The purpose of the Oregon Transportation Plan is to guide the development of a safe, convenient, and efficient transportation system which promotes economic prosperity and livability for all Oregonians." The OTP defines broad policies for the state transportation system. The plan defines a minimum level of service (now termed mobility standard) for highways.

> *Finding*: This IAMP is consistent with the OTP because the IAMP makes safety improvements that will provide safe and efficient movement of people and freight in the interchange study area. The OTP does not specifically address improvements to the IAMP study area, but offers a broad

policy framework and standards for improving state highway systems. The IAMP has been developed to be consistent with the OTP, and more specifically, the Oregon Highway Plan, which is an element of the OTP.

OREGON HIGHWAY PLAN COMPLIANCE

The I-84 Exits 302 and 306 IAMP was developed in accordance with the policies set forth in the Oregon Highway Plan (OHP). The following identifies the OHP policies that pertain to the I-84 Exits 302 and 306 IAMP and how the IAMP satisfies the requirements.

Policy 1A: State Highway Classification System. The state highway classification system includes five classifications: Interstate, Statewide, Regional, District, and Local Interest Roads. In addition, there are four special purpose categories that overlay the basic classifications: special land use areas, statewide freight route, scenic byways, and lifeline routes.

Within the two IMSAs, there are three ODOT highways. Interstate-84 is an Interstate Highway and is part of the National Highway System (NHS). OR 86 and US 30 are both District Highways in the vicinity of I-84.

> *Finding*: The I-84 Exits 302 and 306 IAMP recognized the respective functions of each highway. Access standards, traffic control, and geometric considerations were informed by the applicable highway designation.

Policy 1B: Land Use and Transportation. This policy recognizes the role of both the State and local governments related to the state highway system and calls for a coordinated approach to land use and transportation planning.

> *Finding*: The IAMP was developed through a cooperative planning effort between the City/County and ODOT. The IAMP will be implemented by the City/County through IAMP Management Areas that will require coordinated agency review on all future development or land use actions within the Area.

Policy 1C: State Highway Freight System. This policy recognizes the need for the efficient movement of freight through the state. Interstate-84 is a designated freight route.

> *Finding*: The transportation improvement plan plans for increasing volumes on the I-84 ramp terminals.

Policy 1F: Highway Mobility Standards Access Management Policy. This policy addresses state highway performance expectations, providing guidance for managing access and traffic control systems related to interchanges.

> *Finding*: The I-84 Exits 302 and 306 IAMP demonstrates that the interchange will be able to meet ODOT mobility standards through the 20-year horizon. It also provides an access management element that improves access management near the interchanges.

Policy 1G: Major Improvements. This policy requires maintaining performance and improving safety by improving efficiency and management before adding capacity.

> *Finding*: The I-84 Exits 302 and 306 IAMP provides measures to increase efficiency through access management and provides improvements to the local street system.

Policy 2B: Off-System Improvements. This policy recognizes that the state may provide financial assistance to local jurisdictions to make improvements to local transportation systems if the improvements would provide a cost-effective means of improving the operations of the state highway system.

> *Finding*: The transportation system was considered as a whole with improvements to the state and local system equally considered.

Policy 2F: Traffic Safety. This policy emphasizes the state's efforts to improve safety of all uses of the highway system. Action 2F.4 addresses the development and implementation of the Safety Management System to target resources to sites with the most significant safety issues.

> *Finding*: Safety is a key component of the concept improvements, including improving sight distance on the Exit 302 ramp terminals and the Exit 302 AMP.

Policy 3A: Classification and Spacing Standards. This policy addresses the location, spacing and type of road and street intersections and approach roads on state highways. The adopted standards can be found in Appendix C of the Oregon Highway Plan.

> *Finding*: See Policy 3C below.

Policy 3C: Interchange Access Management Areas. This policy addresses management of gradeseparated interchange areas to ensure safe and efficient operation between connecting roadways. Action items include developing interchange area management plans to protect the function of the interchange to provide safe and efficient operations between connecting roadways and to minimize the need for major improvements of existing interchanges. The local jurisdiction's role in access management is stated in Policy 3C as follows: "necessary supporting improvements, such as road networks, channelization, medians and access control in the interchange management area must be identified in the local comprehensive plan and committed with an identified funding source, or must be in place (Action 3C.2)."

Access management standards are detailed in Policy 3C and include the distance required between an interchange, approaches, and intersections. The most stringent standards apply in interchange areas. Table 17 of the OHP contains the minimum spacing standards applicable to the I-84/US 395 Interchange, a freeway interchange that has a multi-lane crossroad. The spacing standards in an urban area for this type of interchange are:

1 mile (3.2 km)	Distance between the start and end of tapers of adjacent interchanges.
750 feet (230 m)	Distance to the first approach on the right (right in/right out only)
1,320 feet (400 m)	Distance to the first major intersection or approach (left turns allowed).
990 feet (300 m)	Distance between the last right in/right out approach road and the start of the taper for the on-ramp.

> *Finding*: The I-84 Exits 302 and 306 IAMP includes an access management element that consolidates access points and improves access spacing over the existing conditions. Ultimately, upon land development, access on either side will be improved but it will not meet the standards outlined above. Section 7 outlines where deviations will be necessary and describes how each of the necessary deviations meets the requirements of Division 51.

Policy 3D: Deviations. This policy establishes general policies and procedures for deviations from adopted access management standards and policies.

Finding: Deviations to the OHP access spacing standards are required, as described in Section 2 of the I-84 Exits 302 and 306 IAMP. The access management element describes the need for future deviations at the time of construction.

Policy 4A: Efficiency of Freight Movement. This policy emphasizes the need to maintain and improve the efficiency of freight movement on the state highway system. Interstate -84 and US 395 are Freight Routes.

> *Finding*: The transportation improvements included in the IAMP plan improves traffic operations and safety for all vehicles, including freight vehicles.

Policy 5B: Scenic Resources. This policy applies to all state highways and commits the State to using best management practices to protect and enhance scenic resources in all phases of highway project planning, development, construction, and maintenance.

Finding: This policy was considered as part of the plan development.

Transportation Planning Rule (Oregon Administrative Rule 660-012)

The Transportation Planning Rule (TPR) implements Statewide Planning Goal 12 (Transportation), which encourages construction of transportation facilities that promote the development of safe, convenient, and economic transportation systems that are designed to reduce reliance on the automobile and reduce air pollution, congestion, and other livability issues found in urban areas. Much of the TPR relate to the formation and implementation of local Transportation System Plans. The TPR also addresses changes to a functional plan, an acknowledged comprehensive plan, or a land use regulation that would significantly affect an existing or planned facility.

Finding: City/County have adopted transportation system plans that are acknowledged by the Land Conservation and Development Commission. The IAMP was developed and adopted by local governments to provide an overview of how the interchange will function and provide safe travel for users. The Department has received signed ordinance to signify compatibility with the local comprehensive plan, transportation system plan, and applicable local ordinances.

Access Management Rule (Oregon Administrative Rule 734-051)

The intent of ODOT's Access Management Rule is to balance the safety and mobility needs of travelers along state highways with the access needs of property and businesses owners. ODOT's rule sets guidelines for managing access to the state's highway facilities in order to maintain highway function, operations, safety, and the preservation of public investment consistent with the policies of the 1999 OHP. This rule applies to the location, construction, maintenance and use of approaches onto the state highways. The rule also governs closure of existing approaches, spacing standards, medians, deviations, appeal processes, grants of access and indentures of access.

Finding: As this is a relatively undeveloped interchange, the IAMP strives to identify a local roadway network that is consistent with ODOT access spacing standards. The IAMP works toward improving the sagety and efficiency of the interchanges and sets access requirements that are consistent with the Oregon Highway Plan and Access Management Rule (OAR 734-051).

OAR 731-0015-0055 and 0065

ODOT's State Agency Coordination Agreement requires that the Oregon Transportation Commission (OTC) adopt findings of fact when adopting modal plans or plan amendments (OAR 731-015-0055) or when adopting facility plans (OAR 731-015-065). Pursuant to these requirements ODOT provides the following findings to support the OTC adoption of the I-84 Exit 302 and 306 Interchange Area Management Plan (IAMP). The IAMP, seeks to amend the OHP to identify the interchange access management plan approved through local comprehensive plan, Transportation System Plan, and development ordinance amendments in the City/County as the appropriate mechanism within which to develop a road network and ensure the protection of the function and capacity of the interchange.

The approved IAMP is located on I-84 at exit 302 and 306 north and south of Baker City Figure 1 of the IAMP. The IAMP establishes management objectives for the interchange facility and local roadway network.

731-015-0055

Coordination Procedures for Adopting Modal Plan Amendments

1) Except in the case of minor amendments, the Department shall involve DLCD and affected metropolitan planning organizations, cities, counties, state and federal agencies, special districts and other interested parties in the development or amendment of a modal systems plan. This involvement may take the form of mailings, meetings, or other means that the Department determines are appropriate for the circumstances. The Department shall hold at least one public meeting on the plan prior to adoption.

   Finding: The IAMP used an open and ongoing public involvement process which included community members, business owners, Baker City, Baker County, and ODOT. The IAMP public process looked to solve current and future transportation needs, avoid and minimize impacts to the natural and built environments, and enhance community livability in the project area. In addition to the public Project Management Team (PMT) meetings, the public involvement process included:

   - Public open-house workshop
   - Public outreach meetings
   - One-on-one landowner meetings
   - DLCD 45-day notice
   - Adoption process at Baker City and Baker County

2) The Department shall evaluate and write findings of compliance with all applicable statewide planning goals.

   Finding: The IAMP is attached for the Commission's consideration. The IAMP contains findings that address compliance with applicable statewide planning goals and the comprehensive plan of the affected cities.

3) If the draft plan identifies new facilities which would affect identifiable geographic areas, the department shall meet with the planning representatives of affected cities, counties, and metropolitan planning organizations to identify compatibility issues and the means of resolving them. These may include:

   (a) Changing the facility plan to eliminate the conflicts;

   (b) Working with the local governments to amend the local comprehensive plans to eliminate the conflicts; or

   (c) Identifying the conflicts in the draft facility plan and including policies that commit the Department to resolving the conflicts prior to the conclusion of the transportation planning program for the affected portions of the transportation facility.

   Finding: The Department has received a copy of the adoption ordinances with the findings of compatibility with the local comprehensive plan and applicable local ordinances and applicable statewide planning goals from the City/County.

4) The Department shall present to the Transportation Commission the facility plan, findings of compatibility with the acknowledged comprehensive plans of the affected city, and findings of compliance with applicable statewide planning goals.

   Finding: The Department has received a copy of the adoption ordinances with the findings of compatibility with the local comprehensive plan and transportation system

plan. The IAMP is attached for the Commission's consideration. The IAMP contains findings that address compliance with applicable statewide planning goals and the comprehensive plan of the affected cities.

5) The Transportation Commission, when it adopts a final modal systems plan, shall adopt findings of compatibility for new facilities affecting identifiable geographic areas and findings of compliance with all applicable statewide planning goals.

   Finding: The IAMP is attached for the Commission's consideration. The IAMP contains findings that address compliance with applicable statewide planning goals and the comprehensive plan of the affected cities.

6) The Department shall provide copies of the adopted final facility plan and findings to DLCD, to affected metropolitan planning organizations, cities, counties, state and federal agencies, special districts and to others who request to receive a copy.

   Finding: The Department has provided copies of the adopted IAMP, including all required findings, to DLCD, the affected local jurisdictions, and others who request a copy.

731-015-0065

Coordination Procedures for Adopting Final Facility Plans

1) Except in the case of minor amendments, the Department shall involve DLCD and affected metropolitan planning organizations, cities, counties, state and federal agencies, special districts and other interested parties in the development or amendment of a facility plan. This involvement may take the form of mailings, meetings or other means that the Department determines are appropriate for the circumstances. The Department shall hold at least one public meeting on the plan prior to adoption.

   Finding: The IAMP used an open and ongoing public involvement process which included community members, business owners, Baker City, Baker County, and ODOT. The IAMP public process looked to solve current and future transportation needs, avoid and minimize impacts to the natural and built environments, and enhance community livability in the project area. In addition to the public Project Management Team (PMT) meeting, the public involvement process included:

   - Public open-house workshops
   - Public outreach meetings
   - One-on-one landowner meetings
   - Adoption process at Baker City and Baker County

2) The Department shall provide a draft of the proposed facility plan to planning representatives of all affected cities, counties, and metropolitan planning organization and shall request that they identify any specific plan requirements which apply, any general plan requirements which apply and whether the draft facility plan is compatible with the acknowledged comprehensive plan. If no reply is received from an affected city, county or metropolitan planning organization within 30 days of the Department's request for a compatibility determination, the Department shall deem that the draft plan is compatible with that

jurisdiction's acknowledged comprehensive plan. The Department may extend the reply time if requested to do so by an affected city, county or metropolitan planning organization.

Finding: The Department has received a copy of the adoption ordinances with the findings of compatibility with the local comprehensive plan and transportation system plan and applicable local ordinances from the City/County.

3) If any statewide goal or comprehensive plan conflicts are identified, the Department shall meet with the local government planning representatives to discuss ways to resolve the conflicts. These may include:

   (a) Changing the draft facility plan to eliminate the conflicts;

   (b) Working with the local governments to amend the local comprehensive plans to eliminate the conflicts; or

   (c) Identifying the conflicts in the facility plan and including policies that commit the Department to resolving the conflicts prior to the conclusion of the transportation planning program for the affected portions of the transportation facility.

   Finding: No statewide goal or comprehensive plan conflicts have been identified with the IAMP.

4) The Department shall evaluate and write draft findings of compatibility with acknowledged comprehensive plans of affected cities and counties, findings of compliance with any statewide planning goals which specifically apply as determined by OAR 660-030-0065(3)(d), and findings of compliance with all provisions of other statewide planning goals that can be clearly defined if the comprehensive plan of an affected city or county contains no conditions specifically applicable or any general provisions, purposes or objectives that would be substantially affected by the facility plan.

   Finding: The IAMP is attached for the Commission's consideration. The IAMP contains findings that address compliance with applicable statewide planning goals and the comprehensive plan of the affected cities.

5) The Department shall present to the Transportation Commission the draft plan, findings of compatibility with the acknowledged comprehensive plans of the affected cities and counties and findings of compliance with applicable statewide planning goals.

   Finding: The Department has received letters of compatibility with the local comprehensive plan and applicable local ordinances from City/County. The IAMP is attached for the Commission's consideration. The IAMP contains findings that address compliance with applicable statewide planning goals and the comprehensive plan of the affected cities.

6) The Transportation Commission shall adopt findings of compatibility with the acknowledged comprehensive plans of affected cities and counties and findings of compliance with applicable statewide planning goals when it adopts the final facility plan.

   Finding: The Department has received a copy of the adoption ordinances with the findings of compatibility with the local comprehensive plan and transportation system plan and applicable local ordinances from the City/County. The IAMP is attached for the

Commission's consideration. The IAMP contains findings that address compliance with applicable statewide planning goals and the comprehensive plan of the affected cities.

7) The Department shall provide copies of the adopted final facility plan and findings to DLCD, to affected metropolitan planning organizations, cities, counties, state and federal agencies, special districts and to others who request to receive a copy.

   Finding: The Department will provide copies of the adopted IAMP, including all required findings, to DLCD, the affected local jurisdictions, and others who request a copy.

Regional and Local Plans and Policies

Regional and local planning documents relevant for the IAMP improvements are Baker City Transportation System Plan and the Comprehensive Plan and the Baker County Transportation System Plan and Comprehensive Plan.

Finding: This IAMP has been developed to be consistent with local and state transportation policies. The review of local policies and regulations did not reveal conflicts with the primary goal of the IAMP to protect the function of the interchange. The Department has received findings from City/County that show that the IAMP meets criteria of the applicable Comprehensive Plan and Zoning Ordinances. Documentation of compatibility with local plans, policies, and ordinances are attached.

Attachment 3

Contact Information
Interchange Area Management Plan for Interstate 84, Exit 302 and 306

Copies of the Interstate 84, Exit 302 and 306 Interchange Area Management Plan and appendicies can be obtained by downloading from the following link:

ftp://ftp.odot.state.or.us/outgoing/I-84%20Exits%20302%20and%20306%20Interchange%20Area%20Management%20Plan/

or contacting:

Patrick Knight
Planning and Programming Unit
ODOT Region 5
3012 Island Avenue
LaGrande, OR 97850-9497
541-963-1345
William.P.Knight@odot.state.or.us

I-84 EXITS 302 AND 306 INTERCHANGE AREA MANAGEMENT PLAN

January 2016

Prepared for:

Oregon Department of Transportation - Region 5
3012 Island Avenue
La Grande, OR 97850

Baker City
1655 First Street
PO Box 650
Baker City, OR 97814

Baker County
1995 Third Street
Baker City, OR 97814

I-84 Exits 302 and 306 Interchange Area Management Plan

Baker County and Baker City, Oregon

Final

January 2016

I-84 Exits 302 and 306 Interchange Area Management Plan

Baker County and Baker City, Oregon

Prepared For:
Oregon Department of Transportation
Region 5
3012 Island Avenue
La Grande, OR 97850
(541) 963-3177

Baker City
1655 First Street
PO Box 650
Baker City, OR 97814
(541) 523-6541

Baker County
1995 Third Street
Baker City, OR 97814
(541) 523 - 8219

Prepared By:
Kittelson & Associates, Inc.
610 SW Alder, Suite 700
Portland, OR 97205
(503) 228-5230

In Association With:
Siegel Planning Services, LLC.
16146 Boones Ferry Road, #145
Lake Oswego, OR 97035
(503) 699-5850

Project No. 17921

January 2016

TABLE OF CONTENTS

Preface vi

Project Management Team (PMT) vi

Consultant Team vi

Executive Summary 8

Interchange Improvement and Access Management Plan 12

Background 12

Conditions Statement 12

Purpose and Intent Statement 12

Goals and Objectives 13

Interchange Management Study Area 14

Transportation Improvement Plan 14

Access Management Plan 21

Implementation Plan 26

OAR and OHP Compliance 32

OAR Compliance 32

Oregon Highway Plan Compliance 33

LIST OF FIGURES

Figure EX-1 Exit 302 Transportation Improvement Plan 10
Figure 1 Interchange Management Study Area, Exit 302 15
Figure 2 Interchange Management Study Area, Exit 306 16
Figure 3 Exit 302 Transportation Improvement Plan 17
Figure 4 Cedar Street/Hughes Lane Intersection Concept 20
Figure 5 Exit 302 Access Management Plan 22
Figure 6 Exit 306 Access Management Plan 23

LIST OF TABLES

Table EX - 1 I-84 Exit 302 Interchange Area Improvement Summary 9
Table 1 I-84 Exit 302 Interchange Area Improvement Summary 18
Table 2 I-84 Exits 302 and 306 IAMP OAR Compliance 32

DISCLAIMER

The inclusion of proposed projects and actions in this plan does not obligate or imply obligations of funds by any jurisdiction for project level planning or construction. The inclusion of proposed projects and actions does serve as an opportunity for projects to be included, if appropriate in the State Transportation Improvement Program (STIP) and the City of Baker City/Baker County capital improvements program but such inclusion is not automatic. It is incumbent on the state, county, city and general public to take action to encourage and support inclusion into the STIP or CIP at the appropriate time.

PREFACE

This plan is the continuation of a previous effort that resulted in a draft plan in 2005. The previous plan was never formally adopted by Baker City, Baker County, or ODOT, primarily due to a lack of support for the realignment of Best Frontage Road. In recognition of the lack of adoption, the amount of time that has passed since the inception of the original planning effort, and that the realignment of Best Frontage Road has recently occurred, ODOT determined that the 2005 plan needed to be revisited. As such, this IAMP builds upon the previously completed work.

The development of this plan was guided by the Project Management Team (PMT). The members of this group are identified below, along with members of the consultant team. They devoted a substantial amount of time and effort to the development of I-84 Exits 302 and 306 Interchange Area Management Plan (IAMP) and their participation was instrumental in the development of the recommendations that are presented in this plan. The individuals shown below are representative of this update effort and not the 2005 IAMP, though there is some overlap between the two projects.

This plan was adopted by the City of Baker City in December 2015 and by Baker County in January 2016.

Project Management Team (PMT)

Patrick Knight
ODOT Region 5

Don Fine
ODOT Region 5

Holly Kerns
Baker County

Jeff Smith
Baker County

Michelle Owen
City of Baker City

Consultant Team

Kittelson & Associates, Inc.
Nick Foster, AICP
Matt Hughart, AICP
Lauren Nuxoll

Siegel Planning Services
Scot Siegel, AICP, LEED AP

Section 1
Executive Summary

EXECUTIVE SUMMARY

The I-84 Exits 302 and 306 Interchange Area Management Plan (IAMP) is a strategic transportation plan designed to ensure growth can occur in the area surrounding the interchanges without compromising the long-term function of both interchange areas. Potential development in the vicinity of Exit 302 originally triggered the need for this study in the early 2000's. In 2005, an IAMP was prepared for the I-84 Exit 302 and I-84 Exit 306 interchanges (Reference 1). While the technical components of the IAMP were essentially completed, the IAMP was never formally adopted by Baker City, Baker County, or ODOT, primarily due to a lack of support for the realignment of Best Frontage Road. In recognition of the lack of adoption, the amount of time that has passed since the inception of the original planning effort, and that the realignment of Best Frontage Road has recently occurred, ODOT determined that the 2005 IAMP needed to be revisited. As such, this IAMP builds upon the previously completed work.

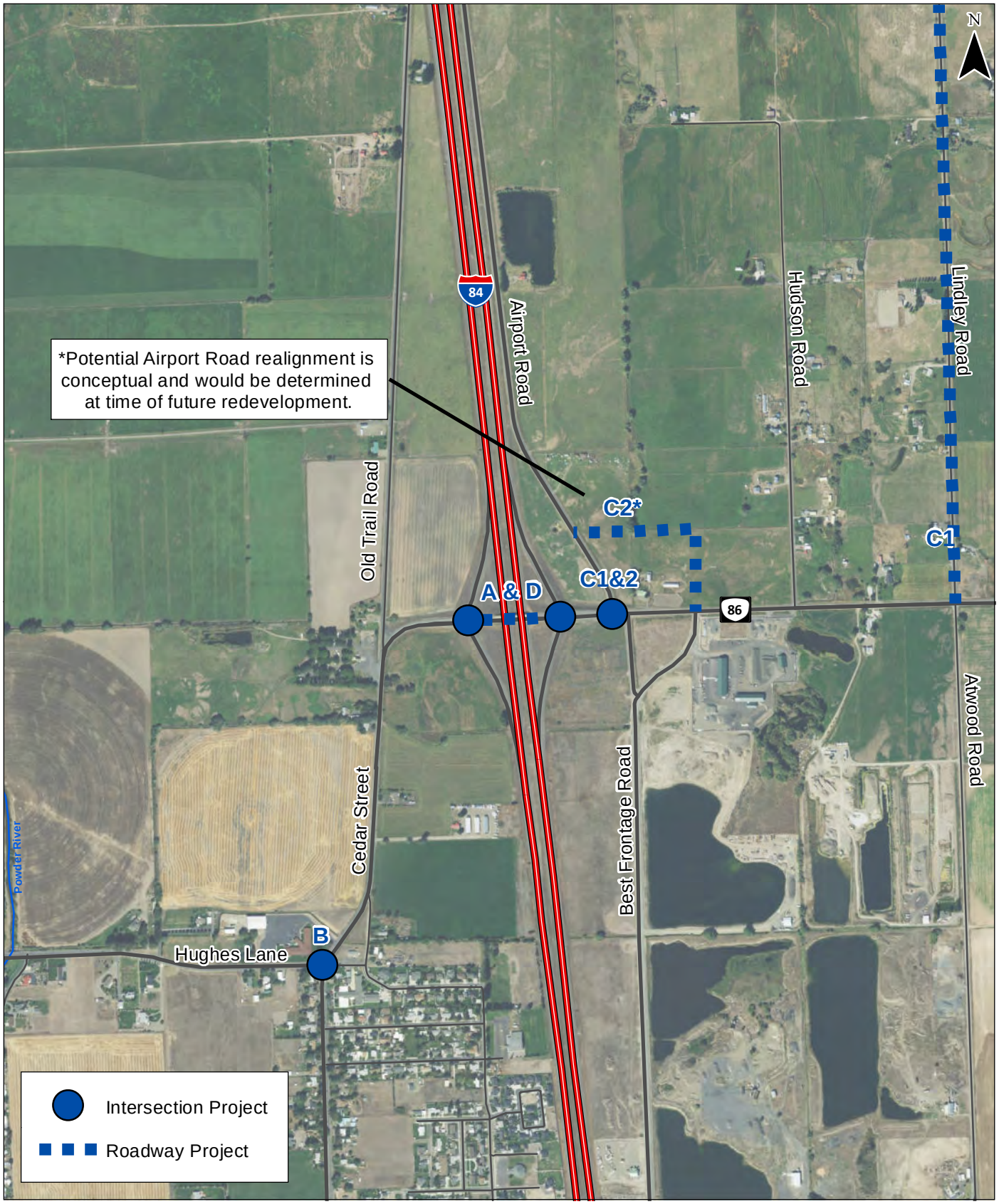
The executive summary provides an overview of the project elements that were developed through a collaborative effort of the Project Team, Baker County, City of Baker City, Oregon Department of Transportation (ODOT), and local stakeholders. The following table and figures summarize the identified improvement projects. Note that no projects are identified for the Exit 306 Interchange area. Additional details are provided herein.

With the identification of near- and long-term infrastructure improvements, a number of policies, ordinances, and other provisions have been developed for adoption into the Baker County and Baker City transportation system plans, comprehensive plans, and development review ordinances to support and implement the IAMP. The IAMP will also be adopted by the Oregon Transportation Commission as an amendment to the Oregon Highway Plan.

Table EX - 1 I-84 Exit 302 Interchange Area Improvement Summary

Figure EX-1 Label	Near-Term Improvement Description	Trigger for Improvement	Estimated Cost[1]	Potential Funding Source
A	• Relocate the guardrail along OR 86, west and east of the bridge over I-84, to provide additional sight distance.	When funding is available.	$30k	STIP
B	• Construct an eastbound right-turn lane at the Cedar Street/Hughes Lane intersection (Phase 1).	When funding is available. Project will need to be prioritized against other projects within the Baker City TSP.	$160k	PDF CIP
	Long-Term Improvement Description			
B	• Construct a southbound right-turn lane at the Cedar Street/Hughes Lane intersection (Phase 2). • Convert the Cedar Street/Hughes Lane intersection to all-way stop control by adding stop signs to the Cedar Street approaches. Construct a left-turn lane on the northbound approach (Phase 3). • Install a traffic signal at the Cedar Street/Hughes Lane intersection (Phase 4).	Phase 2 – When intersection operations or crash patterns warrant Phase 3 – When all-way stop control warrants are met (projected to occur between the year 2030 and 2035) Phase 4 – Once signal warrants are met (projected to occur around 2035)	$200k (Phase 2) $220k (Phase 3) $300k (Phase 4)	PDF CIP
C1	• Restrict the existing access onto Airport to right-in/right-out only, rendering Lindley Road as the primary access to the Airport from OR 86. • Airport Lane (not pictured) between Airport Road and Lindley Road would need to be paved and upgraded to meet the demand of this shift in access from OR 86.	When the queue of vehicles turning left onto Airport Road from OR 86 interferes with operations at the I-84 westbound ramp terminal or when crash patterns in the area could be mitigated by improving spacing between the I-84 westbound ramp terminal and the nearest full access (currently Airport Road). *Only construct this project if C2 is not built.*	$1.0M	PDF STIP
C2	• Airport Road would be realigned to intersect OR 86 across from Best Frontage Road. • The existing Airport Road access onto OR 86 would be removed.	Same as C1. The ability to establish this future roadway alignment would be conditioned upon future redevelopment of parcels along the north side of OR 86 and in consultation with property owners. *This concept would be considered if/when there is a zone change (to a more traffic intensive land use) and development on property on the north side of OR 86 between Airport Road and Hughes Lane.*	$2.6M	PDF STIP
D	• Install signals at the I-84 Ramp terminals on OR 86. • Install left turn lanes on OR 86 at the ramp terminals. The bridge over I-84 would not be widened. It would be restriped to include the left-turn lanes.	When signal warrants are met. This is projected to occur by the end of the year 2035 planning horizon.	$1.3M	PDF STIP

CIP – Baker City Capital Improvement Program
STIP – State Transportation Improvement Project
PDF – Private Development Funds
[1] Planning level costs are in year 2015 dollars



0 1,000 Feet

Exit 302 Transportation Improvement Plan
Baker City, Oregon

Figure
EX-1

H:\profile\17921 - I-84 North Baker IAMP\gis\FigEX-1_302ProposedTransportationPlan.mxd - rfoster - 9:13 AM 4/11/2016

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl
Data Sources: ESRI, Oregon Spatial Data Library

Section 2
Interchange Improvement and Access Management Plan

INTERCHANGE IMPROVEMENT AND ACCESS MANAGEMENT PLAN

Background

In 2005, an IAMP was prepared for the I-84 Exit 302 and I-84 Exit 306 interchanges in Baker City, Oregon. While the technical components of the IAMP were essentially completed, the IAMP was never formally adopted by Baker City, Baker County, and ODOT, primarily due to a lack of support for the realignment of Best Frontage Road. In recognition of the lack of adoption, the amount of time that has passed since the inception of the original planning effort, and that the realignment of Best Frontage Road has recently occurred, ODOT determined that the IAMPs needed to be revisited. As such, the purpose of this new planning effort is to build upon the previously completed work and develop a final plan that can move forward through the local adoption process. The remainder of this section contains the planning context, specific interchange infrastructure projects, and access management plan for the IAMP.

Cedar Street/Hughes Lane Intersection

Conditions Statement

The I-84 Exit 302 and Exit 306 interchanges were constructed as rural interchanges serving the north and south ends of Baker City, respectively, and the surrounding areas. Development in the Baker City area is expected to expand northward and the Exit 302 interchange has been a specific point of discussion for prospective developers. It is anticipated that phased improvements to this interchange and the surrounding road network will be required for the interchange to continue to operate acceptably as the surrounding area develops over the next twenty years and beyond.

Purpose and Intent Statement

The I-84 Exits 302 and 306 IAMP is a strategic transportation plan designed to ensure growth can occur in the area surrounding the interchanges without compromising the long-term function and safety of both interchange areas. Potential development in the vicinity of Exit 302 originally triggered the need for this study. The IAMP will identify land use management strategies, short- and long-term transportation improvements, access management goals, and strategies to fund identified improvements. The intent is a planning effort that results in policies, ordinances, and other provisions that will be adopted into the Baker City and Baker County Transportation System Plans (TSPs) and

Comprehensive Plans. The IAMP will also be adopted by the Oregon Transportation Commission (OTC) as an amendment to the Oregon Highway Plan (OHP).

Goals and Objectives

The primary goal of the IAMP process is to protect the function of both interchanges for the next 20 years while accounting for changes in land use and traffic patterns. As stated in Policy 3C of the 1999 Oregon Highway Plan, "*it is the policy of the State of Oregon to plan for and manage grade-separated interchange areas to ensure safe and efficient operation between connecting roadways*." To this end, the following draft objectives have been developed based on the previous effort and the scope of work for this project:

1. Involve affected property owners in the interchange area, the City of Baker City, Baker County, the Oregon Department of Transportation (ODOT), and other stakeholders, including interchange users.

2. Evaluate local transportation, environmental, and land use conditions.

3. Identify needed transportation improvements within the Interchange Study Areas and propose alternatives that conform to current design standards and accommodate the long-term capacity and safety needs of the project study areas.

4. Develop the IAMP in accordance with the provisions and the policies of the 1999 Oregon Highway Plan, Oregon Administrative Rule Chapter 734, Division 51, and Baker City and Baker County transportation system plans and comprehensive plans.

5. Manage the allowed land uses within the vicinity of both interchanges to provide for future economic growth over the next 20 years.

6. Identify current accesses along the interchange crossroads and develop a phased access management plan for the crossroads based on a detailed and collaborative process involving the local jurisdiction and local property owners. The access management plan will be based on key principles that balance highway mobility and safety against:

    a. The findings of local TSPs and land use plans;
    b. Local economic development objectives for properties that require access to the state highways

7. Comply with the intent of Statewide Planning Goals including Goal 1: Public Involvement, Goal 2: Land Use Planning, Goal 5: Natural Resources, Goal 6: Air, Water and Land Resources Quality, Goal 7: Areas Subject to Natural Hazards, Goal 8: Recreation Needs, Goal 9: Economic Development, Goal 12: Transportation, and Goal 14: Urban Growth Boundaries.

8. Identify phased implementation strategies for identified near- and long-term improvements.

9. Develop implementation policies and regulations to be adopted into the City Comprehensive Plans, Transportation System Plans, and zoning ordinances, as appropriate.

These objectives were reviewed with and confirmed by members of the study's Project Management Team (PMT).

Interchange Management Study Area

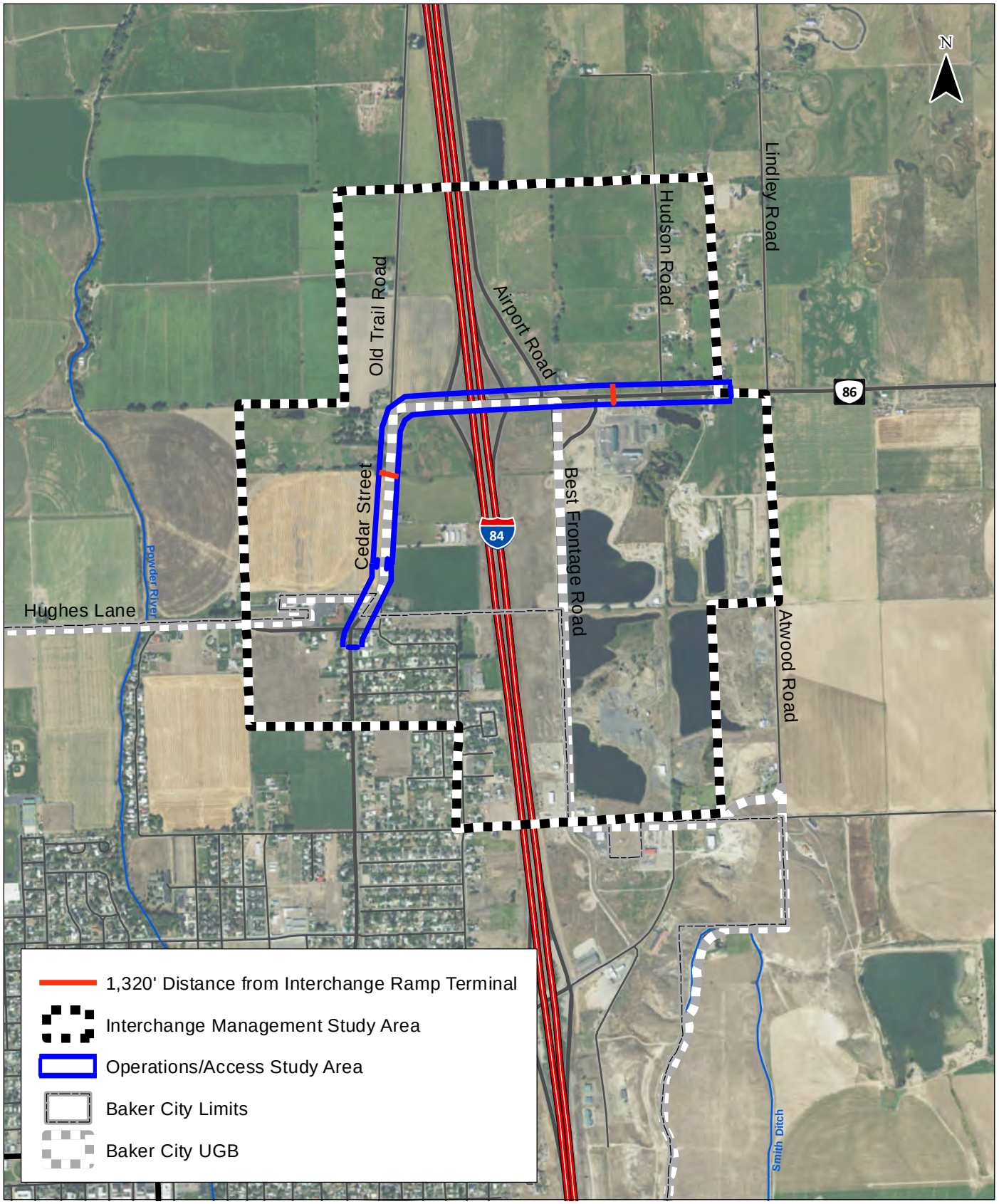
To provide a comprehensive study and to achieve effective results, the IMSA for each interchange includes developable and re-developable properties and major roadways that could significantly affect the function of both interchanges over the next 20 years. At a minimum, the IMSA includes properties, as well as all access points within ½ mile from the existing interchanges as defined by the IAMP Guidelines. Maps of the IMSA for each interchange are shown in Figure 1 and Figure 2.

Transportation Improvement Plan

The following section describes the transportation improvement plan for the Exit 302 Interchange. The project team did not receive any comments on the Exit 306 interchange area during the January 29, 2015 public workshop. Given that the previous effort did not develop any concepts for this area and that the project team's technical analysis and feedback from the public do not identify any significant issues that need to be addressed under existing or projected future conditions, a specific improvement plan was not developed for this interchange.

EXIT 302 TRANSPORTATION IMPROVEMENT PLAN

A comprehensive transportation improvement plan within the Exit 302 IMSA was developed based on the concept screening and evaluations outlined in the Technical Appendix. This plan includes new traffic control at key intersections and improved access surrounding the Exit 302 interchange. Each transportation improvement project is described in detail below, illustrated in Figure 3, and summarized in Table 1.



0 1,000 2,000 Feet

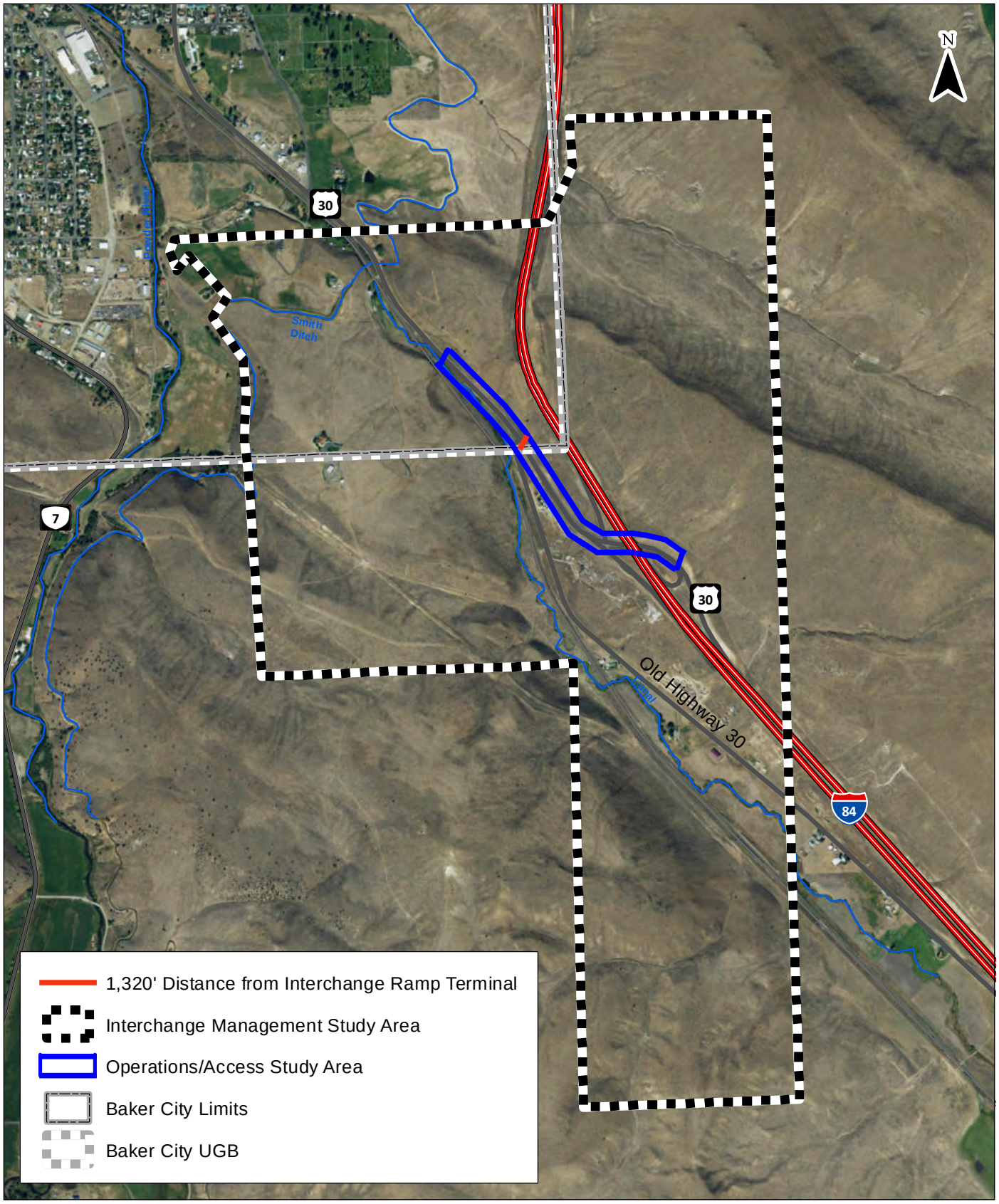
Interchange Management Study Area
Exit 302
Baker City, Oregon

Figure
1

H:\projfile\17921 - I-84 North Baker IAMP\gis\Fig1_IMSA_302.mxd - nfoster - 9:14 AM 4/11/2016

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl
Data Sources: ESRI, Oregon Spatial Data Library



0 1,000 2,000 Feet

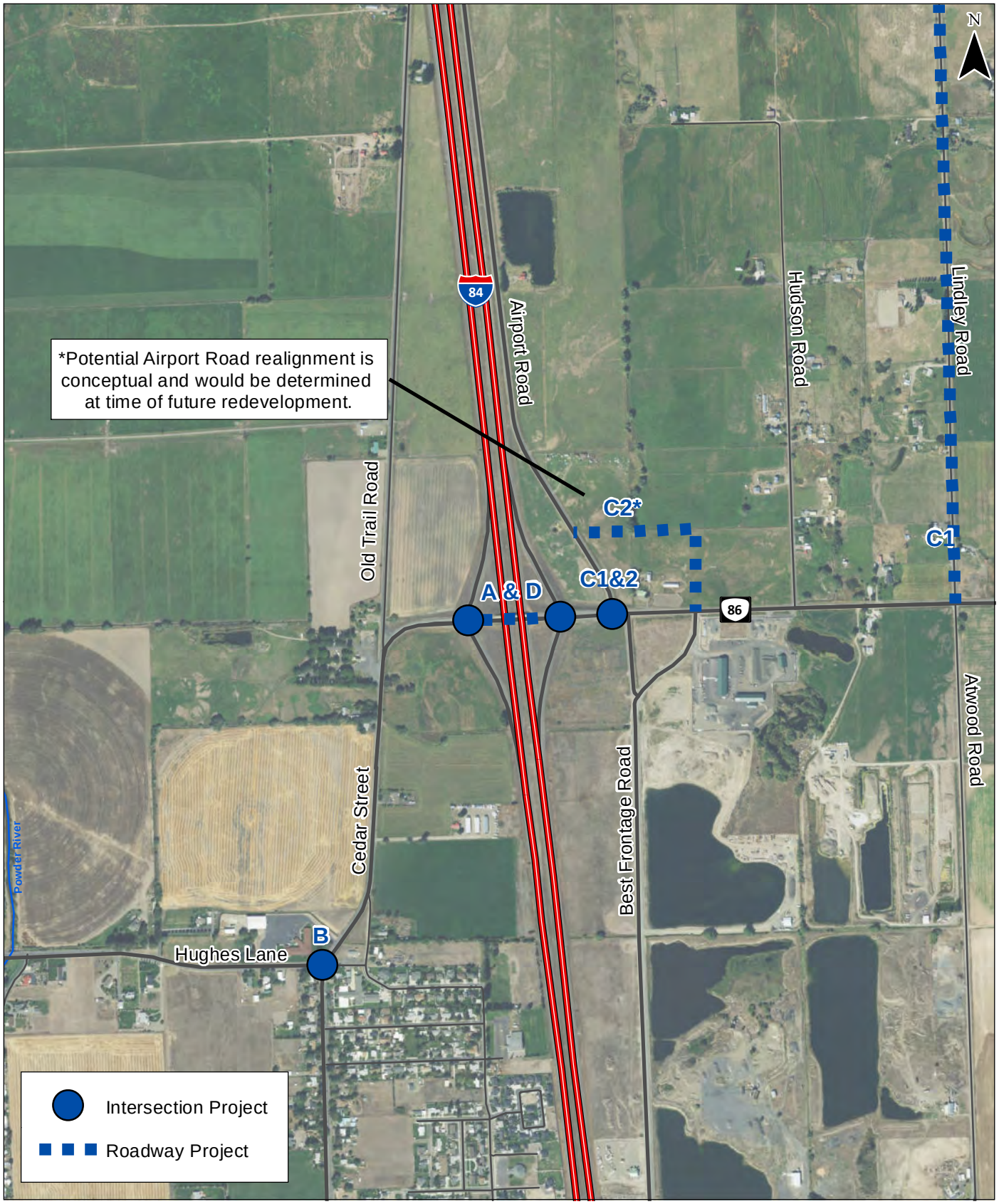
Interchange Management Study Area
Exit 306
Baker City, Oregon

Figure
2

H:\projfile\17921 - I-84 North Baker IAMP\gis\Fig2_IMSA_306.mxd - nfoster - 9:14 AM 4/11/2016

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl
Data Sources: ESRI, Oregon Spatial Data Library



0 1,000 Feet

Exit 302 Transportation Improvement Plan
Baker City, Oregon

Figure
3

H:\profile\17921 - I-84 North Baker IAMP\gis\Fig3_302ProposedTransportationPlan.mxd - nfoster - 9:15 AM 4/11/2016

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl
Data Sources: ESRI, Oregon Spatial Data Library

Table 1 I-84 Exit 302 Interchange Area Improvement Summary

Figure 3 Label	Near-Term Improvement Description	Trigger for Improvement	Estimated Cost[1]	Potential Funding Source
A	• Relocate the guardrail along OR 86, west and east of the bridge over I-84, to provide additional sight distance.	When funding is available.	$30k	STIP
B	• Construct an eastbound right-turn lane at the Cedar Street/Hughes Lane intersection (Phase 1).	When funding is available. Project will need to be prioritized against other projects within the Baker City TSP.	$160k	PDF CIP
	Long-Term Improvement Description			
B	• Construct a southbound right-turn lane at the Cedar Street/Hughes Lane intersection (Phase 2). • Convert the Cedar Street/Hughes Lane intersection to all-way stop control by adding stop signs to the Cedar Street approaches. Construct a left-turn lane on the northbound approach (Phase 3). • Install a traffic signal at the Cedar Street/Hughes Lane intersection (Phase 4).	Phase 2 – When intersection operations or crash patterns warrant Phase 3 – When all-way stop control warrants are met (projected to occur between the year 2030 and 2035) Phase 4 – Once signal warrants are met (projected to occur around 2035)	$200k (Phase 2) $220k (Phase 3) $300k (Phase 4)	PDF CIP
C1	• Restrict the existing access onto Airport to right-in/right-out only, rendering Lindley Road as the primary access to the Airport from OR 86. • Airport Lane (not pictured) between Airport Road and Lindley Road would need to be paved and upgraded to meet the demand of this shift in access from OR 86.	When the queue of vehicles turning left onto Airport Road from OR 86 interferes with operations at the I-84 westbound ramp terminal or when crash patterns in the area could be mitigated by improving spacing between the I-84 westbound ramp terminal and the nearest full access (currently Airport Road). *Only construct this project if C2 is not built.*	$1.0M	PDF STIP
C2	• Airport Road would be realigned to intersect OR 86 across from Best Frontage Road. • The existing Airport Road access onto OR 86 would be removed.	Same as C1. The ability to establish this future roadway alignment would be conditioned upon future redevelopment of parcels along the north side of OR 86 and in consultation with property owners. *This concept would be considered if/when there is a zone change (to a more traffic intensive land use) and development on property on the north side of OR 86 between Airport Road and Hughes Lane.*	$2.6M	PDF STIP
D	• Install signals at the I-84 Ramp terminals on OR 86. • Install left turn lanes on OR 86 at the ramp terminals. The bridge over I-84 would not be widened. It would be restriped to include the left-turn lanes.	When signal warrants are met. This is projected to occur by the end of the year 2035 planning horizon.	$1.3M	PDF STIP

CIP – Baker City Capital Improvement Program
STIP – State Transportation Improvement Project
PDF – Private Development Funds
[1] Planning level costs are in year 2015 dollars

NEAR-TERM IMPROVEMENTS

The following near-term improvements are identified for the I-84 Exit 302 IMSA.

A). Improve Sight Distance at the I-84 Ramp Terminals

Relocating the guardrail along OR 86 west and east of the bridge over I-84 would provide additional sight distance for vehicles exiting I-84 onto OR 86. *This improvement would be constructed when funding can be made available. ODOT Region and District staff are currently working on a detailed scope and cost of this project and will then determine where it can fit into their near-term project plans.*

B). Eastbound Right-Turn Lane at Cedar Street/Hughes Lane Intersection (Phase 1)

To reduce delay for eastbound right-turning vehicles, construct a right-turn lane on the eastbound Hughes Lane approach. *This project would be constructed as part of a capital improvement project or via future development.*

LONG-TERM IMPROVEMENTS

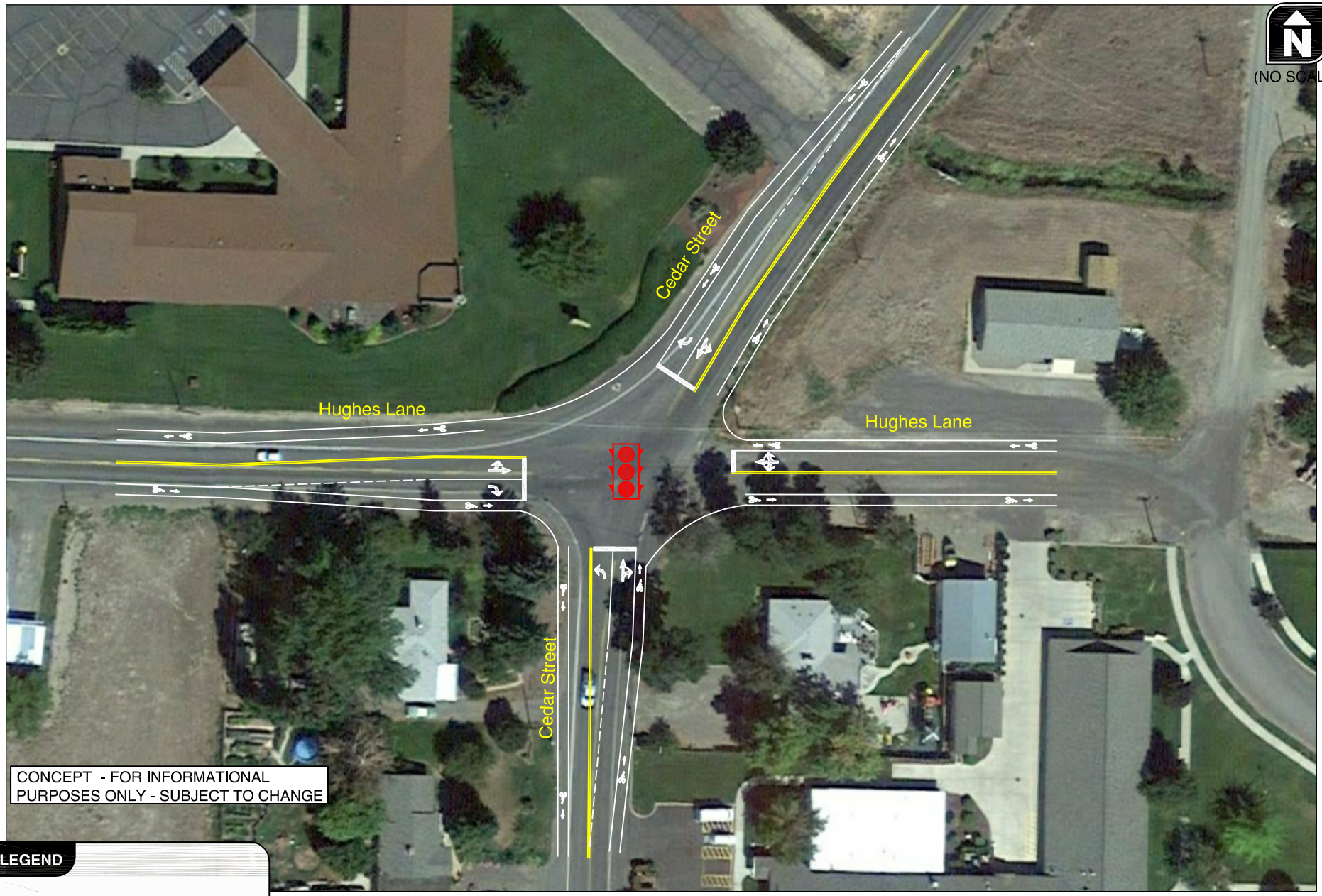
Most of the projects identified in this IAMP are long-term improvements conditional upon future development occurring within the IMSA.

B). 4-Way Stop at Cedar Street/Hughes Lane Intersection (Phases 2 through 4)

The second phase of improvements at the Cedar Street/Hughes Lane intersection would be a right-turn lane on the southbound Cedar Street approach. This would be followed by building a left-turn lane on the northbound approach and converting the intersection to all-way stop control. The all-way stop control would be an interim measure replaced by a traffic signal in the fourth phase of the project. *Phase 2 (southbound right-turn lane) would be constructed after intersection operations or crash patterns indicate the need for the turn lane. Phase 3 will be triggered when all-way stop control warrants are met (projected to occur between the years 2030 and 2035), with Phase 4 being implemented once signal warrants are met.* Figure 4 illustrates a concept for what the intersection could look like once all phases of this project are complete.

C1). Airport Road Access Modification and Conversion of Lindley Road as Primary Access to Airport

To improve long-term intersection operations and address the close spacing from the I-84 Westbound ramp terminal, the Airport Road access to OR 86 will need to be converted to right-in/right-out access only. As part of this modification, Lindley Road will be repurposed to become the primary access to the Baker City Airport and surrounding industrial lands. Signage along OR 86 and road upgrades along Lindley Road will be necessary at this time. *This access modification and repurposing of Lindley Road will be triggered when one or more of the following conditions are occurring:*



LEGEND

- TRAFFIC SIGNAL

CEDAR STREET/HUGHES LANE INTERSECTION CONCEPT
BAKER CITY, OREGON

FIGURE 4

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING

H:\projfile\17921 - I-84 North Baker IAMP\dwgs\design\17921 - I-84 North Baker IAMP.dwg Apr 11, 2016 - 9:22am - nfoster Layout Tab: 4-new

- The queue of eastbound vehicles turning left onto Airport Road from OR 86 regularly backs up and interferes with operations at the I-84 westbound ramp terminal. It should be noted that these conditions are projected to occur beyond the year 2035 planning horizon and may require zoning changes and development on the parcels adjacent to Airport Road to generate this level of traffic.
- When crash patterns in the area could be mitigated by improving spacing between the I-84 westbound ramp terminal and Airport Road.

C2). Airport Road Realignment

An alternative to project C1 would be to realign Airport Road such that it intersects OR 86 across from Best Frontage Road. The ability to establish this future roadway alignment would be conditioned upon future redevelopment of parcels along the north side of OR 86 and in consultation with property owners. The exact alignment of such a project would be determined in the future in conjunction with the affected property owners. *This concept would be considered if/when there is a zone change (to a more traffic intensive land use) and development on property on the north side of OR 86 between Airport Road and Hudson Road. This concept would create a traditional four-leg intersection across from Best Frontage Road, provides reasonable and highly visible access opportunities for property redevelopment, and is consistent with the access spacing precedent set when Best Frontage Road was realigned.*

D). Signalize the I-84 Ramp Terminals

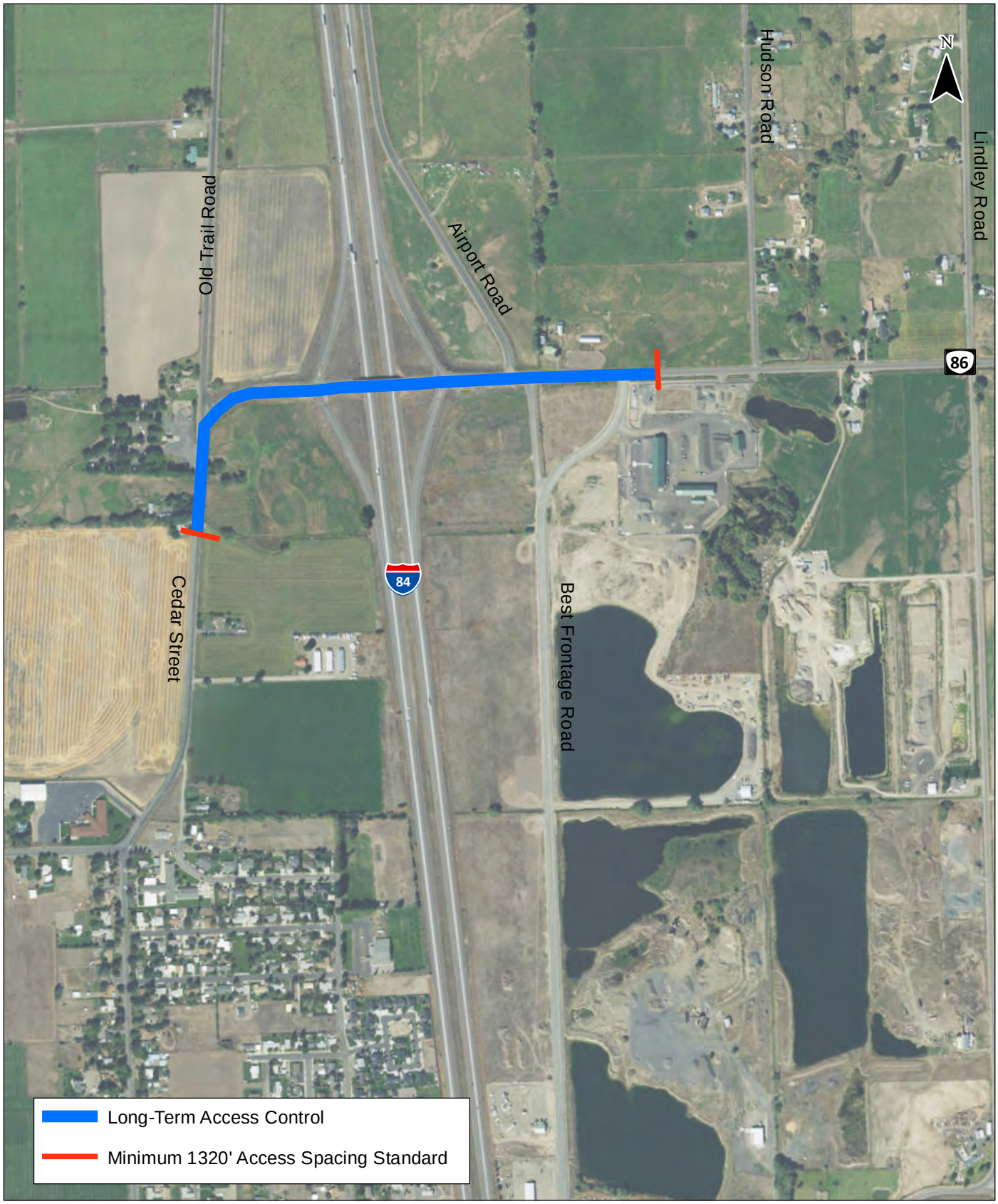
The I-84 Exit 302 ramp terminal intersections with OR 86 will be signalized at such time that they meet warrants. At this time, left-turn lanes on OR 86 will also be striped in. *This project is contingent upon signal warrants being met at these intersections, which is projected to occur beyond the year 2035 planning horizon.*

POSSIBLE EXCEPTIONS/DEVIATIONS FROM STANDARDS

The deviations that will be required for the IAMP transportation improvement plan are related to the access spacing standards outlined under Oregon Administrative Rule 734, Division 51 and the Oregon Highway Plan (OHP). These deviations are discussed in the access management subsection below.

Access Management Plan

Access locations within the Exit 302 and 306 IMSAs were evaluated based on ODOT's Division 51 Access Management standards and an assessment of traffic operations and safety as described in Action 3C.3 of the Oregon Highway Plan. Accordingly, the Access Management Plan (AMP) will preserve the operational integrity and safety of the interchanges and primary roadways (e.g. OR 86, US 30) serving them, while maintaining viable access to all parcels in the IMSAs. The AMP contains a plan for actions to be taken on a Baker County roadway (Cedar Street) and will need to be adopted into the County's TSP. An AMP is identified for near- and long-term timeframes. The overall AMP is illustrated in Figures 5 and 6.



0 1,000 Feet

Exit 302 Access Management Plan
Baker City, Oregon

Figure
5

H:\projfile\17921 - I-84 North Baker IAMP\gis\Fig5_302_AccessManagement.mxd - nfoster - 9:16 AM 4/11/2016

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl
Data Source: ESRI

0 1,000 Feet

Exit 306 Access Management Plan
Baker City, Oregon

Figure
6

H:\projfile\17921 - I-84 North Baker IAMP\gis\Fig6_306_AccessManagement.mxd - nfoster - 9:17 AM 4/11/2016

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl
Data Sources: ESRI, Oregon Spatial Data Library

GENERAL ACCESS MANAGEMENT IMPLEMENTATION

Under ODOT's current access management policy, OAR 734-051-4020 stipulates that the desired distance between an interchange ramp terminal and the first full approach (public or private) on the crossroad should be a minimum of 1,320 feet (¼-mile). The first right-in/right-out access for a rural interchange should also be a minimum of 1,320 feet from the ramp terminal. It is anticipated that the Exit 302 interchange will become an urban interchange within the study horizon, in which case the standard for right-in/right-out access spacing would be 990 feet downstream from the ramp terminal and 1,320 feet upstream from the ramp terminal.

Currently, there are three public accesses and one private access located within ¼-mile of the Exit 302 interchange, as is documented in Figure 5.

There are no public or private accesses that are within ¼-mile of the Exit 306 ramps.

EXIT 302 ACCESS MANAGEMENT PLAN

The Exit 302 AMP is divided into two timeframes: near-term and long-term. The near-term plan is to not allow new access to OR 86 or Cedar Street within ¼-mile of the interchange ramp terminals. Long-term, the Airport Road access will be modified as described above in either project C1 or C2. Private accesses will be consolidated and modified as properties redevelop and the capital projects associated with this IAMP are constructed in order to move in the direction of ODOT's access management standards.

Exit 306 Access Management Plan

As Figure 6 shows, there are no accesses located within ¼-mile of the Exit 306 interchange. Therefore, the Exit 306 IMSA access management plan does not contain any recommended actions for existing accesses. If new accesses are proposed along US 30 in the vicinity of the Exit 306 interchange and cannot be located outside the ¼-mile spacing standard, they should be located as far from the interchange as practically possible

DEVIATIONS TO THE DIVISION 51 ACCESS MANAGEMENT STANDARDS

It may not be possible for certain accesses to meet ODOT's access spacing standards due to property boundary constraints. Therefore, the above AMPs are written with the objective of moving as close as possible to the standards.

Section 3
Implementation Plan

IMPLEMENTATION PLAN

This section describes the IAMP implementation strategy, which includes an Interchange Function and Policy Definition and Management Area for each of the two interchanges. The Implementation Plan also includes adoption and monitoring procedures that will ensure transportation improvements are constructed and funded as development occurs and that the improvement plan is updated as needed over time.

To ensure that the IAMP remains dynamic and responsive to changes to the adopted land use and transportation plans, the following actions at the State and local level are recommended:

- Amend the City of Baker City and Baker County transportation system plans (TSPs), which are the transportation elements of the respective comprehensive plans, to include the recommendations of the IAMP;
- Amend the Oregon Highway Plan (OHP);
- Codify and map an IAMP Management Area that defines the area wherein regulations and requirements associated with protecting the interchange apply (see Figures 1 and 2);
- Coordinate planning activities pursuant to the Transportation Planning Rule (OAR 660-012);
- Review the IAMP and mobility standards for the interchange prior to adopting local plan amendments.

Plan Elements

In addition to adoption of the IAMP, implementation of this IAMP requires adoption of an "Interchange Function and Policy Definition" and IAMP Management Area.

INTERCHANGE FUNCTION AND POLICY DEFINITION

The City of Baker City and Baker County should adopt a clear definition of the function of the Exit 302 and 306 interchanges into their respective comprehensive plans and TSPs as a policy to provide direction for management of the interchange area and achieve the objectives and goals of this IAMP. This will help to ensure consistency between future policy decisions with the interchange's intended function.

The following function and policy definition was developed for the Exit 302 Interchange:

> *"The primary function of the I-84 Exit 302 interchange is to provide truck and vehicular access to northern Baker City and OR 86, including the industrial lands along Best Frontage Road and at the*

Baker City Airport. A secondary function is to provide an alternative access to central Baker City, US 30, the Oregon Trail Interpretive Center, and the Hells Canyon Scenic Byway."

The following function and policy definition was developed for the Exit 306 Interchange:

"The primary function of Exit 306 is to provide access to downtown and southern Baker City, particularly for individuals coming from the east. A secondary function is to provide access to various regional visitor attractions, such as Phillips Reservoir and the historic mining town of Sumpter."

INTERCHANGE AREA MANAGEMENT PLAN (IAMP) MANAGEMENT AREA

Baker County and the City of Baker City both have land-use regulatory authority for lands within the two IMSAs. To ensure the continued operation and safety integrity of the interchange, both the City of Baker City and Baker County should adopt and map an IAMP Management Area for each interchange based on their respective IMSAs. Future development and land use actions within the IAMP Management Area will be monitored to ensure that volume-to-capacity ratios do not exceed the adopted Oregon Highway Plan mobility standards at the ramp terminals. This can be accomplished through Development Review guidelines included within the proposed amendments to the City and County's land use and development ordinances as described in the following sections.

Adoption Elements

Implementation of I-84 Exits 302 and 306 IAMP will occur at several levels of government. Consistent with OAR 734-051, the City of Baker City and Baker County will identify legislative amendments to adopted transportation system plans and comprehensive plans to incorporate elements of the I-84 Exits 302 and 306 IAMP. In addition, new land use ordinances or amendments to existing ordinances or resolutions will be required to ensure that the access management, land use management, and coordination elements of the IAMP are achieved. This adoption process will include Planning Commission/City Council hearings at the City level and Planning Commission/Board of County Commissioners hearings at the County level.

Following successful adoption at the City and County levels, the I-84 Exits 302 and 306 IAMP will be presented to the Oregon Transportation Commission (OTC) for its review and adoption. This should occur prior to transportation improvements as described in this IAMP being constructed.

To implement the I-84 Exits 302 and 306 IAMP, the following actions shall occur:

BAKER CITY:

- Will amend its Transportation System Plan to incorporate the I-84 Exits 302 and 306 interchange function and policy definition and recommended transportation improvements. The IAMP shall serve as the long range comprehensive management plan for providing the transportation facilities that are specifically addressed in this plan, as well as the Access Management Plan and the planned local street network for the area.

- Will amend the Comprehensive Plan Map and Zoning Map to include Interchange Management Areas to identify where compliance with the I-84 Exits 302 and 306 IAMP will be a condition of future development approval.
- Will amend the Development Code to require that development and redevelopment proposals within the Interchange Management Areas show consistency with the IAMP and to allow the City to require improvements as a condition of approval. Amendments will ensure that proposals for new development within the IMSAs will be reviewed to determine if a need for different interchange improvement phases is triggered. Adoption of an Interchange Overlay Zone is recommended for this purpose.
- Work with ODOT to identify and pursue funding for all I-84 Exits 302 and 306 interchange projects identified in this IAMP within the City's UGB.

BAKER COUNTY:

- Will amend its Transportation System Plan to incorporate the I-84 Exits 302 and 306 interchange function and policy definition and recommended transportation improvements. The IAMP shall serve as the long range comprehensive management plan for providing the transportation facilities that are specifically addressed in this plan, as well as the Access Management Plan and the planned local street network for the area.
- Will amend the Comprehensive Plan Map and Zoning Map to include Interchange Management Areas to identify where compliance with the I-84 Exits 302 and 306 IAMP will be a condition of future development approval.
- Will amend the Zoning Ordinance to require that development and redevelopment proposals within the Interchange Management Areas show consistency with the IAMP and to allow the County to require improvements as a condition of approval. Amendments will ensure that proposals for new development within the IMSAs will be reviewed to determine if a need for different interchange improvement phases is triggered. Adoption of an Interchange Overlay Zone is recommended for this purpose.
- Work with ODOT to identify and pursue funding for all I-84 Exits 302 and 306 interchange projects identified in this IAMP outside City's UGB.

ODOT:

- The IAMP shall be adopted by the Oregon Transportation Commission as part of the Oregon Highway Plan.

Monitoring Elements

The purpose of the IAMP is to ensure that capacity at the interchange is preserved for its intended function. While a long-range plan, the IAMP needs to remain dynamic and responsive to development and changes to the adopted land use and transportation plans and may need to be periodically reviewed and updated. To accomplish this goal, a monitoring program is included that identifies triggers

for reviewing the IAMP and assessing how development approval within the IAMP Management Area will be reviewed and coordinated.

IAMP REVIEW TRIGGERS

Periodically, the implementation program shall be evaluated by the City, County, and ODOT, to ensure it is accomplishing the goals and objectives of the IAMP. Events that may trigger an IAMP review include:

- Plan map and zone changes that have a "significant affect" pursuant to the Transportation Planning Rule, Section -0060 and impact either the Exit 302 or Exit 306 interchanges, or that are located within one of the IAMP Management Areas.
- Proposed development that generates expected traffic volume at the Exit 302 or Exit 306 terminals that exceed the adopted mobility targets.

In addition to the established triggers for IAMP review, the agencies may request a review of the IAMP at any time if, in their determination, specific land use or transportation changes warrant a review of the underlying assumptions and/or recommendations within the IAMP. If the participants in the IAMP review meeting agree that, once the impacts of the "trigger" that necessitated the review are examined, an IAMP amendment is not warranted, a recommendation of "no action" may be documented and submitted in the form of a letter to the City of Baker City Council, Baker County Board of Commissioners, and the Oregon Transportation Commission.

If the findings and conclusions from the IAMP review meeting demonstrate the need for an update to the plan, review participants will initiate an IAMP update process. Initial steps in updating the IAMP will include scoping the planning process, identifying funding, and outlining a schedule for plan completion. Once completed, IAMP updates will be required to be legislatively adopted, requiring a City Council public hearing, as an amendment to the City of Baker City Transportation System Plan and will be adopted by Baker County Board of Commissioners (if affected) and the Oregon Transportation Commission as an update to the Oregon Highway Plan.

DEVELOPMENT REVIEW

The following outlines the transportation requirements for development and zone change applications within the I-84 Exits 302 and 306 Interchange Management Areas and describes how the City of Baker City and Baker County will coordinate with ODOT.

Traffic Impact Analysis

Development applications located within either the Exit 302 or Exit 306 Interchange Management Areas that meet the criteria of Baker City Development Code 4.1.900 (for development inside the UGB) or Baker County Zoning Ordinance 340.07 (for development outside the UGB) shall be accompanied by a Transportation Impact Study that demonstrates the level of impact of the proposed development on the interchange and surrounding street system, and how the impact will be mitigated pursuant to ODOT and City or County standards.

Notwithstanding Baker City or Baker County criteria, a Transportation Impact Study/Analysis shall be required where a proposed change relying on a private connection to a state highway meets the ODOT requirements for a traffic impact study contained in OAR 734-051-3030(4) *When a Traffic Impact Analysis is Required*.

The determination of impact or effect, and the scope of the TIA, shall be coordinated with the City of Baker City, Baker County, and ODOT. The developer shall be required to mitigate impacts attributable to the project.

ODOT Coordination

- The City and County shall consult the Oregon Department of Transportation (ODOT) on TIA requirements when the site of the proposal is adjacent to or otherwise affects a State roadway.
- The City shall provide written notification to ODOT once a land use application within the IAMP Management Area is deemed complete.
- ODOT shall have at least 20 days, measured from the date notice to agencies was mailed, to provide written comments to the City. If ODOT does not provide written comments during this 20-day period, the City staff report will be issued without consideration of ODOT comments.
- The County shall invite ODOT to participate in a pre-application review for applications within an Interchange Management Area Plan (IAMP) Management Area or within a ¼-mile of any ODOT roadway. Notice of actions requiring a public hearing shall be provided to ODOT at least twenty days prior to the date of the hearing.

Section 4
OAR and OHP Compliance

OAR AND OHP COMPLIANCE

The following section discusses the Oregon Administrative Rule (OAR) and Oregon Highway Plan (OHP) policy based compliance issues that pertain to the development of the I-84 Exits 302 and 306 IAMP.

OAR Compliance

The I-84 Exits 302 and 306 IAMP was developed in collaboration with the City of Baker City, Baker County, and ODOT and was developed in accordance with the guidelines set forth in the State of Oregon's Oregon Administrative Rules for Interchange Access Management Planning and Interchange Area Management Planning. Table 2 identifies the required planning elements from OAR 734-051 and documents how this IAMP satisfies the requirements.

Table 2 I-84 Exits 302 and 306 IAMP OAR Compliance

OAR 734-051-7010 Requirement	How Addressed	Report Reference
Should be developed no later than the time the interchange is being developed or redeveloped -7010(7)(a)	This plan was developed to effectively plan for future development and traffic growth that could occur within the interchange area. Future improvements will be needed to safely accommodate forecast increases in vehicular and truck demand.	Technical Appendix
Should identify opportunities to improve operations and safety in conjunction with roadway projects and property development or redevelopment and adopt strategies and development standards to capture those opportunities -7010(7)(b)	The access management, transportation improvement plan, and Interchange Management Area elements identified in this plan will result in operational, safety, and capacity improvements.	Section 2
Should include short, medium, and long-term actions to improve operations and safety in the interchange area -7010(7)(c)	The IAMP includes a phasing plan for the transportation system improvements and access management elements that cover the short and long-term time timeframes.	Section 2
Should consider current and future traffic volumes and flows, roadway geometry, traffic control devices, current and planned land uses and zoning, and the location of all current and planned approaches -7010(7)(d)	A full analysis of existing and forecast (2035) operational and geometric conditions was conducted for this planning effort. The future volumes were developed based on current zoning and comprehensive plan designations. All approaches, existing and planned, were examined.	Technical Appendix
Should provide adequate assurance of the safe operation of the facility through the design traffic forecast period, typically 20 years -7010(7)(e)	Specific improvements are included in the plan to address safety concerns through improved geometric alignment and access spacing.	Section 2
Should consider existing and proposed uses of all property in the interchange area consistent with its comprehensive plan	A thorough analysis of surrounding land uses and land use potential was performed based on the current comprehensive plan designations and zoning.	Technical Appendix

OAR 734-051-7010 Requirement	How Addressed	Report Reference
designations and zoning -7010(7)(f)		
Is consistent with any applicable Access Management Plan, corridor plan or other facility plan adopted by the Oregon Transportation Commission -7010(7)(g)	The access management plan included in the IAMP is consistent with the OHP.	Section 2
Includes polices, provisions and standards from local comprehensive plans, transportation system plans, and land use and subdivision codes that are relied upon for consistency and that are relied upon to implement the Interchange Area Management Plan. -7010(7)(h)	The implementation plan included in this IAMP documents the required amendments to local plans needed to adopt the IAMP. In addition, the implementation section outlines monitoring elements for the purpose of directing future land use action within the IAMP study area. Amendments will ensure that future development and land use actions within the interchange management area do not degrade the interchange terminal volume to capacity ratios below the adopted OHP mobility standards. These amendments include coordination between agencies, traffic impact analysis requirements, monitoring of traffic operations, and access management requirements.	Section 3

Oregon Highway Plan Compliance

The I-84 Exits 302 and 306 IAMP was developed in accordance with the policies set forth in the Oregon Highway Plan (OHP). The following identifies the OHP policies that pertain to the I-84 Exits 302 and 306 IAMP and how the IAMP satisfies the requirements.

Policy 1A: State Highway Classification System. The state highway classification system includes five classifications: Interstate, Statewide, Regional, District, and Local Interest Roads. In addition, there are four special purpose categories that overlay the basic classifications: special land use areas, statewide freight route, scenic byways, and lifeline routes.

Within the two IMSAs, there are three ODOT highways. Interstate-84 is an Interstate Highway and is part of the National Highway System (NHS). OR 86 and US 30 are both District Highways in the vicinity of I-84.

> *How Addressed:* The I-84 Exits 302 and 306 IAMP recognized the respective functions of each highway. Access standards, traffic control, and geometric considerations were informed by the applicable highway designation.

Policy 1B: Land Use and Transportation. This policy recognizes the role of both the State and local governments related to the state highway system and calls for a coordinated approach to land use and transportation planning.

> *How Addressed:* The IAMP was developed through a cooperative planning effort between the City of Baker City, Baker County, and ODOT. The IAMP will be implemented by the City of Baker

City and Baker County through IAMP Management Areas that will require coordinated agency review on all future development or land use actions within the Area.

Policy 1C: State Highway Freight System. This policy recognizes the need for the efficient movement of freight through the state. Interstate-84 is a designated freight route.

How Addressed: The transportation improvement plan plans for increasing volumes on the I-84 ramp terminals.

Policy 1F: Highway Mobility Standards Access Management Policy. This policy addresses state highway performance expectations, providing guidance for managing access and traffic control systems related to interchanges.

How Addressed: The I-84 Exits 302 and 306 IAMP demonstrates that the interchange will be able to meet ODOT mobility standards through the 20-year horizon. It also provides an access management element that improves access management near the interchanges.

Policy 1G: Major Improvements. This policy requires maintaining performance and improving safety by improving efficiency and management before adding capacity.

How Addressed: The I-84 Exits 302 and 306 IAMP provides measures to increase efficiency through access management and provides improvements to the local street system.

Policy 2B: Off-System Improvements. This policy recognizes that the state may provide financial assistance to local jurisdictions to make improvements to local transportation systems if the improvements would provide a cost-effective means of improving the operations of the state highway system.

How Addressed: The transportation system was considered as a whole with improvements to the state and local system equally considered.

Policy 2F: Traffic Safety. This policy emphasizes the state's efforts to improve safety of all uses of the highway system. Action 2F.4 addresses the development and implementation of the Safety Management System to target resources to sites with the most significant safety issues.

How Addressed: Safety is a key component of the concept improvements, including improving sight distance on the Exit 302 ramp terminals and the Exit 302 AMP.

Policy 3A: Classification and Spacing Standards. This policy addresses the location, spacing and type of road and street intersections and approach roads on state highways. The adopted standards can be found in Appendix C of the Oregon Highway Plan.

How Addressed: See Policy 3C below.

Policy 3C: Interchange Access Management Areas. This policy addresses management of grade-separated interchange areas to ensure safe and efficient operation between connecting roadways. Action items include developing interchange area management plans to protect the function of the interchange to provide safe and efficient operations between connecting roadways and to minimize the need for major improvements of existing interchanges. The local jurisdiction's role in access management is stated in Policy 3C as follows: "necessary supporting improvements, such as road networks, channelization, medians and access control in the interchange management area must be identified in the local comprehensive plan and committed with an identified funding source, or must be in place (Action 3C.2)."

Access management standards are detailed in Policy 3C and include the distance required between an interchange and approaches and intersections. The most stringent standards apply in interchange areas.

> *How Addressed:* The I-84 Exits 302 and 306 IAMP includes an access management element that consolidates access points and improves access spacing over the existing conditions.

Policy 3D: Deviations. This policy establishes general policies and procedures for deviations from adopted access management standards and policies.

> *How Addressed:* Deviations to the OHP access spacing standards are required, as described in Section 2 of the I-84 Exits 302 and 306 IAMP. The access management element describes the need for future deviations at the time of construction.

Policy 4A: Efficiency of Freight Movement. This policy emphasizes the need to maintain and improve the efficiency of freight movement on the state highway system. Interstate-84 is a designated freight route.

> *How Addressed:* The transportation improvements included in the IAMP plan improves traffic operations and safety for all vehicles, including freight vehicles.

Policy 5B: Scenic Resources. This policy applies to all state highways and commits the State to using best management practices to protect and enhance scenic resources in all phases of highway project planning, development, construction, and maintenance.

> *How Addressed:* This policy was considered as part of the plan development.