

Interchange Area Management Plan

I-84/ARMY DEPOT ACCESS ROAD

Umatilla County, Oregon

August 2014



Prepared for:



Prepared by:



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I-84/Army Depot Access Road Interchange Area Management Plan

Umatilla County, Oregon

Final

August 2014

This study was prepared under contract with the Port of Morrow, Oregon, with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of the Port of Morrow and does not necessarily reflect the views of the Office of Economic Adjustment.

I-84/Army Depot Access Road Interchange Area Management Plan

Umatilla County, Oregon

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August 2014



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PREFACE

The development of this plan was guided by the Steering Committee and Technical / Public Advisory Committee (TPAC). The members of these groups are identified below, along with members of the consultant team. The Steering Committee members were also members of the TPAC, who collectively were responsible for reviewing all work products and guiding the planning work. They devoted a substantial amount of time and effort to the development of the I-84/Army Depot Access Road IAMP and their participation was instrumental in the final recommendations that are presented herein.

Steering Committee

Dr. Donald Chance <i>UMADRA</i>	Tamra Mabbott <i>Umatilla County</i>	Carla McLane <i>Morrow County</i>	Teresa Penninger <i>ODOT</i>
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Debbie Pedro <i>Hermiston Chamber</i>	Todd Longgood <i>Hale Farms/Riverpoint Farms</i>	Stan Hutchison <i>Oregon National Guard</i>
Herb Stahl <i>Stanfield HB Farm</i>	Lisa Mittelsdorf <i>Port of Morrow</i>	Kim Puzey <i>Port of Umatilla</i>
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Section 1
Executive Summary

EXECUTIVE SUMMARY

The I-84/Army Depot Access Road Interchange Area Management Plan (IAMP) was prepared to identify and address infrastructure, access, and land use regulations associated with the transition of the Umatilla Army Chemical Depot (UMCD) from a facility that has historically stored/shipped military supplies and disposed of chemical weapons to a facility that will accommodate Oregon National Guard operations, environmental preservation, and new economic development.

The executive summary provides an overview of the project elements that were developed through a collaborative effort of the Project Team, Umatilla Army Depot Reuse Authority, Technical/Public Advisory Committee, Umatilla County, Morrow County, Oregon Department of Transportation (ODOT), and local stakeholders. The following table and figures summarize the identified improvement projects. 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 Umatilla and Morrow County 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.

I-84/Army Depot Access Interchange (Exit 177)



Executive Summary - I-84/Army Depot Access Road Interchange Area Improvement Summary

Fig 1. Project Label	Near-Term Improvement Description	Implementation Need/Trigger for Improvement	Estimated Planning-Level Cost ¹	Potential Funding Sources
A	Construct a more formal Gun Club Lane and farm access intersection with the Army Depot Access Road	<ul style="list-style-type: none"> Safety: Create a more fully defined intersection that is squared up to the Army Depot Access Road Operations: Improve local roadway access efficiency. Trigger: When determined by future traffic studies that the existing Gun Club lane intersection can no longer safely support existing and future development-driven traffic volumes. 	\$42K	PDF
Fig. 1 Project Label	Long-Term/Vision Project Description	Implementation Need/Trigger for Improvement	Estimated Planning-Level Cost	Potential Funding Sources
B	Lengthen and realign the I-84 westbound off-ramp.	<ul style="list-style-type: none"> Safety: Increase vehicle/truck queuing, upgrade ramp to current design standard. Operations: Eliminate ramp skew angle. Trigger: When determined by future traffic studies or as part of future capital improvements. 	\$0.54M	STIP, PDF, GF
C	Lengthen and realign the I-84 eastbound off-ramp and reconstruct Frontage/Ordinance Road.	<ul style="list-style-type: none"> Safety: Increase vehicle/truck queuing, upgrade ramp to current design standard. Operations: Eliminate ramp skew angle. Trigger: When determined by future traffic studies or as part of future capital improvements. 	\$1.06M	STIP, PDF, GF
D	Lengthen and realign the I-84 westbound on-ramp.	<ul style="list-style-type: none"> Safety: Increase vehicle/truck queuing, upgrade ramp to current design standard. Operations: Eliminate ramp skew angle. Trigger: When determined by future traffic studies or as part of future capital improvements. 	\$0.79M	STIP, PDF, GF
E	Lengthen and realign the I-84 eastbound on-ramp.	<ul style="list-style-type: none"> Safety: Increase vehicle/truck queuing, upgrade ramp to current design standard. Operations: Eliminate ramp skew angle. Trigger: When determined by future traffic studies or as part of future capital improvements. 	\$0.53M	STIP, PDF, GF

STIP – State Transportation Improvement Project

PDF – Private Development Funds

GF – Other Grant Funds

¹ – Planning level costs are in 2014 dollars. Construction costs only, does not include right-of-way costs.



NOTE: LINEWORK PROVIDED BY ANDERSON PERRY AND ASSOCIATES 7/2014

ALL LINE WORK IS PRELIMINARY AND FOR PLANNING USE ONLY

- PRELIMINARY ALIGNMENT
- X X X REMOVE STRUCTURE / ROADWAY
- X IMPROVEMENT (SEE TABLE 1 FOR DESCRIPTION & COST ESTIMATE)

I-84/ARMY DEPOT ACCESS ROAD IAMP IMPROVEMENT PLAN
UMATILLA COUNTY, OREGON

Figure E1

Section 2 Interchange Improvement and Access Management Plan

INTERCHANGE IMPROVEMENT AND ACCESS MANAGEMENT PLAN

INTRODUCTION / BACKGROUND

The Umatilla Army Chemical Depot (UMCD) is formally being decommissioned and prepared for reuse/redevelopment. The Umatilla Chemical Depot Reuse Authority (UMADRA - sometimes referred to as the “LRA” and currently undergoing a name change to the “Columbia Development Authority”) is chartered with administering the transition of the UMCD and is leading the planning process. Following the completion of a Redevelopment Plan in 2010, reuse/redevelopment of the UMCD has been targeted to accommodate a new 7,500 acre Oregon National Guard training base, a 5,678 acre habitat refuge, and approximately 3,000 acres of industrial/warehouse development.

With the transition and reconfiguration of land uses on the UMCD site, it is recognized that transportation patterns and traffic demands will change. Some of these changes will impact the existing I-84/Army Depot Access Road interchange. In accordance with Oregon Administrative Rule 734-051, an Interchange Area Management Plan (IAMP) has been prepared to identify and address future transportation infrastructure needs, access, and land use regulations at this interchange. The remainder of this section contains the planning context, specific interchange infrastructure projects, and access management plan for the IAMP.

Conditions Statement

Exhibit 1 - I-84/Army Depot Access Road Interchange



The I-84/Army Depot Access Road interchange is located at Exit 177 in Umatilla County. The interchange is a traditional diamond-style interchange. The eastbound ramp terminal intersects Frontage Road/Ordnance Road while the westbound ramp terminal intersects the Umatilla Army Depot Access Road.

The interchange has served two primary purposes since its construction in 1967. From a regional perspective, the interchange provides access between I-84 and the expansive rural farming/agricultural uses that exist along the south side of I-84. From a local perspective, the interchange has served as the main access to the UMCD site which exists north of I-84 and the adjacent UP Mainline railroad tracks. When originally built, the I-84/Army Depot Access Road

interchange was constructed at a time in which the primary use of the UMCD was to store and ship military supplies. With these UMCD uses no longer in operation and a future vision that includes a change in military uses (Oregon National Guard), environmental preservation, and economic development, the I-84/Army Depot Access Road interchange infrastructure will be utilized over time in a manner that is different from historical patterns.

Purpose and Intent Statement

The purpose of the I-84/Army Depot Access Road IAMP is to develop a plan that focuses on the interchange and existing Army Depot Access Road that serves the UMCD site. The intent of the plan is to develop land use management strategies for the reuse/redevelopment of the UMCD, create an access management plan for the Army Depot Access Road and Frontage Road, and develop funding mechanisms to construct the necessary infrastructure improvements.

Goals and Objectives

The IAMP is intended to protect the function of the I-84/Army Depot Access Road interchange for the next 20 years while accounting for changes in land use and traffic patterns brought about by reuse/redevelopment of the UMCD and continued growth in the regional study area. As stated in Policy 3C of the *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, working collaboratively with the Technical/Public Advisory Committee (TPAC) and public, the Goals/Objectives of the IAMP are to:

1. Protect the long-term function, operation, and safety of the I-84/Army Depot Access Road interchange.
2. Identify opportunities for enhanced roadway connectivity within the UMCD site that would provide public roadway connections between the I-84/Army Depot Access Road and I-82/Lamb Road interchanges.
3. Manage the allowed land uses within the vicinity of the interchanges to provide for future economic growth over the next 20 years.
4. 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 Umatilla County 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 County TSPs and land use plans; and
 - b. Local economic development objectives for properties that require access to the state highway.
5. Identify opportunities for freight-based multi-modal accessibility to/from future redevelopment of the UMCD site.

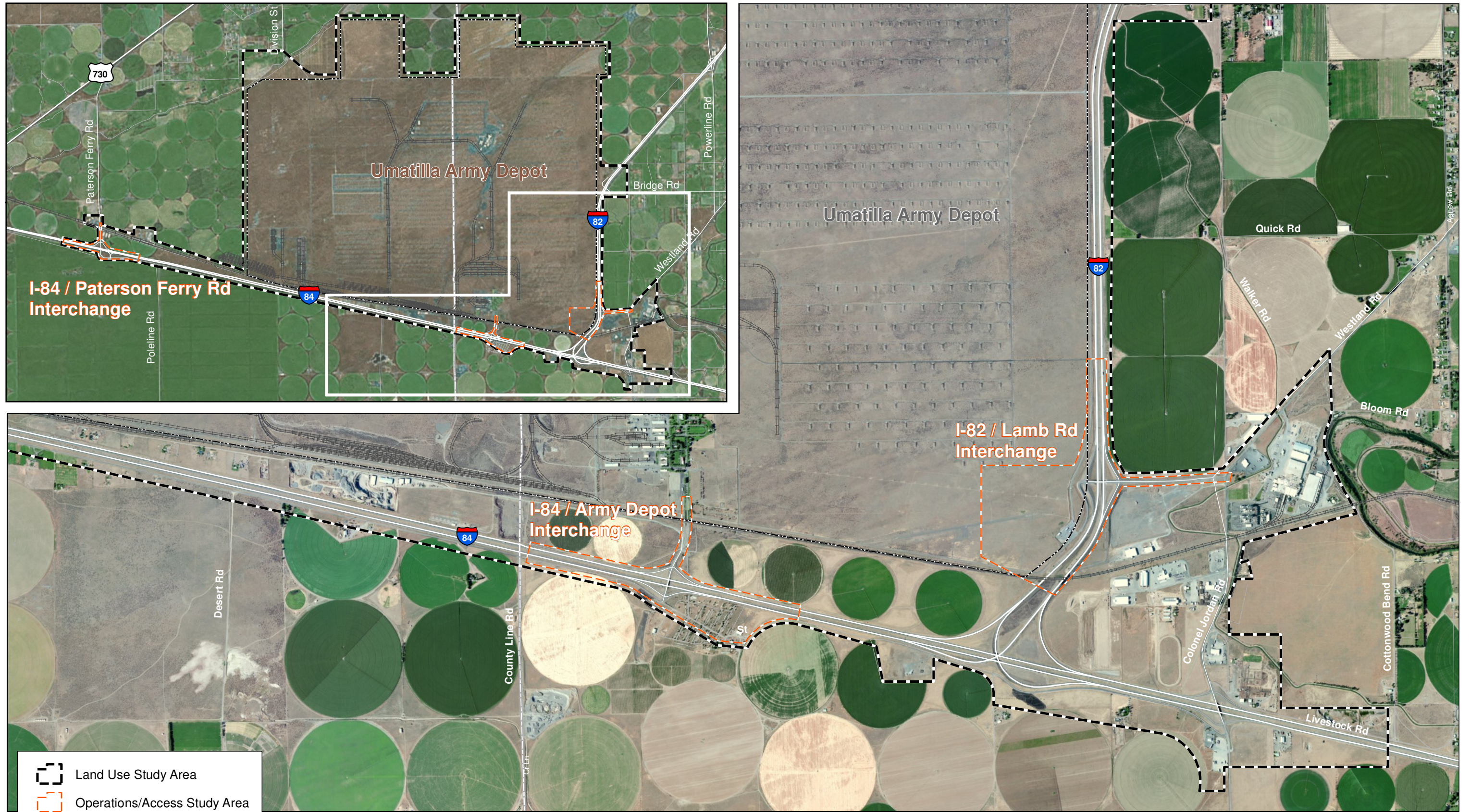
6. Collaborate throughout the planning process with design professionals, jurisdictional representatives, developers, local property owners, and the general public, including protected populations as established by federal and state regulations and policies.
7. Comply with the intent of Statewide Planning 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 interchange infrastructure and interchange crossroad improvements.
9. Identify interchange infrastructure funding mechanisms that could be applied to future reuse/redevelopment of the UMCD and other land uses within the Interchange Management Study Area.
10. Develop implementation policies and regulations to be adopted into the Umatilla County Comprehensive Plan, Transportation System Plan, and zoning ordinances, as appropriate.

Interchange Management Study Area (IMSA)

The I-84/Army Depot Access Road IAMP was prepared in conjunction with IAMPs for two other interchanges: I-82/Lamb Road and I-84/Paterson Ferry Road. All three interchanges will be affected to some degree by future reuse of the UMCD site. Within the context of the IAMP planning process, the Interchange Management Study Area (IMSA) defines the extent of the detailed land use and infrastructure study area. The IAMPs will focus specifically on the freeway interchanges that serve the UMCD and surrounding land uses. At a minimum, the IMSA includes properties, as well as all access points located within ½ mile from the freeway interchange as defined by the State of Oregon's IAMP Guidelines. In order to capture the overarching land use related impacts of the reuse/redevelopment of the UMCD as well as growth potential of immediately surrounding uses, the IMSA includes the following areas:

- The entire UMCD site
- Westland Road Exception Area – area east of I-82 and north of I-84
- Industrial zoned land located north of the Paterson Ferry Road interchange

The Interchange Management Study Area (IMSA) map is shown in Figure 1.



**Interchange Management Study Area
Morrow / Umatilla Counties**

**Figure
1**

H:\profile\13848 - Umatilla Subarea Plan and Combined IAMP\figs\13848_Fig01.mxd - pmarnell - 10:51 AM 7/14/2014

I-84/ARMY DEPOT ACCESS ROAD INTERCHANGE IMPROVEMENT PLANS

A comprehensive transportation improvement plan for the I-84/Army Depot Access Road interchange was developed based on concept screening and evaluations outlined in the Technical Appendix to the IAMP. Depending upon future development and internal UMCD access scenarios, this plan identifies two sets of improvement scenarios that range from minor access management/local roadway enhancements to a more significant reconstruction of the interchange on- and off ramps. Each transportation improvement project is described in detail below, illustrated in Figure 2, and summarized in Table 1.

Near/Long- Term Improvements

The I-84/Army Depot Access Road interchange has historically been, and likely will continue to be a low-volume interchange. The rural farming/agricultural land uses that it supports on the south side of I-84 are relatively minor in intensity and are forecast to continue to generate relatively low volumes of traffic through this interchange over the next 20 years. Likewise, future reuse of the UMCD site is also not anticipated to generate a significant amount of daily traffic volumes through this interchange when considering the following conditions and likely future development scenarios:

- Per their current plans, the Oregon National Guard (ORNG) is proposing to house their Regional Training Institute, a readiness center, and an assortment of training facilities on their portion of the UMCD site. Typical daily use and staffing of these facilities are not anticipated to generate a significant amount of trips as outlined in the Technical Appendix to this IAMP.
- The majority of future development associated with the Depot Industrial zone in the eastern portion of the UMCD site is anticipated to be oriented to the closer and more conveniently located I-82/Lamb Road interchange. As such, a minimal amount of associated vehicle and truck traffic is anticipated to use the I-84/Army Depot Access Road interchange.
- Future development of the Morrow County Port Industrial zone in the southwest quadrant of the UMCD site could potentially take access to the I-84 corridor via a new roadway connection to Patterson Ferry Road (see I-84/Paterson Ferry Road IAMP). As such, a minimal amount of associated vehicle and truck traffic is anticipated to use the I-84/Army Depot Access Road interchange.
- The existing Army Depot Access Road underpass at the adjacent UP Mainline has existing vertical and horizontal clearance limitations that would prevent some large trucks and oversized vehicles from accessing the ORNG, and potential future development associated with the Morrow County Port Industrial and Umatilla County Depot Industrial zones.

Based on the above noted conditions and assumed future development scenarios, the existing I-84/Army Depot Access Road interchange can continue to function as a low-volume rural interchange with only a few relatively minor access and safety improvements as noted below.

Project A. Realignment of Gun Club Lane Access (Near-Term)

The existing Gun Club Lane access off of the Army Depot Access Road has a large and expansive point of access. This connection is not well defined and intersects the Army Depot Access Road at a severe skew angle. Project A would include the construction of a more formal intersection that squares up the access to the Army Depot Access Road and realigns it opposite of the existing farm access on the east side of Army Depot Access Road. *This improvement would need to be constructed as part of future capital improvement project or when it is determined (through the Umatilla County and/or Morrow County development review process) that the current configuration cannot safely support future development-driven traffic volumes on Gun Club Lane.*

Table 1 - I-84/Army Depot Access Road Interchange Transportation Improvement Plan

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Fig. 1 Project Label	Long-Term/Vision Project Description	Implementation Need/Trigger for Improvement	Estimated Planning-Level Cost	Potential Funding Sources
B	Lengthen and realign the I-84 westbound off-ramp.	<ul style="list-style-type: none"> Safety: Increase vehicle/truck queuing, upgrade ramp to current design standard. Operations: Eliminate ramp skew angle. Trigger: When determined by future traffic studies or as part of future capital improvements. 	\$0.54M	STIP, PDF, GF
C	Lengthen and realign the I-84 eastbound off-ramp and reconstruct Frontage/Ordinance Road.	<ul style="list-style-type: none"> Safety: Increase vehicle/truck queuing, upgrade ramp to current design standard. Operations: Eliminate ramp skew angle. Trigger: When determined by future traffic studies or as part of future capital improvements. 	\$1.06M	STIP, PDF, GF
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I-84/ARMY DEPOT ACCESS ROAD IAMP IMPROVEMENT PLAN
UMATILLA COUNTY, OREGON

Figure
2

Long-Term/Vision Project Improvements

Anticipated future reuse of the UMCD site is not likely to generate a significant amount of traffic through the I-84/Army Depot Access Road interchange, and therefore no major infrastructure improvements would be needed at the interchange. However, the IAMP recognizes that the potential exists for intensified levels of traffic growth through the I-84/Army Depot Access Road as it relates to future reuse of the UMCD site. Specifically, future development associated with the Morrow County Port Industrial zone in the southwest quadrant of the UMCD site may need near- or long-term regional access to the I-84/Army Depot Access Road interchange until a primary access connection can be established via Paterson Ferry Road. It is also possible, but unlikely, that the ORNG could expand their operations beyond current plans. If either were the case, it can be expected that the I-84/Army Depot Access Road interchange will experience a significant increase in vehicular and truck traffic. As such, the following Long-Term/Vision Projects have been identified so that their potential need can be monitored and planned for over the 20-year life of the IAMP.

Project B. Improve I-84 Westbound Off-Ramp (Vision Project)

The existing I-84 westbound off-ramp is substandard in its length to safely and efficiently accommodate intensification in vehicle and truck traffic that could be generated by future development of the Port Industrial zone in the southwest quadrant of the UMCD site or expanded ORNG operations. Project B would lengthen and realign the off-ramp to better accommodate potential long-term vehicle and truck demand. *These improvements would be constructed when future development-driven traffic studies determine that they are needed for safety and/or operations reasons.*

Project C. Improve I-84 Eastbound Off-Ramp/Realign Frontage/Ordnance Road (Vision Project)

The existing I-84 eastbound off-ramp is substandard in its length to safety and efficient accommodate intensification in vehicle and truck traffic that could be generated by future development of the Port Industrial zone in the southwest quadrant of the UMCD site or expanded ORNG operations. Project B would lengthen and realign the off-ramp to better accommodate potential long-term vehicle and truck demand and eliminate the existing skew angle at Army Depot Access Road. In addition, this project would reconstruct a portion of the Frontage Road that would be impacted by the realigned off-ramp. *These improvements would be constructed when future development-driven traffic studies determine that they are needed for safety and/or operations reasons.*

Project D. Improve/Realign the I-84 Westbound On-Ramp (Longer-Term)

The existing I-84 westbound on-ramp is deficient in its length and cannot safely and efficiently accommodate the intensified vehicular/truck volumes that could be generated by future development of the Port Industrial zone in the southwest quadrant of the UMCD site or expanded ORNG operations. *This improvement would be constructed in conjunction with Project B or when determined to be needed for safety or operations reasons.*

Project E. Improve/Realign the I-84 Eastbound On-Ramp (Longer-Term)

The existing I-84 eastbound on-ramp is deficient in its length and has a large skew angle that cannot efficiently accommodate the intensified vehicular/truck volumes that could be generated by future development of the Port Industrial zone in the southwest quadrant of the UMCD site or expanded ORNG operations. *This improvement would be constructed in conjunction with Project C or when determined to be needed for safety or operations reasons.*

INTERCHANGE ACCESS MANAGEMENT PLAN

Access locations within the I-84/Army Depot Access Road interchange area 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 interchange and primary roadways serving it, while maintaining viable access to all parcels in the IMSA.

Access Management

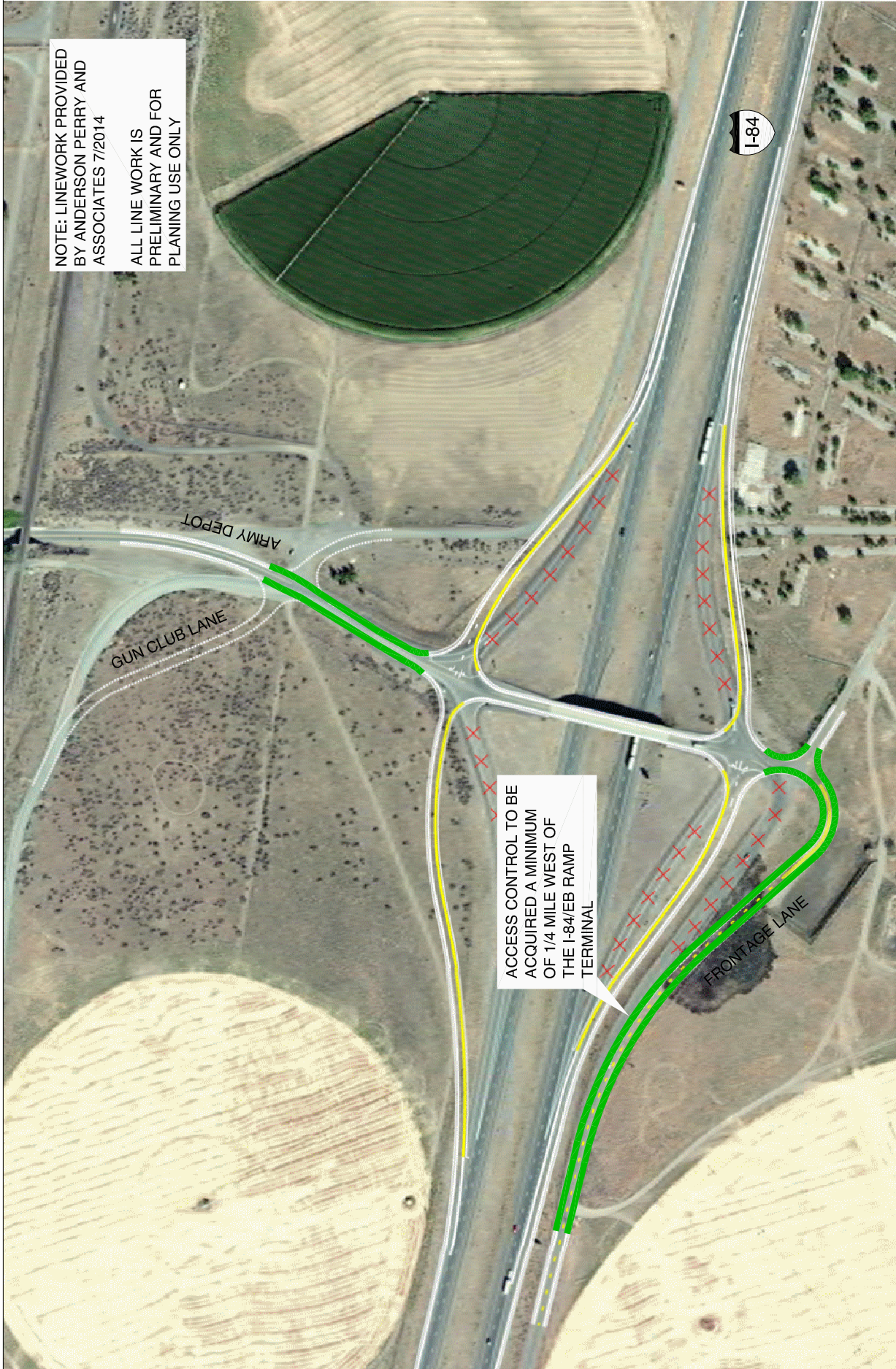
Figure 3 illustrates the access management plan for the I-84/Army Depot Access Road interchange.

Army Depot Access Road

The access management plan for the Army Depot Access Road is primarily focused on not allowing new access to the roadway between the westbound ramp terminals and the UP Mainline railroad underpass to the north. The realignment/establishment of a Gun Club Lane/Existing Farm access (Project A) along the Army Depot Access Road is intended to formalize and optimize the location of this access. Along with this project, formalized access control should be established by ODOT to prevent future access along this limited corridor.

South of the interchange, formalized access control should be established along the realigned/reconstructed Frontage/Ordnance Road if/when the project is needed (See Long-Term/Vision Project C).

NOTE: LINEWORK PROVIDED BY ANDERSON PERRY AND ASSOCIATES 7/2014
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-  PRELIMINARY ROADWAY ALIGNMENT
-  REMOVE STRUCTURE / ROADWAY
-  ACQUIRE ACCESS CONTROL

I-84/ARMY DEPOT ACCESS ROAD IAMP IMPROVEMENT PLAN UMATILLA COUNTY, OREGON

Figure
3

Section 3 Implementation Plan

IMPLEMENTATION PLAN

INTRODUCTION

ODOT and Umatilla County will need to adopt elements of the I-84/Army Depot Access Road IAMP specific to the individual jurisdiction/agency. Since the IAMP involves both State and local government authority, some policies will guide ODOT actions and others will guide Umatilla County decisions. The Oregon Administrative Rule [(OAR 734-051-0155(2)) states that ODOT will work with local governments on any amendments to local comprehensive plans and transportation system plans and local land use and subdivision codes to ensure the proposed IAMP is consistent with the local plan and codes, prior to adoption by the Oregon Transportation Commission (OTC).

It is expected that the IAMP will be made part of the Umatilla County Comprehensive Plan by including it as an amendment to its Transportation System Plans (TSP). This amendment process will require notification and public hearings pursuant to the local legislative process. Umatilla County can adopt the I-84/Army Depot Access Road IAMP document in its entirety or by reference to the existing TSP, can prepare an ordinance that more specifically identifies what parts of the IAMPs are being adopted locally and how local plans and ordinances are being modified, and/or can issue a statement that local plans and ordinances are consistent with the recommendations of the IAMP.

ODOT Region 5 will prepare findings to support adoption of the I-84/Army Depot Access Road IAMP on the State's behalf, and the Oregon Transportation Commission (OTC) will deliberate and adopt the final documents as a facility plan and amendments to the Oregon Highway Plan (OHP). The following is a summary of the proposed actions to implement the IAMP.

PLAN ELEMENTS

Interchange Function and Policy Definition

Umatilla County should adopt a clear definition of the I-84/Army Depot Access Road Interchange function into its comprehensive plan and TSP to provide policy 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 and the interchange's intended function.

The I-84/Army Depot Access Road interchange provides a direct connection between I-84 and the Oregon National Guard (ONG) property. As well, this interchange will provide access to the Port Industrial zoned lane on the southwestern quadrant of the UMCD site. Finally, as the eastern portion of the Depot planning area develops, and internal roads are constructed, the I-84/Army Depot Access Road Interchange will provide secondary access from the east to the industrial and employment uses along I-82.

As ONG activities increase on the Depot property, use of the I-84/Army Depot Access Road Interchange will increase. Historically, the interchange provided secured access to the Umatilla Army Chemical Depot when it was operational. When those operations ceased, use of the interchange diminished. With renewed use of the site by the ONG for training activities, the interchange will see a reestablishment of daily activity.

I-84 is a major east-west interstate highway that connects the state of Oregon to the state of Idaho. I-84 is classified as an Interstate Highway by the Oregon Highway Plan (OHP) and designated as an Expressway and Statewide Freight Route.

Based on this description, the following function and policy definition was developed for the I-84/Army Depot Access Road Interchange:

“The function of the I-84/Army Depot Access Road interchange is to provide primary access for future training and operational activities performed by the Oregon National Guard on the former Umatilla Army Chemical Depot site. Traffic operations at the interchange will need to accommodate both large and small military vehicles. At the same time, the I-84/Army Depot Access Road Interchange may provide access to future Port Industrial development to the west of the interchange and to future industrial and employment uses to the east between this interchange and the I-82/Lamb Road Interchange.”

Interchange Area Management Plan (IAMP) Management Area

Umatilla County is the land use regulatory authority for the Interchange Management Study Area (IMSA). To ensure the continued operation and safety integrity of the interchange, Umatilla County should adopt an I-84/Army Depot Access Road IAMP Management Area. 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 County’s Zoning and Subdivision Ordinances as described in the following sections.

ADOPTION ELEMENTS

Implementation of the I-84/Army Depot Access Road IAMP will occur at several levels of government. Consistent with OAR 734- 051, Umatilla County will adopt legislative amendments to its transportation system plan and comprehensive plan to incorporate elements of the I-84/Army Depot Access Road IAMP. In addition, new land use ordinances or amendments to existing ordinances or resolutions may 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/County Commission hearings at the County level.

Following successful adoption at the County level, the 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/Army Depot Access Road IAMP, the following actions shall occur:

ODOT:

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

Umatilla County:

- Will amend the Transportation System Plan to incorporate the I-84/Army Depot Access Road 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 an Interchange Management Area to identify where compliance with the I-84/Army Depot Access Road 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 Area show consistency with the IAMP and recommended improvements to allow the County to require improvements as a condition of approval. Amendments will ensure that proposals for new development within the UMCD and IMSA will be reviewed to determine if a need for different interchange improvement phases is triggered. Amendments to the following sections are recommended:
 - Section 152.018 Access Management and Street Connectivity
 - Section 152.019 Traffic Impact Analysis
- Work with Morrow County and ODOT to identify and pursue funding for the I-84/Army Depot Access Road interchange projects identified in this IAMP.

Morrow County:

If proposed development in the Port Industrial portion of the UMCD site precedes the construction of the envisioned Paterson Ferry Road-UMCD connector roadway, Morrow County will coordinate development review with Umatilla County. Prior to the construction of the connector roadway, Morrow County will:

- Notify Umatilla County of submitted applications for development proposals within the Port Industrial portion of the UMCD site, under Morrow County’s jurisdiction.
- Require development applicants to obtain an Access Permit through Umatilla County Public Works as part of the development approval process.
- Work with Umatilla County to establish an appropriate funding mechanism to construct the necessary frontage road to connect the I-84/Army Depot Access Road interchange to the Port Industrial zoned lands.

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 ODOT and Umatilla County 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 (OAR 660-012-0060) and impact the I-84/Army Depot Access Road Interchange, or that are located within the IAMP Management Area.
- Proposed development that generates expected traffic volume at the I-84 ramp terminals that exceed the adopted mobility targets.
- Unanticipated intensification of ORNG uses that significantly exceed forecasts as identified in the Technical Appendix of the IAMP.

In addition to the established triggers for IAMP review, either agency may request a formal 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 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 Umatilla County Commission and the Oregon Transportation Commission.

If the findings and conclusions from the IAMP review 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 as an amendment to the Umatilla

County Transportation System Plan, requiring a Umatilla County public hearing, as an amendment to the Umatilla County Transportation System Plan and adoption by 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/Army Depot Access Road Interchange Management Area and describes how Umatilla County will coordinate with Morrow County and ODOT.

Local Requirements

Umatilla County currently requires that proposed development comply with access management and traffic impact analysis requirements pursuant to the adopted Development Code. Umatilla County will amend the Development Code to require that development and redevelopment proposals within the Interchange Management Area show consistency with the IAMP Access Management Plan (AMP) and allow the County to recommend improvements as a condition of approval. Code amendments will ensure that all proposals for new development within the Umatilla County portion of the Depot site area will be reviewed to determine if a need for different interchange improvement phasing is triggered or additional improvements are needed to support the proposal. Amendments to the following sections are recommended:

- Section 152.018 Access Management and Street Connectivity
- Section 152.019 Traffic Impact Analysis

Section 152.018 will include the following provision:

Proposed access within an Interchange Area Management Plan (IAMP) will be consistent with this section and the Access Management Plan of the applicable IAMP. Where conflicts between code requirements and the applicable IAMP Access Management Plan exist, the Access Management Plan will govern.

In recognition that the I-82/Lamb Road interchange may have the ability to accommodate some level of development within the UMCD boundary prior to full implementation of the identified near-term interchange improvement projects (Projects A and B in the IAMP), special Traffic Impact Analysis (TIA) provisions will be amended in the County's TIA requirements (§152.019.B.2). These requirements will be specific to all future development located within the UMCD boundary of the larger IMSA. The entire TIA requirements with these new special provisions are included below with the new language underlined.

§ 152.019 TRAFFIC IMPACT STUDY.

(A) Purpose: The purpose of this section of the code is to implement Section 660-012-0045 (2) (e) of the State Transportation Planning Rule that requires the County to adopt a process to apply conditions to specified land use proposals in order to minimize adverse impacts to and protect transportation facilities. This section establishes the standards for when a proposal must be reviewed for potential traffic impacts; when a Traffic Impact Analysis must be submitted with an application in order to determine whether conditions are needed to minimize impacts to and protect transportation facilities; what must be in a Traffic Impact Analysis; and who is qualified to prepare the analysis.

(B) Applicability: A Traffic Impact Analysis shall be required to be submitted to the County with a land use application, apply:

(1) A change in plan amendment designation; or

(2) The proposal is projected to cause one or more of the following effects, which can be determined by field counts, site observation, traffic impact analysis or study, field measurements, crash history, Institute of Transportation Engineers Trip Generation manual; and information and studies provided by the local reviewing jurisdiction and/or ODOT:

(a) An increase in site traffic volume generation by 250 Average Daily Trips (ADT) or more (or as required by the County Engineer). The latest edition of the Trip Generation manual, published by the Institute of Transportation Engineers (ITE) shall be used as standards by which to gauge average daily vehicle trips; or

(b) An increase in use of adjacent streets by vehicles exceeding the 10,000 pound gross vehicle weights by 20 vehicles or more per day; or

(c) The location of the access driveway does not meet minimum intersection sight distance requirements, or is located where vehicles entering or leaving the property are restricted, or vehicles queue or hesitate, creating a safety hazard; or

(d) A change in internal traffic patterns that may cause safety problems, such as back up onto the highway or traffic crashes in the approach area; or

(e) Any development proposed within the UMCD boundary of the I-84/Lamb Road or I-84/Army Depot Access Road Interchange Area Management Plan (IAMP) Management Area prior to the completion of near-term improvements projects (Projects A and B) identified in the I-82/Lamb Road IAMP; or

~~(e)~~ (f) For development within the I-82/US 730 Interchange Area Management Plan (IAMP) Management Area, the location of the access driveway is inconsistent with the Access Management Plan in Section 7 of the IAMP.

(C) Traffic Impact Analysis Requirements

(1) Preparation. A Traffic Impact Analysis shall be prepared by a professional engineer. The Traffic Impact Analysis will be paid for by the applicant.

(2) Transportation Planning Rule Compliance as provided in § 152.751.

(3) Pre-filing Conference. The applicant will meet with the Umatilla County Public Works Director and Planning Director prior to submitting an application that requires a Traffic Impact Analysis. The County has the discretion to determine the required elements of the TIA and the level of analysis expected. The County shall also consult the Oregon Department of Transportation (ODOT) on analysis requirements when the site of the proposal is adjacent to or otherwise affects a State roadway.

(4) For development proposed within the UMCD boundary of the I-84/Lamb Road or I-84/Army Depot Access Road Interchange Area Management Plan (IAMP) Management Area prior to the construction and completion of near-term improvements projects (Projects A and B) identified in the I-82/Lamb Road IAMP, the following additional submittal requirements may be required:

(a) An analysis of typical average daily vehicle trips using the latest edition of the Trip Generation Manual, published by the Institute of Transportation Engineers (ITE) or other data source deemed acceptable by the County Engineer.

(b) A truck and personal passenger vehicle mode split analysis.

(c) An analysis that shows the traffic conditions of the project at full buildout and occupancy, assuming the background traffic conditions at the year of expected project completion.

(d) Findings related to the impacts of the proposed development and the need for Projects A and B to mitigate those impacts.

Once Projects A and B have been completed, section (4) will no longer apply to new development.

(D) Approval Criteria: When a Traffic Impact Analysis is required; approval of the proposal requires satisfaction of the following criteria:

(1) Traffic Impact Analysis was prepared by an Oregon Registered Professional Engineer qualified to perform traffic engineering analysis;

(2) If the proposed action shall cause a significant effect pursuant to the Transportation Planning Rule, or other traffic hazard or negative impact to a transportation facility, the Traffic Impact Analysis shall include mitigation measures that meet the County's Level-of-Service and/or Volume/Capacity standards and are satisfactory to the County Engineer, and ODOT when applicable; and

(3) The proposed site design and traffic and circulation design and facilities, for all transportation modes, including any mitigation measures, are designed to:

- (a) Have the least negative impact on all applicable transportation facilities;
- (b) Accommodate and encourage non-motor vehicular modes of transportation to the extent practicable;
- (c) Make the most efficient use of land and public facilities as practicable;
- (d) Provide the most direct, safe and convenient routes practicable between on-site destinations, and between on-site and off-site destinations; and
- (e) Otherwise comply with applicable requirements of the Umatilla County Code.

(E) Conditions of Approval: The County may deny, approve, or approve a proposal with appropriate conditions.

(1) Where the existing transportation system is shown to be impacted by the proposed action, dedication of land for streets, transit facilities, sidewalks, bikeways, paths, or accessways may be required to ensure that the transportation system is adequate to handle the additional burden caused by the proposed action.

(2) Where the existing transportation system is shown to be impacted by the proposed action, improvements such as paving, curbing, installation or contribution to traffic signals, construction of sidewalks, bikeways, accessways, paths, or streets that serve the proposed action may be required.

OREGON DEPARTMENT OF TRANSPORTATION / UMATILLA COUNTY COORDINATION

Following adoption of the I-84/Army Depot Access Road IAMP, Umatilla County will need to coordinate future development activities on the UMCD site with ODOT. The following describes steps both ODOT and Umatilla County will take when reviewing development proposals that may impact the I-84/Army Depot Access Road interchange. Umatilla County shall provide notice to the Oregon Department of Transportation (ODOT) on TIA studies when the site of the proposal is adjacent to or otherwise affects a State highway.

- Umatilla 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 highway.
- Umatilla County shall provide written notification to ODOT once a quasi-judicial or legislative 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 County. If ODOT does not provide written comments

during this 20-day period, the County staff report will be issued without consideration of ODOT comments.

- The County shall invite ODOT to participate in a pre-filing conference for applications within an Interchange Management Area Plan Management Area or within a ¼ mile of any ODOT facility. 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 & 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/Army Depot Access Road IAMP.

OAR COMPLIANCE

The I-84/Army Depot Access Road IAMP was developed in collaboration with UMADRA, Umatilla County, and ODOT and was developed in accordance with the guidelines set forth in the State of Oregon’s Administrative Rules for Interchange Access Management Planning and Interchange Area Management Planning. Table 6 identifies the required planning elements from OAR 734-051 and documents how the IAMP satisfies the requirements.

Table 2 – I-84/Army Depot Access Road IAMP OAR Compliance

OAR 734-0051-0155 Requirement	How OAR is Addressed	Document 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.	IAMP Technical Appendix “G”
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.	IAMP 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 presented within the plan. These improvements address the near term needs identified by the existing conditions analysis as well as long-term demand needs that are expected to occur beyond the 20-year horizon period.	IAMP 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 operational and geometric conditions was conducted for this planning effort. The future volumes were developed based on approved zoning and comprehensive plan designations.	IAMP Technical Appendices “D”, “E”, & “G”
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.	IAMP Section 2
Should consider existing and proposed uses of all property in the interchange area consistent with its comprehensive plan designations and zoning	A thorough analysis of surrounding land uses and land use potential was performed based on the current and approved comprehensive plan designations and zoning.	IAMP Technical Appendices “D”, “E”, & “G”

OAR 734-0051-0155 Requirement	How OAR is Addressed	Document Reference
-7010(7)(f)		
Is consistent with any applicable Access Management Plan, corridor plan or other facility plan adopted by the Oregon Transportation Commission	The access management plan included in the IAMP is consistent with the OHP.	IAMP Section 2
-7010(7)(g)		
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.	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.	IAMP Section 3
-7010(7)(h)		

OREGON HIGHWAY PLAN COMPLIANCE

The I-84/Army Depot Access Road IAMP was developed in accordance with the policies set forth in the OHP. The following identifies the OHP Policies that pertain to the I-84/Army Depot Access Road 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 Interchange Management Study Area (IMSA), there are two ODOT highways. I-84 is an Interstate Highway designated as an Expressway. I-82 is an Interstate Highway also designated as an Expressway.

How Addressed: The I-84/Army Depot Access Road IAMP recognized the respective functions of each highway. Access standards, traffic control, and geometric considerations were informed by the applicable highway designation. The preferred concept includes modification to the interstate ramps to better accommodate future traffic volumes and truck types.

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 UMADRA, Umatilla County, and ODOT. The IAMP will be implemented by Umatilla County through the IAMP Management Area 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. I-84 and I-82 are designated Freight Routes.

How Addressed: The transportation projects included in the plan were developed considering freight mobility needs, particularly at the EB and WB interchange on/off ramps.

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: I-84/Army Depot Access Road IAMP demonstrates that the interchange and surrounding transportation system will be able to meet ODOT mobility targets through the 20-year horizon.

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

How Addressed: I-84/Army Depot Access Road IAMP focuses on improving the geometry of the existing interchange to improve efficiency and safety, adding capacity only where needed.

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: The new Gun Club Lane access and interchange ramp improvements will be reconstructed to eliminate existing deficiencies. In addition, the access management plan was developed to ensure the long-term safety of the interchange area.

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/Army Depot Access Road IAMP includes an access management plan that improves access spacing over existing conditions.

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. All highways within the study area are designated truck routes.

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.

