



FINAL REPORT

Prepared for



Oregon Department of
Transportation

Stanfield Interchange Access Management Plan



November 2005



Oregon

Theodore R. Kulongoski, Governor

Department of Land Conservation and Development

635 Capitol Street NE, Suite 150

Salem, Oregon 97301-2524

Phone: (503) 373-0050

First Floor/Coastal Fax: (503) 378-6033

Second Floor/Director's Office: (503) 378-5518

Web Address: <http://www.oregon.gov/LCD>

NOTICE OF ADOPTED AMENDMENT

February 3, 2006



TO: Subscribers to Notice of Adopted Plan or Land Use Regulation Amendments

FROM: Mara Ulloa, Plan Amendment Program Specialist

SUBJECT: Umatilla County Plan Amendment
DLCD File Number 006-05

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Copies of the adopted plan amendment are available for review at DLCD offices in Salem, the applicable field office, and at the local government office.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: February 15, 2006

This amendment was submitted to DLCD for review prior to adoption with less than the required 45-day notice. Pursuant to ORS 197.830 (2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

***NOTE: THE APPEAL DEADLINE IS BASED UPON THE DATE THE DECISION WAS MAILED BY LOCAL GOVERNMENT. A DECISION MAY HAVE BEEN MAILED TO YOU ON A DIFFERENT DATE THAN IT WAS MAILED TO DLCD. AS A RESULT YOUR APPEAL DEADLINE MAY BE EARLIER THAN THE DATE SPECIFIED ABOVE.**

Cc: Doug White, DLCD Community Services Specialist
Mark Radabaugh, DLCD Regional Representative
Patty Perry, Umatilla County

<paa> ya



DLCD NOTICE OF ADOPTION

JAN 27 2006

This form must be mailed to DLCD within 5 working days after the final decision per ORS 197.610, OAR Chapter 660 - Division 18

LAND CONSERVATION AND DEVELOPMENT

(See reverse side for submittal requirements)

Jurisdiction: Umatilla County Local File No.: T-05-025 (If no number, use none)

Date of Adoption: 1-10-06 (Must be filled in) Date Mailed: 1-25-06 (Date mailed or sent to DLCD)

Date the Notice of Proposed Amendment was mailed to DLCD: 11-10-05

- Checkboxes for Comprehensive Plan Text Amendment, Land Use Regulation Amendment, New Land Use Regulation, Comprehensive Plan Map Amendment, Zoning Map Amendment, and Other: co-adoptions (Please Specify Type of Action)

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached."

County adoption of Stanfield Interchange Access Mgt. Plan (IAMP) Hwy 395/I84. Co adoption of City of Echo TSP and Comp Plan and Zoning Code amendments. Co adoption of City of Stanfield amendment to TSP for Stanfield IAMP

Describe how the adopted amendment differs from the proposed amendment. If it is the same, write "Same." If you did not give notice for the proposed amendment, write "N/A."

Same

Plan Map Changed from: N/A to

Zone Map Changed from: N/A to

Location: Stanfield & Echo UG-Bs Acres Involved: N/A

Specify Density: Previous: N/A New:

Applicable Statewide Planning Goals: 11, 12

Was an Exception Adopted? Yes: No: [check]

DLCD File No.: 006-05 (14817)

Did the Department of Land Conservation and Development receive a notice of Proposed Amendment **FORTY FIVE (45) days prior to the first evidentiary hearing.** Yes: No:

If no, do the Statewide Planning Goals apply. Yes: No:

If no, did The Emergency Circumstances Require immediate adoption. Yes: No:

Affected State or Federal Agencies, Local Governments or Special Districts: Echo, Stanfield,

ODOT, Umatilla County

Local Contact: PATTY PERRY, Sr. Planner Area Code + Phone Number: 541-278-6249

Address: Umatilla County
216 SE 4th St.

City: Pendleton Zip Code+4: 97801

ADOPTION SUBMITTAL REQUIREMENTS

This form **must be mailed** to DLCD **within 5 working days after the final decision** per ORS 197.610, OAR Chapter 660 - Division 18.

1. Send this Form and TWO (2) Copies of the Adopted Amendment to:
ATTENTION: PLAN AMENDMENT SPECIALIST
DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
635 CAPITOL STREET NE, SUITE 150
SALEM, OREGON 97301-2540
2. Submit **TWO (2) copies** the adopted material, if copies are bounded please submit **TWO (2) complete copies** of documents and maps.
3. Please Note: Adopted materials must be sent to DLCD not later than **FIVE (5) working days** following the date of the final decision on the amendment.
4. Submittal of of this Notice of Adoption must include the text of the amendment plus adopted findings and supplementary information.
5. The deadline to appeal will be extended if you submit this notice of adoption within five working days of the final decision. Appeals to LUBA may be filed within **TWENTY-ONE (21) days** of the date, the "Notice of Adoption" is sent to DLCD.
6. In addition to sending the "Notice of Adoption" to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.
7. **Need More Copies?** You can copy this form on to 8-1/2x11 green paper only ; or call the DLCD Office at (503) 373-0050; or Fax your request to:(503) 378-5518; or Email your request to Larry.French@state.or.us - ATTENTION: PLAN AMENDMENT SPECIALIST.

RECEIVED

JAN 10 2006

UMATILLA COUNTY RECORDS

THE BOARD OF COMMISSIONERS OF UMATILLA COUNTY

STATE OF OREGON

In the Matter of Co-Adopting)
 City of Stanfield Ordinance) ORDINANCE NO. 2006-03
 No. 377-2005)

WHEREAS the City of Stanfield and Umatilla County previously have entered into a Joint Management Agreement applying to lands within the City Urban Growth Area, and pursuant to the agreement, all adopted amendments to the City's Comprehensive Plan, land use regulations and maps affecting the Urban Growth Area or Urban Growth Boundary, are referred to the County for adoption as amendments to the county Plan and Development Ordinance;

WHEREAS on November 15, 2005, the Stanfield City Council adopted Ordinance No. 377-2005, accepting and adopting the Stanfield Interchange Access Management Plan dated November 2005 prepared for Oregon Department of Transportation, and amending the Stanfield Comprehensive Plan and Transportation System Plan to include the Interchange Access Management Plan;

WHEREAS, at its December 15, 2005 meeting, the Umatilla County Planning Commission reviewed the ordinance and recommended that the Board of Commissioners co-adopt the ordinance;

WHEREAS the Board of Commissions held a public hearing on January 10, 2006, to consider the co-adoption of the ordinance;

WHEREAS at its meeting of January 10, 2006, the Board of Commissioners voted unanimously to co-adopt the ordinance.

NOW, THEREFORE the Board of Commissioners of Umatilla County ordains the co-adoption by Umatilla County, Oregon, of the following:

1. City of Stanfield Ordinance No. 377-2005, amending the City Comprehensive Plan and Transportation System Plan to incorporate the Stanfield Interchange Access Management Plan, a copy of which is attached to this document and incorporated by this reference.

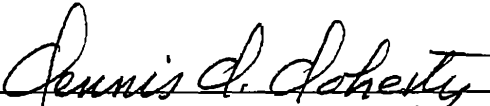
2. To the extent necessary to comply with the Joint Management Agreement, the Umatilla County Comprehensive Plan is amended to incorporate the amendments resulting from City of

Stanfield Ordinance No. 377-2005.

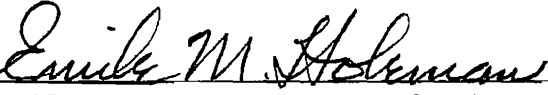
FURTHER, the Board of Commissioners deems this Ordinance necessary for the immediate preservation of public peace, health, and safety, and therefore, it is adjudged and decreed that an emergency does exist in the case of this Ordinance and it shall be in full force and effect from and after its adoption by the Umatilla County Board of Commissioners.

DATED this 10th day of January, 2006.

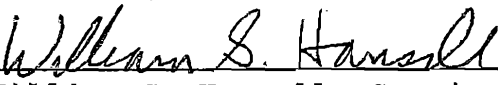
UMATILLA COUNTY BOARD OF COMMISSIONERS



Dennis D. Doherty, Chair



Emile M. Holeman, Commissioner



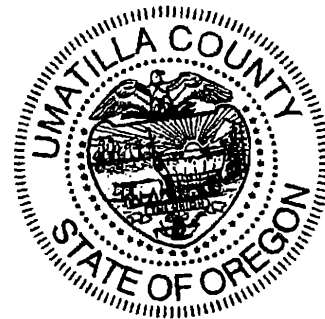
William S. Hansell, Commissioner



ATTEST:
OFFICE OF COUNTY RECORDS



Records Officer



RECEIVED

JAN 10 2006

THE BOARD OF COMMISSIONERS OF UMATILLA COUNTY

UMATILLA COUNTY
RECORDS

STATE OF OREGON

In the Matter of Co-Adopting)
 City of Echo Ordinance Nos.) ORDINANCE NO. 2006-02
 341-04 and 349-05)

WHEREAS the City of Echo and Umatilla County previously have entered into an Urban Growth Area Joint Management Agreement applying to lands within the City urban growth area, and pursuant to the agreement, the substantive portions of the City's zoning, subdivision and mobile home park ordinances are to be incorporated by reference into and made part of the County's zoning, subdivision and mobile home park ordinances for application within the City urban growth area;

WHEREAS on October 21, 2004, the Echo City Council passed Ordinance No. 341-04, amending the City of Echo Zoning code section 9-4A-3, 9-4B-3, 9-4C-3, 9-4D-3, and 9-4D-4;

WHEREAS on November 17, 2005, the Echo City Council adopted Ordinance No. 349-05, amending the City of Echo Subdivision Code to implement the recommendations of the Stanfield Interchange Access Management Plan dated November 2005 prepared for Oregon Department of Transportation;

WHEREAS, at its December 15, 2005 meeting, the Umatilla County Planning Commission reviewed the ordinances and recommended that the Board of Commissioners co-adopt the ordinances;

WHEREAS the Board of Commissions held a public hearing on January 10, 2006, to consider the co-adoption of the ordinances;

WHEREAS at its meeting of January 10, 2006, the Board of Commissioners voted unanimously to co-adopt the ordinances;

NOW, THEREFORE the Board of Commissioners of Umatilla County ordains the co-adoption by Umatilla County, Oregon, of the following:

1. City of Echo Ordinance No. 341-04, amending City of Echo Zoning Code sections 9-4A-2, 9-4B-3, 9-4C-2, 9-4D-3, and 9-4D-4, a copy of which is attached to this document and incorporated by this reference.

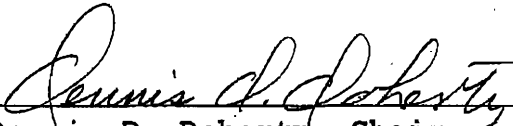
2. City of Echo Ordinance No. 349-05, amending the City of Echo Subdivision Code, a copy of which is attached to this document and incorporated by this reference.

3. To the extent necessary to comply with the Joint Management Agreement, the Umatilla County Development Code is amended to incorporate the amendments resulting from City of Echo Ordinance Nos. 341-04 and 349-05.

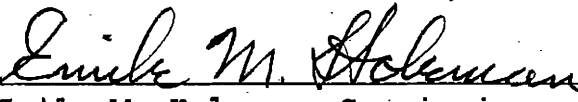
FURTHER, the Board of Commissioners deems this Ordinance necessary for the immediate preservation of public peace, health, and safety, and therefore, it is adjudged and decreed that an emergency does exist in the case of this Ordinance and it shall be in full force and effect from and after its adoption by the Umatilla County Board of Commissioners.

DATED this 10th day of January, 2006.

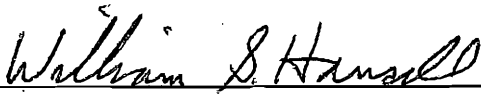
UMATILLA COUNTY BOARD OF COMMISSIONERS



Dennis D. Doherty, Chair



Emile M. Holeman, Commissioner



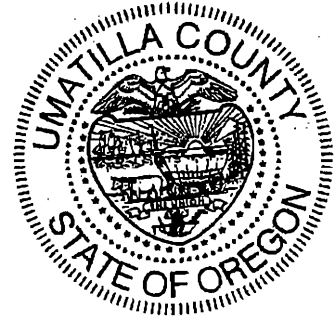
William S. Hansell, Commissioner



ATTEST:
OFFICE OF COUNTY RECORDS



Records Officer



FORM 1

D L C D NOTICE OF PROPOSED AMENDMENT

This form must be received by DLCD at least 45 days prior to the first evidentiary hearing per ORS 197.610, OAR Chapter 660 - Division 18 and Senate Bill 543 and effective on June 30, 1999.
(See reverse side for submittal requirements)

Jurisdiction: Umatilla County

Local File No.: None
(If no number, Use none)

Date of First Evidentiary Hearing: 12/15/05
(Must be filled in)

Date of Final Hearing: 1/15/05
(Must be filled in)

Date this proposal was sent or mailed: 11/10/05
(Date mailed or sent to DLCD)

Has this proposal previously been submitted to DLCD? Yes: No: Date: _____

Comprehensive plan Text Amendment Comprehensive Plan Map Amendment

Land Use regulation Amendment Zoning Map Amendment

New Land Use regulation Other: Co-adoption of Echo TSP, Stanfield TSP amendments, and the Stanfield Interchange Access Management Plan
(Please Specify Type of Action)

Briefly Summarize the proposal. Do not use technical terms. Do not write "See Attached."

Umatilla County will co-adopt the Stanfield Access Management Plan by ordinance into their TSP.

Umatilla County will co-adopt the Echo TSP & will co-adopt the Stanfield TSP updates. This proposal has been previously been submitted to DLCD for the Cities of Stanfield and Echo.

Plan Map Changed from: _____ to _____

Zone Map Changed from: _____ to _____

Location: _____ Acres Involved: _____

Specified Change in Density: Current: _____ Proposed: _____

Applicable Statewide Planning Goals: Goal 11, Goal 12

Is an Exception Proposed? Yes: No:

Affected State or Federal Agencies, Local Governments or Special Districts: Echo, Stanfield, ODOT, Umatilla County

Local Contact: Patty Perry

Area Code + Phone Number: 541-278-6249

Address: 216 SE 4th St.

City: Pendleton

Zip Code + 4: 97801

Email Address: pattyp@co.umatilla.or.us

DCLD No: _____

RECEIVED

JAN 10 2006

THE BOARD OF COMMISSIONERS OF UMATILLA COUNTY

UMATILLA COUNTY
RECORDS

STATE OF OREGON

In the Matter of Co-Adopting)
 City of Echo Transportation) ORDINANCE NO. 2006-01
 System Plan and Implementing)
 Ordinance No. 326-01, and)
 also Ordinance No. 348-05 for)
 Stanfield Interchange Access)
 Management Plan)

WHEREAS the City of Echo and Umatilla County previously have entered into an Urban Growth Area Joint Management Agreement applying to lands within the City urban growth area, and pursuant to the agreement, the portions of the Echo Comprehensive Plan that addresses the urban growth area were incorporated into the Umatilla County Comprehensive Plan;

WHEREAS on May 17, 2001, the Echo City Council passed Ordinance No. 326-01, amending the City of Echo Comprehensive Plan by acknowledging a Transportation System Plan and by revising plan section 7-1-K regarding Transportation, to comply with the Statewide Planning Goal 12 and OAR 660-12-045;

WHEREAS on November 17, 2005, the Echo City Council adopted Ordinance No. 348-05, amending the City of Echo Comprehensive Plan by adopting and incorporated into the plan the Stanfield Interchange Access Management Plan dated November 2005 prepared for Oregon Department of Transportation;

WHEREAS, at its December 15, 2005 meeting, the Umatilla County Planning Commission reviewed the ordinances and recommended that the Board of Commissioners co-adopt the ordinances;

WHEREAS the Board of Commissions held a public hearing on January 10, 2006, to consider the co-adoption of the ordinances;

WHEREAS at its meeting of January 10, 2006, the Board of Commissioners voted unanimously to co-adopt the ordinances;

NOW, THEREFORE the Board of Commissioners of Umatilla County ordains the co-adoption by Umatilla County, Oregon, of the following:

1. City of Echo Ordinance No. 326-01, amending the Echo

Comprehensive Plan to incorporate a Transportation System Plan for the City and its urban growth area and revising Comprehensive Plan Section 7-1-5 K ("TSP"), a copy of which is attached to this document and incorporated by this reference.

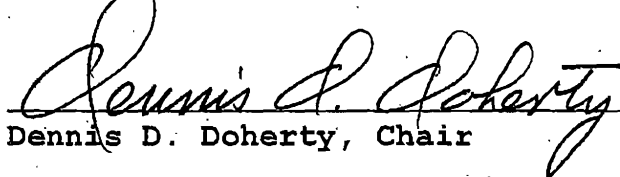
2. City of Echo Ordinance No. 348-05, amending the City Comprehensive Plan and TSP to incorporate the Stanfield Interchange Access Management Plan, a copy of which is attached to this document and incorporated by this reference.

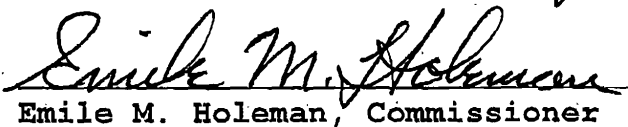
3. To the extent necessary to comply with the Joint Management Agreement, the Umatilla County Comprehensive Plan is amended to incorporate the City of Echo Transportation System Plan and the Stanfield Interchange Access Management Plan.

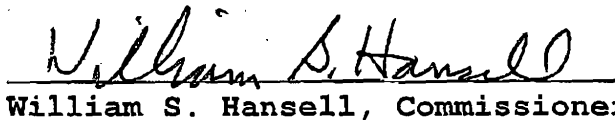
FURTHER, the Board of Commissioners deems this Ordinance necessary for the immediate preservation of public peace, health, and safety, and therefore, it is adjudged and decreed that an emergency does exist in the case of this Ordinance and it shall be in full force and effect from and after its adoption by the Umatilla County Board of Commissioners.

DATED this 10th day of January, 2006.

UMATILLA COUNTY BOARD OF COMMISSIONERS


Dennis D. Doherty, Chair

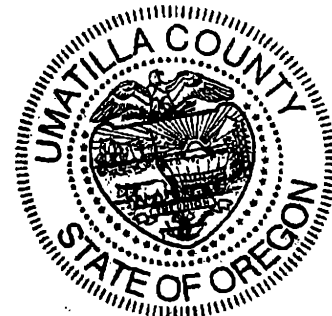

Emile M. Holeman, Commissioner


William S. Hansell, Commissioner



ATTEST:
OFFICE OF COUNTY RECORDS


Records Officer



Ordinance No. 326-01

An Ordinance amending the Echo Comprehensive Plan to comply with Statewide Planning Goal 12 and Oregon Transportation Planning Administrative Rule (OAR 660-12-045).

The City of Echo ordains as follows:

Comprehensive Plan Section 7-1-5 K, **PLANS GOALS AND POLICIES** is amended to read:

K. Transportation

GOAL: To provide and encourage a safe, convenient, and economic transportation system.

Objectives:

1. Ensure that the road system within the City and urban area is adequate to meet public needs, including the needs of the transportation disadvantaged.
 - A. Develop a city transportation plan.
 - B. Meet identified maintenance level of service standards on the county and state highway systems.
 - C. Review and revise, if necessary, street cross-section standards for local, collector, and arterial streets to enhance safety and mobility.
 - D. Develop access management strategies where needed.
 - E. Evaluate the need for traffic control devices.
 - F. Analyze the safety of traveling speeds and consider modifying posted speeds as necessary.
 - G. Evaluate the operation and safety of the street system.
 - H. Encourage the provision of transportation alternatives for elderly and handicapped citizens.
2. Preserve the function, capacity, level of service, and safety of existing and planned roadways.
 - A. Develop access management standards.
 - B. Develop alternative, parallel routes.
 - C. Promote alternative modes of transportation.
 - D. Promote transportation demand management programs.
 - E. Promote transportation system management.
3. Develop procedures to minimize impacts to and protect transportation facilities, corridors, or sites during the development review process.
4. Improve coordination among Umatilla County, ODOT, the US Forest Service (USFS), the Federal Highway Administration (FHWA), and the city.

- A. Cooperate with ODOT in the implementation of the Statewide Transportation Improvement Program (STIP).
 - B. Work with Umatilla County to coordinate roadway maintenance and improvements and to develop joint policies concerning local roads and streets within the Urban Growth Boundary.
 - C. Work with the county in establishing cooperative road improvement programs and schedules.
 - D. Work with the county in establishing the right-of-way needed for new roads identified in the transportation system plan.
 - E. Take advantage of federal and state highway funding programs.
 - F. Encourage the county and ODOT to improve the existing road system to and within the City.
 - G. Consider pooling resources with other cities and the county to provide services the benefit areas both inside and outside the City.
5. Increase the use of alternative modes of transportation (walking, bicycling, and public transportation) through improved access, safety and service.
- A. Provide sidewalks or shoulders and safe crossings on collectors and arterials.
 - B. Amend and implement a city bicycle plan.
 - C. Seek Transportation and Growth Management (TGM) and other funding for projects evaluating and improving the environment for alternative modes of transportation.
 - D. Cooperate with other cities and the county to pursue inter-city transit service opportunities.
 - E. Utilize local improvement districts (LID's) when possible to provide sidewalks and curbs for local neighborhoods.

It shall be City policy:

- 1. To repave city streets and provide curbs and sidewalks as resources are available.
- 2. To encourage the Union Pacific Railroad to landscape its right-of-way through the City.

3. To encourage Umatilla County to improve County Road No. 848 between the City and the I-84 Freeway Interchange and to plan for adequate access to adjacent property.
4. To work with Umatilla County to develop joint policies concerning local roads and streets within the urban growth boundary.
5. To coordinate with the Oregon Department of Transportation (ODOT) to implement the highway improvements listed in the Statewide Transportation Improvement Program (STIP) that are consistent with the Transportation System Plan and the city Comprehensive Plan.
6. To consider the findings of ODOT's draft Environmental Impact Statements and Environmental Assessments as integral parts of the land use decision-making procedures. Other actions required, such as a goal exception or plan amendment will be combined with review of the draft EA or EIS and land use approval process.
7. To acknowledge that the Echo Transportation System Plan is an element of the Comprehensive Plan. It identifies the general location of transportation improvements. Changes in the specific alignment of proposed public road and highway projects that shall be permitted without plan amendment if the new alignment falls within a transportation corridor identified in the Transportation System Plan.
8. To allow operation, maintenance, repair, and preservation of existing transportation facilities without land use review, except where specifically regulated.
9. To allow dedication of right-of-way, authorization of construction, and the construction of facilities and improvements, for projects authorized in the Transportation System Plan, the classification of the roadway and approved road standards without land use review.
10. To allow changes in the frequency of transit, rail and airport services that are consistent with the Transportation System Plan without land use review.
11. To acknowledge that for State projects that require an Environmental Impact Statement (EIS) or Environmental Assessment (EA), the draft EIS or EA shall serve as the documentation for local land use review, if local review is required.
 - A. Where the project is consistent with the Transportation System Plan, formal review of the draft EIS or EA and concurrent or subsequent compliance with applicable development standards or conditions;

B. Where the project is not consistent with the Transportation System Plan, formal review of the draft EIS or EA and concurrent completion of necessary goal exceptions or plan amendments.

12. To protect the function of existing and planned roadways as identified in the Transportation System Plan.
13. To include a consideration of a proposal's impact on existing or planned transportation facilities in all land use decisions.
14. To protect the function of existing or planned roadways or roadway corridors through the application of appropriate land use regulations.
15. To consider the potential to establish or maintain accessways, paths, or trails prior to the vacation of any public easement or right-of-way.
16. To preserve right-of-way for planned transportation facilities through exactions, voluntary dedication, or setbacks.
17. To plan and develop a network of streets, accessways, and other improvements, including bikeways, sidewalks, and safe street crossings to promote safe and convenient bicycle and pedestrian circulation within the community.
18. To require streets and accessways where appropriate to provide direct and convenient access to major activity centers, including downtown, schools, shopping areas, and community centers.
19. To investigate the existing and future opportunities for bicycle and pedestrian accessways in areas of new development. Many existing accessways such as user trails established by school children distinguish areas of need and should be incorporated into the transportation system.
20. To include bikeways on all new arterials and collectors within the Urban Growth Boundary except on limited access freeways.
21. To proceed with retrofitting existing arterials and collectors with bike lanes on a prioritized schedule as appropriate and practical (i.e., bike lanes may not be appropriate in downtown core areas where it would require the removal of parking).
22. To include sidewalks on all new streets within the Urban Growth Boundary except on limited access freeways.

23. To proceed with retrofitting existing streets with sidewalks on a prioritized schedule.

24. To give priority to developing accessways to major activity centers within the Echo Urban Growth Boundary, such as the downtown commercial center, schools, and community centers.

25. To connect bikeways and pedestrian accessways to local and regional travel routes.

26. To design and construct bikeways and pedestrian accessways to minimize potential conflicts between transportation modes. Design and construction of such facilities shall follow the guidelines established by the Oregon Bicycle and Pedestrian Plan.

27. To give maintenance and repair of existing bikeways and pedestrian accessways (including sidewalks) equal priority to the maintenance and repair of motor vehicle facilities.

28. To provide bicycle parking facilities at all new residential multifamily developments of four units or more, commercial, industrial, recreational, and institutional facilities.

PASSED by the Common Council of the City of Echo this

17th day of May

2001.



Mayor

Attest:



City Administrator/Recorder

ORDINANCE #348-05

**AN ORDINANCE AMENDING THE CITY COMPREHENSIVE PLAN
CHAPTER 7, INCLUDING THE TRANSPORTATION SYSTEM PLAN AND
DECLARING AN EMERGENCY.**

THE CITY OF ECHO ORDAINS AS FOLLOWS:

SECTION 1. The Comprehensive Plan is amended as shown on the following attachment.

SECTION 2. Inasmuch as it is necessary for the health, comfort, convenience, safety and welfare of the people of the City of Echo that this ordinance have immediate effect, an emergency is hereby declared to exist. This ordinance shall be in full force and effect from and after its passage and approval.


ADOPTED by the Common Council and approved by the Mayor this 17th day of November, 2005.

Approved:



Richard Winter, PhD, Mayor

Attest:



Diane Berry, City Administrator-Recorder

I certify that this ordinance was first discussed by the city council at a regular meeting on October 20, 2005 and again at a public hearing before the City Council was held on November 17, 2005, giving citizens an opportunity to comment on the COMPREHENSIVE PLAN and TSP.



Diane Berry, City Administrator-Recorder

City of Echo
COMPREHENSIVE PLAN

CHAPTER 1
ECHO COMPREHENSIVE PLAN

SECTION:

- 7--1--1: Authority
- 7--1--2: Plan Technical Report
- 7--1--3: Plan Implementation Measures
- 7--1--4: Availability of Plan
- 7--1--5: Plan Goals and Policies
- 7--1--6: Plan and Implementation Measure Review
- 7--1--7: Plan Amendment Applications
- 7--1--8: Plan Amendment

7-1-1 AUTHORITY:

Pursuant to Oregon Revised Statutes, chapters 92, 197, 215 and 227, the Statewide Planning Goals, and in coordination with Umatilla County and other affected governmental units, the City hereby adopts the City of Echo Comprehensive Plan including plan goals and policies as enumerated herein and the plan map attached to Ordinance 232-78 as Attachment "A".

7-1-2 PLAN TECHNICAL REPORT:

The technical report provides the background information, facts and considerations that the City's Comprehensive Plan goals, policies and map are based on. The technical report is not adopted as part of the Plan but remains the supporting document that is subject to revision as new technical data becomes available. When new data indicates that the City's Plan should be revised, amendments shall be made as provided in Section 7--1--8 of this Chapter.

7-1-3 PLAN IMPLEMENTATION MEASURES:

All plan implementation measures including but not limited to the Zoning Ordinance, Subdivision Ordinance, Mobile Home Park Ordinance, and Urban Growth Area Joint Management Agreement between the City and County, shall be consistent with and subsequent to the City Comprehensive Plan.

7-1-4 AVAILABILITY OF PLAN:

After the City Comprehensive Plan receives acknowledgment of compliance from the Oregon Land Conservation and Development Commission, the Comprehensive Plan, technical report and implementation measures shall be available for use and inspection at City Hall, Umatilla County Planning Department office in Pendleton, East Central Oregon Association of Counties, and the Department of Land Conservation and Development office in Salem.

7-1-5 PLAN GOALS AND POLICIES:

The following statement of goals and policies provide a general long-range basis for decision making relative to the future growth and development of the City. The goals are patterned after and are in direct response to applicable Oregon Statewide Planning Goals. The policy statements set forth a guide to courses of action, which are intended to carry out the goals of the Plan. The policy statements present the City's position on matters pertaining to physical improvements and community development.

A. Citizen Involvement

GOAL: To develop a citizen involvement program that insures opportunity for citizens to participate in all phases of the planning process.

It shall be City policy:

1. To conduct periodic community surveys to ascertain public opinion and collect information; tabulated survey results shall be distributed.
2. To encourage people to attend and participate in City Council meetings and hearings.

B. Land Use Planning

GOAL: To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.

It shall be City policy:

1. To prepare data inventories on natural resources, man-made structures and utilities, population and economic characteristics, and the roles and responsibilities of affect governmental units.
2. To identify lands suitable for development and areas where development should be restricted.
3. To develop economic and population projections.
4. To determine the land requirements for projected economic development and population growth.
5. To determine the public facilities an services required to accommodate existing unmet public needs and expected economic and population growth.
6. To revise the Comprehensive Plan and urban growth boundary for the City of Echo as necessary based on available information, citizen input, coordination and affected governmental units, and the goals and policies adopted herein.
7. To prepare, adopt and revise as necessary Zoning, Subdivision and Mobile Home Park Ordinances.

8. To establish additional policies and implementation measures consistent with the Comprehensive Plan as necessary.

C. Agricultural Lands

GOAL: To preserve and maintain agricultural lands.

It shall be City Policy:

1. To identify agricultural lands which should be preserved and protected from urban development.
2. To encourage residential, commercial and industrial development within the urban growth boundary.
3. To restrict non-farm development outside the urban growth boundary.
4. To retain land within the urban growth area presently zoned for exclusive farm use for farming until rezoning is requested.

D. Open Spaces, Scenic and Historic Areas, and Natural Resources

GOAL: To conserve open space and protect natural scenic, historic, and cultural resources.

It shall be City policy:

1. To identify open spaces; scenic, cultural and historic areas; and natural resources which should be preserved from urban development.
2. To preserve the floodway of the Umatilla River as permanent open space and protect fish, wildlife and vegetation.
3. To preserve open space through public acquisition of suitable land and by encouraging provisions for open space in private developments.
4. To examine any publicly owned lands including street rights of way for their potential open-space use before their disposition.
5. To encourage multiple uses of open space land, provided that the uses are compatible.
6. To protect archaeological and historic sites, structures and artifacts.
7. To conserve the area's natural resources.

E. Air, Water and Land Resources Quality

GOAL: To maintain and improve the quality of the air, water, and land resources of Echo.

It shall be City policy:

1. To encourage development to locate outside floodplains, natural drainage ways, steep slopes, and other hazardous areas. (Ord. 232-78, 10-18-78)
2. To limit the use of land in the 100-year floodplain and floodway of the Umatilla River to open space, recreation or other appropriate uses,

which minimize obstruction of floodwaters and the potential loss to life or property and which comply with Federal and State regulations. (Ord. 232-78, 10-1-8-7; 1986 Code)

3. To investigate alternative ways to reduce the flood hazard within the City limits.
4. To protect the City from possible overflow from or damage to the Feed Canal and Furnish Ditch.
5. To preserve the land between the Feed Canal and furnish Ditch as permanent open space with the exception of the area adjacent to the Lexington-Echo Highway.
6. To preserve the land between the Union Pacific rail line and the Feed Canal north and south of the sewage lagoons as permanent open space.
7. To require site specific information clearly determining the degree of hazard present from applicants who seek approval to develop residential, commercial or industrial uses within known areas of natural disasters and hazards. (Ord. 232-78, 10-18-78)
8. To participate in and comply with the National Food Insurance Program.
9. To apply flood hazard regulations to the 500-year floodplain of the Umatilla River and to the channels, borders and potential floodplains of the various creeks, draws, and gullies which extend from higher land to the north and east. (Ord. 256-84, 5-8-84)

F. Recreational Needs

GOAL: To satisfy the recreational needs of the citizens of Echo and visitors.

It shall be City policy:

1. To develop public meeting places and indoor recreational facilities for all age groups.
2. To build additional park and outdoor recreational facilities in order to meet recreational needs of residents and visitors as the community grows
3. To develop a community swimming pool complex as resources become available.
4. To require the dedication of parkland or fee in lieu of for park land or facilities as part of the review and approval of subdivisions and planned unit developments.
5. To plan community recreation facilities in conjunction with existing and planned school facilities so that they complement each other in function.
6. To maintain and improve the Echo Golf Course.

7. To develop a riverside park.
8. To encourage tourist commercial uses such as motels, restaurants, gas stations, truck stops and similar uses to cluster adjacent to the I-80N Freeway Interchange.

G. Economic Development

GOAL: To diversify and improve the economy of Echo.

It shall be City policy:

1. To preserve the land south of the I-80N Freeway Interchange for commercial and light
2. Industrial development and protect this area from encroachment from incompatible land uses.
3. To preserve the land adjacent to the Union Pacific rail line and west of the cemetery for light industrial development. (Ord. 237-78, 10-18-78)
4. To encourage diversified industrial development in order to provide a stable job market for City residents. (Ord. 237-78, 10-18-78; amd. Ord. 236-79)
5. To minimize high noise levels, heavy traffic volumes, and other undesirable effects of commercial and industrial developments.
6. To provide facilities necessary to attract and serve industry.
7. To cooperate with and encourage the use of local manpower training agencies and programs to expand job opportunities, reduce unemployment, reduce out-migration of youth, accommodate the growth of the local labor force, and maximize the utilization of local manpower as job opportunities increase.
8. To develop an improvement plan for the downtown area and encourage commercial development. (Ord. 237-78, 10-18-78)
9. To prepare an economic development strategy and work program. (Ord. 236-79)

H. Housing

GOAL: To increase the supply of housing to allow for population growth and to provide for the housing needs of the citizens of Echo.

It shall be City Policy:

1. To encourage a moderate rate of growth.
2. To cooperate with agencies involved in the development of low and moderate-income housing.
3. To encourage future residential developments which provide prospective buyers with a variety of residential lot sizes, a diversity of housing types and a range in prices.

4. To establish low-density residential areas within the urban growth boundary rather than rural residential areas adjacent to, but outside the urban growth boundary.
5. To require that low-density residential areas, which are subdivided or
6. partitioned, be laid out so that such areas may be further subdivided or partitioned at a later time while still insuring that necessary public facilities can be developed. Sub-areas which are equal to or greater than twelve percent (12%) slope are excepted.
7. To allow mobile homes in appropriate residential areas on individual lots as an outright use and mobile home parks as a conditional use.

I. Public Facilities and Services

Goal: To plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban development.

It shall be City policy:

1. To require property owners and developers to finance provision of urban services (water, sewer and storm drainage services and transportation infrastructure) to residential, commercial and industrial lands within the City's Urban Growth Area as these lands are urbanized.
2. To provide water and sewer services only within the Urban Growth Boundary (UGB) upon annexation or irrevocable consent to annex.
3. To discourage inefficient development without adequate public services and promote efficient use of urban and urbanizable land within the City's UGB.
4. To support development that is compatible with the City's ability to provide adequate public facilities and services.
5. To require that utilities are installed underground in all new developments and as major improvements are made to areas with above ground utilities.
6. To buffer the area around the cemetery from urban development.
7. To work with Umatilla County to insure adequate provision for and control of solid waste disposal sites.
8. To require the dedication of land, or fees in lieu of land for school sites or capital improvements as a part of the review and approval of subdivisions and planned unit developments as necessary.
9. To discourage development of new wells within the UGB if such wells either individually or collectively will substantially reduce the City's ability to provide a dependable source of water.
10. To identify approximate locations of future streets, water tank sites,

and other public facilities and review development to ensure conformity with such plans.

11. To prioritize development of land serviced by utilities and require the extension of water, sewer and storm drainage facilities for all urban level development within the UGB.
12. To require the provision of necessary onsite public facilities in new subdivisions including but not limited to water, sewer, and streets.
13. To adopt, review, and periodically update long-range master plans for its water, sewer, storm drainage and transportation systems including identification of locations of future facilities.
14. To adopt and periodically update, as a supporting document to this Plan, a Public Facilities and Capital Improvement Plan for development of public services and facilities in conformance with the policies of the Comprehensive Plan.
15. To comply with state and federal regulations for utility systems.
16. To establish and maintain a range of funding mechanisms for building new water, sewer, storm drainage and transportation infrastructure and maintaining existing infrastructure.
17. To monitor the condition of water, sewer, storm drainage and transportation infrastructure and finance regular maintenance of these facilities subject to fund availability.
18. To establish and maintain utility rates and user fees that equitably allocates costs for operations and maintenance to users.
19. To consider a variety of tools to finance new water and wastewater infrastructure as allowed by State law and adjust rates to keep up with current costs.
20. To maintain an 8-year supply of commercial and industrial land that is serviceable by water, sewer, and storm drainage and transportation infrastructure.
21. To work with the State and County to protect its water supply and enhance groundwater quality and quantity particularly within the City limits to establish wellhead protection measures as appropriate; work with landowners and managers for protection of water sources; and adhere to applicable permitting requirements when approving new residential, commercial and industrial development and when constructing new water, sewer, storm drainage and transportation infrastructure.
22. If soil conditions and density deem necessary, to require developers to complete storm drainage studies reviewed for acceptability by the City. The City intends to provide standards for storm drainage detention and

management facilities for management of urban storm runoff and to augment flood control by requiring on-site treatment of storm water runoff.

23. To take steps to minimize adverse impacts from construction and other sources of erosion and sedimentation on natural drainage ways and storm drainage facilities by requiring developers to provide plans acceptable to the City for onsite storm water treatment.
24. To allow for safe, orderly, and coordinated development as described above, the City intends to adopt appropriate utility and transportation design standards and construction specifications.

PUBLIC FACILITIES PROJECT LISTS

The following project titles are taken from the Public Facility Plan project list and capital improvement plan. Estimated locations, costs and timing are also included in the Public Facility Plan. The adoption of this project list into the Comprehensive Plan provides an estimate of the infrastructure improvements needed to serve urban development in the Echo urban growth boundary for the planning period. The adoption of this list does not constitute a pledge on the part of the City or other service providers to build the projects, to secure public funding for the projects, or to obligate present or future elected bodies to pursue the development of listed projects. Securing necessary public and/or private funding for the design and construction of these projects is independent of the Comprehensive Plan. For full list, time schedule and cost of improvement, see June 2001 Public Facilities Plan, Capital Improvement Plans (pages 15 – 18).

Table 1 - Water System

Water System Master Plan
New Well Construction
Booster system upgrades
Storage tank
Chlorination
Recoating
Rate Study
Transmission line improvements
Expansion of transmission line to serve commercial and industrial development

Table 2 - Sewer System

Wastewater System Master Plan
New cell/ lagoon
Treatment system upgrades based upon Master Plan
Sludge removal from lagoons
Outfall line
Distribution system improvements/ upgrade based upon Master Plan
Rate Study

Table 3 - Transportation System

Pave southeast sections of Jane, Hiestand and College Streets
Pave sections of Front, Buckley and Dale Streets
Pave sections of Dupont, Halstead and Kennedy Streets
Upgrade multi-use path between Buckley St. and the Lexington-Echo Hwy
Establish bike lanes, with signing and striping, along the Lexington-Echo Hwy, between Main and Gerone St.
Pave east sections of Willow, Sprague, Main, Bridge and Buckley Streets
Umatilla County Roadway Project
Construct a multi-use path along south side of Main Street between Thielsen Street and east end of existing sidewalk.
Reconstruct sidewalk on south side of Buckley Street between Dale Street and the multi-use path
Construct an integrated multi-use path system along the Feed and Furnish Ditches
Repave Dupont St. between Thielsen and Bridge
Repave Bridge St. between Front and dead end
Repave Bonanza St. between Garden and Halstead
Repave Kennedy St. between Dupont and RR tracks
Construct, repair, or replace sidewalks within the city limits
Construct a multi-use path along Thielsen Road between I-84 and the city limits
Construct multi-use path along north side of Gerone Street between Thielsen Street and Golf Course road
Umatilla County Pathway Project

Table 4 - Storm Drainage System

Storm Drainage Master Plan

CAPITAL IMPROVEMENT PLAN MAPS

Comprehensive Plan maps showing the locations of planned water and sewer improvements respectively are attached. Maps of planned transportation system improvements are included in the City's June 2001 Transportation System Plan. (ord. 330-1)

J. Transportation

GOAL: To provide and encourage a safe, convenient, and economic transportation system.

It shall be City policy:

1. To ensure that the road system within the City and urban area is adequate to meet public needs, including the needs of the transportation disadvantaged.
 - a. Develop a city transportation plan.
 - b. Meet identified maintenance level of service standards on the county and state highway systems.
 - c. Review and revise, if necessary, street cross-section standards for local, collector, and arterial streets to enhance safety and mobility.
 - d. Develop access management strategies where needed.
 - e. Evaluate the need for traffic control devices.
 - f. Analyze the safety of traveling speeds and consider modifying posted speeds as necessary.

- g. Evaluate the operation and safety of the street system.
 - h. Encourage the provision of transportation alternatives for elderly and handicapped citizens.
2. Preserve the function, capacity, level of service, and safety of existing and planned roadways.
 - a. Develop access management standards.
 - b. Develop alternative, parallel routes.
 - c. Promote alternative modes of transportation.
 - d. Promote transportation demand management programs.
 - e. Promote transportation system management.
 3. Develop procedures to minimize impacts to and protect transportation facilities, corridors, or sites during the development review process.
 4. Improve coordination among Umatilla County, ODOT, the US Forest Service (USFS), the Federal Highway Administration (FHWA), and the city.
 - a. Cooperate with ODOT in the implementation of the Statewide Transportation Improvement Program (STIP).
 - b. Work with Umatilla County to coordinate roadway maintenance and improvements and to develop joint policies concerning local roads and streets within the Urban Growth Boundary.
 - c. Work with the county in establishing cooperative road improvement programs and schedules.
 - d. Work with the county in establishing the right-of-way needed for new roads identified in the transportation system plan.
 - e. Take advantage of federal and state highway funding programs.
 - f. Encourage the county and ODOT to improve the existing road system to and within the City.
 - g. Consider pooling resources with other cities and the county to provide services the benefit areas both inside and outside the City.
 5. Increase the use of alternative modes of transportation (walking, bicycling, and public transportation) through improved access, safety and service.
 - a. Provide sidewalks or shoulders and safe crossings on collectors and arterials.
 - b. Amend and implement a city bicycle plan.
 - c. Seek Transportation and Growth Management (TGM) and other funding for projects evaluating and improving the environment for

alternative modes of transportation.

- d. Cooperate with other cities and the county to pursue inter-city transit service opportunities.
- e. Utilize local improvement districts (LID's) when possible to provide sidewalks and curbs for local neighborhoods.
6. To repave city streets and provide curbs and sidewalks as resources are available.
7. To encourage the Union Pacific Railroad to landscape its right-of-way through the City.
8. To encourage ~~Umatilla County~~ the State to improve ~~County Road No. 848 Thielsen Road~~ between the City and the I-84 Freeway Interchange and to plan for adequate access to adjacent property including pedestrian/bicycle facilities on both sides of the roadway facilities.
9. To work with Umatilla County to develop joint policies concerning local roads and streets within the urban growth boundary.
10. To coordinate with the Oregon Department of Transportation (ODOT) to implement the highway improvements listed in the Statewide Transportation Improvement Program (STIP) that are consistent with the Transportation System Plan and the city Comprehensive Plan.
11. To consider the findings of ODOT's draft Environmental Impact Statements and Environmental Assessments as integral parts of the land use decision-making procedures. Other actions required, such as a goal exception or plan amendment will be combined with review of the draft EA or EIS and land use approval process.
12. To acknowledge that the Echo Transportation System Plan is an element of the Comprehensive Plan. It identifies the general location of transportation improvements. Changes in the specific alignment of proposed public road and highway projects that shall be permitted without plan amendment if the new alignment falls within a transportation corridor identified in the Transportation System Plan.
13. To allow operation, maintenance, repair, and preservation of existing transportation facilities without land use review, except where specifically regulated.
14. To allow dedication of right-of-way, authorization of construction, and the construction of facilities and improvements, for projects authorized in the Transportation System Plan, the classification of the roadway and approved road standards without land use review.
15. To allow changes in the frequency of transit, rail and airport services that are consistent with the Transportation System Plan without land use review.

16. To acknowledge that for State projects that require an Environmental Impact Statement (EIS) or Environmental Assessment (EA), the draft EIS or EA shall serve as the documentation for local land use review, if local review is required.
 - a. Where the project is consistent with the Transportation System Plan, formal review of the draft EIS or EA and concurrent or subsequent compliance with applicable development standards or conditions;
 - b. Where the project is not consistent with the Transportation System Plan, formal review of the draft EIS or EA and concurrent completion of necessary goal exceptions or plan amendments.
17. To protect the function of existing and planned roadways as identified in the Transportation System Plan.
18. To include a consideration of a proposal's impact on existing or planned transportation facilities in all land use decisions.
19. To protect the function of existing or planned roadways or roadway corridors through the application of appropriate land use regulations.
20. To consider the potential to establish or maintain access ways, paths, or trails prior to the vacation of any public easement or right-of-way.
21. To preserve right-of-way for planned transportation facilities through exactions, voluntary dedication, or setbacks.
22. To plan and develop a network of streets, access ways, and other improvements, including bikeways, sidewalks, and safe street crossings to promote safe and convenient bicycle and pedestrian circulation within the community.
23. To require streets and access ways where appropriate to provide direct and convenient access to major activity centers, including downtown, schools, shopping areas, and community centers.
24. To investigate the existing and future opportunities for bicycle and pedestrian access ways in areas of new development. Many existing access ways such as user trails established by school children distinguish areas of need and should be incorporated into the transportation system.
25. To include bikeways on all new arterials and collectors within the Urban Growth Boundary except on limited access freeways.
26. To proceed with retrofitting existing arterials and collectors with bike lanes on a prioritized schedule as appropriate and practical (i.e., bike lanes may not be appropriate in downtown core areas where it would require the removal of parking).
27. To include sidewalks on all new streets within the Urban Growth

Boundary except on limited access freeways.

28. To proceed with retrofitting existing streets with sidewalks on a prioritized schedule.
29. To give priority to developing access ways to major activity centers within the Echo Urban Growth Boundary, such as the downtown commercial center, schools, and community centers.
30. To connect bikeways and pedestrian access ways to local and regional travel routes.
31. To design and construct bikeways and pedestrian access ways to minimize potential conflicts between transportation modes. Design and construction of such facilities shall follow the guidelines established by the Oregon Bicycle and Pedestrian Plan.
32. To give maintenance and repair of existing bikeways and pedestrian access ways (including sidewalks) equal priority to the maintenance and repair of motor vehicle facilities.
33. To provide bicycle parking facilities at all new residential multifamily developments of four units or more, commercial, industrial, recreational, and institutional facilities. (ord. 326-01)
34. The City of Echo recognizes the importance of I-84 in the movement of people and goods to and from the region and is committed to protecting the function of the interchange to provide access to I-84. The function of the interchange as defined in the Interchange Access Management Plan is to safely and efficiently provide dispersed access into the City of Echo and the surrounding area, and to accommodate future traffic demands associated with current urban and rural land uses.
35. The City of Echo concurs with the analysis and finding of the Stanfield Interchange Access Management Plan and will support the land use designation described in the Access Management Plan and will coordinate with ODOT prior to amending its transportation system plan or proposing transportation improvements that could affect the function of the interchanges.
36. The Stanfield Interchange Access Management Plan is adopted by reference as part of the Comprehensive Plan and Transportation System Plan.

K. Energy Conservation

GOAL: To conserve energy and develop and use renewable energy resources.

It shall be City policy:

1. To revise the Zoning Ordinance to protect solar access.
2. To encourage orientation and design of new streets and buildings to

- allow for utilization of solar energy and provision of landscaping to provide summer cooling.
- 3. To design the extension and upgrading of water and sewer lines and facilities to minimize energy use.
- 4. To encourage building owners to insulate their buildings to conserve energy and reduce operating costs.

L. Urbanization

GOAL: To provide for an orderly and efficient transition from rural to urban land use.

It shall be City policy:

1. To establish an urban growth boundary to identify and separate urbanizable land from rural land.
2. To develop a cooperative process between Echo and Umatilla County for the establishment and change of the urban growth boundary.
3. To first consider land in the designated expansion area for inclusion within the urban growth boundary.
4. To consider only those areas that are within the urban growth boundary for annexation to the City.
5. To work with Umatilla County to develop policies and regulations to manage land development within the urban growth boundary outside City limits.
6. To tax land within the urban growth boundary based on current use and market value.
7. The Stanfield Interchange Access Management Plan is an appropriate mechanism to preserve the function and capacity of the interchange while accommodating planned growth and development in the urban area.
8. The City of Echo will support existing land uses and will focus high intensity commercial development away from the interchange area should urban growth be necessary in this area over the long term.
9. Upon urban growth expansion, the City shall adhere to a policy of not rezoning agricultural or rural residential lands in the area to commercial uses within the interchange area. When and if necessary, less-intensive designations such as residential and industrial uses shall be considered.
10. The City of Echo shall coordinate with ODOT in evaluating land use and transportation actions that could affect the function of I-84 and the interchange.
11. The Interchange Access Management Plan shall be reviewed every 5 to

10 years or as needed, such as an urban growth boundary expansion or zone change.

7-1-6 PLAN AND IMPLEMENTATION MEASURE REVIEW:

The City Comprehensive Plan and implementation measures shall be reviewed at least annually to determine conformity with changes in:

- Oregon Revised Statutes and administrative rules;
- Oregon case law;
- Oregon Statewide Planning Goals;
- Requirements of the City;
- Needs of residents or landowners within the City or urban growth area; and
- Concerns of the County and other affected governmental units.

If the City Comprehensive Plan, implementation measures, or both fail to conform to any of the above criteria, the nonconforming document(s) shall be amended as necessary and as soon as practicable. (Ord. 232-78, 10-18-78)

7-1-7 PLAN AMENDMENT APPLICATIONS:

An amendment to the text of this Chapter or to the Comprehensive Plan map may be initiated by the City Council, an affected governmental unit, or by a property owner or resident of the City or urban growth area. An owner of property located within a designated expansion area may apply for amendment of the urban growth boundary. All applications for plan amend-ments shall be made on forms available from the City accompanied by a fee in an amount established by the City Council. (Ord. 236-79)

7-1-8 PLAN AMENDMENT:

After the City Council determines that proposed amendments should be considered, amendment of the Comprehensive Plan shall be based on the following procedure and requirements:

- A. The City Council shall set a public hearing date and give notice thereof through a newspaper of general circulation in the City at least ten (10) days prior to the hearing and if applicable, notice shall be mailed to:
 1. Property owners within tow hundred fifty feet (250') of land subject to a proposed amendment to the Plan map; and
 2. Affected governmental units which may be impacted by or who have requested opportunity to review and comment on proposed amendments.
- B. Copies of proposed amendments shall be made available for review at least ten (10) days prior to the City Council hearing.

- C. Within ten (10) days after the close of the City Council hearing, the City Council shall make findings of fact and adopt, adopt with changes, or deny the proposed amendments. Adoption of Plan amendments is effective upon;
1. City adoption in the case of amendment of the Plan map for an area within the City limits.
 2. County adoption in the case of amendment of Plan policies or the Plan map for the urban growth area; and
 3. County adoption and Land Conservation and Development Commission approval in the case of amendment of Plan goals or urban growth boundary location.
- D. Copies of Plan amendments adopted by the City shall be sent to the county and the Land Conservation and Development Commission within ten (10) days after adoption. (Ord. 232-78, 10-18-78).

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CHAPTER 1: INTRODUCTION

This introduction chapter presents a project overview which includes the project management team and the public involvement program for the Stanfield Interchange Area Management Plan (IAMP).

Project Overview

The Stanfield Interchange is located on Interstate 84 at exit 188 near the cities of Stanfield and Echo, Oregon. The interchange bridge was constructed in 1967 and widened in 1987 to better accommodate pedestrian and bicycle travel. The need to reconstruct the interchange was previously identified due to structural issues, sight distance deficiencies attributed to the horizontal curvature of the bridge and substandard geometric design. However, a recent interchange bridge evaluation has concluded the overpass does not require reconstruction at this time. Instead, a structural repair project is proposed to mitigate the structural issues without modifying the interchange bridge. The existing sight distance limitations will remain.

The Stanfield IAMP was prepared in cooperation with state and local jurisdictions to identify transportation improvements needed to serve forecasted long-range growth and access management strategies in the interchange area. The purpose of the Stanfield IAMP is to maintain the capacity of the interchange area while providing safe access to adjacent properties and the connecting roadway system.

Project Management Team

The Project Management Team (PMT) includes key representatives from agencies directly involved in the Stanfield IAMP. These individuals were active in the review process and provided comments on each of the work products developed during this study, and were included in monthly updates to the overall work process. The initial roster of the PMT is listed below.

- Diane Berry, City of Echo / City Manager
- Doug Wright, Interchange Project Leader
- George Ruby, ODOT District Manager
- Patrick Knight, ODOT Contract Manager
- Patty Perry, Umatilla County / Planner
- Shelly Bonnett, City of Stanfield / City Manager
- Tom Kuhlman, ODOT Region Traffic Engineer
- Carl Springer, DKS Associates / Consultant Project Manager

Public Meetings

In addition to the regular PMT meeting, a public open house was held to present interim work products, and to solicit feedback and discussion from the general public. Residents of both Stanfield and Echo and any residence from the surrounding unincorporated portions of Umatilla County were invited to the public workshop. Local business owners were also encouraged to attend the open house.

The open house served as an opportunity to summarize the first three technical memos that report the existing interchange area deficiencies, and how the various plans have attempted to address the long-term needs for the interchange. The public was asked to provide feedback and comments on the proposed reconstruction of the interchange and problems that may be created by the access spacing standards along US 395. Minutes of the public open house and individual comments were reviewed and incorporated into the decision-making process of this plan.

CHAPTER 2: GOALS AND OBJECTIVES

This chapter summarizes the overall goals and objectives developed for this study to provide an evaluation criteria for the Stanfield IAMP. The goals and objectives recommended for the Stanfield IAMP are listed below.

Goal #1: Enhance congestion management and maintain adequate freight mobility – This interchange provides a vital connection to state and regional facilities for freight travel and access to local communities. It is important that the long-term facility design and access provisions for adjoining land development does not detract adversely from these primary objectives.

The success of meeting these goals will be measured by:

- Compliance with applicable access spacing standards, as incorporated into local TSPs and the ODOT *Highway Plan*.
- The ratio of long-term traffic volumes versus the ultimate facility improvement plans, referred to as volume-to-capacity ratio.

Goal #2: Increase safety for all travel modes – Several elements of the existing interchange fall short of providing adequate facilities for trucks, pedestrian and bicycle travels. All travel modes that could potentially use the interchange will be reviewed in the context of a recommended alternative to evaluate traffic safety issues. The ability of the plan to accommodate all travel modes will be evaluated by:

- Sight distance for automobiles and trucks at the freeway ramp junctions, and other public cross-streets within the study area.
- Provisions bicycle facilities consistent with State Bicycle Planning guidelines.
- Provision of pedestrian facilities consistent with State standards.

Goal #3: Coordinate transportation plans and relevant land development standards between jurisdictions – The outcomes of this planning study will be compared to each of the transportation plans for local jurisdictions, and necessary plan updates will be identified. As appropriate, changes to land use ordinances will be noted for subsequent adoption by city or county boards to implement the plan recommendations.

CHAPTER 3: BACKGROUND DOCUMENT REVIEW

This chapter summarizes the review of background documents and identifies potential conflicts and discrepancies between previous planning documents and demonstrates how local plans fit into the larger regional context. The documents reviewed are listed below.

City of Echo Transportation System Plan (TSP), April, 2001
City of Stanfield Transportation System Plan (TSP), June, 2001
US 395 North Corridor Plan
Pilot Travel Center, Traffic Impact Study, November, 1995
The Oregon Rural Lands Database, April, 2002
US 395 Corridor Refinement Plan
Joint Management Agreement Between City of Echo and Umatilla County
Joint Management Agreement Between City of Stanfield and Umatilla County
Access Management Rules (OAR 734-051)
Oregon Highway Plan
Freight Moves the Oregon Economy
State Transportation Improvement Program (STIP)
Transportation System Planning Guidelines

These studies were considered through the process, as appropriate, but the land development estimates and travel demand forecasts done in conjunction with the IAMP supersede these studies.

Key Findings

Our review of the background transportation planning documents revealed a long list of issues that should be considered in this project, as discussed in later sections. The key findings that appear to be most relevant in this study are noted below:

- Freight movement (trucks, rail and pipeline) is of paramount importance to the area, and the IAMP must take these modes into consideration.
- Non-motorized forms of transportation should be encouraged through the adequate provision of pedestrian and bicycle facilities, enhancing transportation connections between Echo and Stanfield.
- Transportation System Plans (TSP) for both the City of Stanfield and the City of Echo should be updated with the Stanfield Interchange Area Management Plan outcomes.

City of Echo Transportation System Plan (TSP), April, 2001

The City of Echo, Oregon is located a few miles south of I-84 and is accessed from the Stanfield interchange via Thielsen Road.

Key areas of the TSP that pertain to the Stanfield IAMP are primarily access spacing issues and the relationship of Thielsen Road to I-84. The Echo TSP conforms to ODOT's access spacing criteria, and therefore does not present any additional constraints to the IAMP. The Capital Improvement Program listed in the TSP includes the following projects that should be considered in the IAMP:

- Umatilla County Roadway Project (Thielsen Road) (\$1,941,000 total project cost)
- Construct a multi-use path along Thielsen Road between I-84 and the city limits (cost TBD).

The Echo urban growth boundary (UGB) extends north of the City limits along Thielsen Road up to the I-84 eastbound on-off ramps.

City of Stanfield Transportation System Plan (TSP), June, 2001

The City of Stanfield, Oregon, is located a few miles north of the Stanfield/I-84 interchange. It is accessed from the interchange via Highway 395.

Key areas of the TSP that pertain to the Stanfield IAMP are primarily access spacing issues and the relationship of Highway 395 to I-84. The Stanfield TSP conforms to ODOT's access spacing criteria, and therefore does not present any additional constraints to the IAMP. The Capital Improvement Program listed in the TSP includes the following projects that should be considered in the IAMP:

- Construct new access to US 395, north of I-84 interchange (\$250,000 total project cost)
- Construct multi-use paths along US 395 to I-84 interchange (\$255,000 total project cost)

The Stanfield UGB extends south of City limits along US 395, up to the I-84 westbound on-off ramps.

US 395 North Corridor Plan

The US 395 corridor is covered in two studies: the *US Highway 395 North (Umatilla-Stanfield) Draft Corridor Strategy* and the *US Highway 395 South (Pendleton-California Border) Corridor Strategy*. The Corridor Strategies were developed to identify projects for the Oregon STIP.

The US 395 North Corridor Plan covers a section of US 395 extending from I-84 (including the city of Echo) to US 730 in the city of Umatilla. This plan addresses transportation system improvement projects and provides an access management plan for the entire US 395 North Corridor.

The purpose of the Corridor Plan is to establish both short and long-term management direction for all modes of transportation in the corridor (there is currently passenger vehicles, three Union Pacific railroad lines, the UP Hinkle Rail Yard, a Greyhound Bus line, paratransit service, the Port of Umatilla and a general aviation airport located in the corridor), and make major transportation tradeoff decisions. Projects that were identified in the area of this study are summarized in Table 1.

Table 1 - US 395 North Corridor Plan Projects near Echo or Stanfield

<i>Lead Agency</i>	<i>Description</i>
<i>Constrained Funding*</i>	
ODOT	Construct a new street access and traffic signal on US 395 approximately 1,320 feet north of the I-84 westbound on/off ramp. Project should include both a left turn storage bay and right turn deceleration lanes.
Stanfield	Extend multi-use asphalt path along the west side of US 395 from Ball Avenue to the I-84 interchange. Also construct a 10' wide path along the east side of the US 395 from the north end of the I-84 overpass to approximately ¼ mile north of the interchange.
<i>Unconstrained Funding**</i>	
ODOT/Stanfield	Construct new access to US 395 and realign Edwards Road
Echo/Umatilla County	Widen Thielsen Road to 36' to allow for two 12' travel lanes and 6' wide paved shoulders and include a 6' wide raised sidewalk across the I-84 overpass.

**Constrained* – These projects, along with committed projects, are deemed the highest priority. Constrained projects do not yet have funding authorization, but will be implemented in later years of the STIP.

***Unconstrained* – These projects would be funded if all the needs in the Corridor could be funded. However, based on current revenue forecasts they are not likely to be funded within the 20-year planning horizon. Alternative funding sources for these projects include development exaction, local improvement districts and urban renewal districts, among others.

The overall corridor strategy is to “accommodate efficient movement of through travel, while maintaining environmental integrity, enhancing travel safety and supporting economic development.” The reports set forth objectives which are intended to embody this overall strategy for the corridor, and to set direction and provide guidance for corridor-wide transportation plans and improvements.

Pilot Travel Center, Traffic Impact Study, November, 1995

This report documents projected traffic impacts associated with a proposed 18-acre truck stop adjacent to the I-84/US 395 interchange. The truck stop was proposed with two access ways, one for trucks only, approximately 925 feet from the I-84 westbound on ramp, and one for automobiles only located approximately 675 feet from the same on ramp. All study intersections were projected to operate acceptably at LOS D or better, even under year 2015 traffic volume conditions. Left turn lanes at the site driveways were found to be warranted. Right turn lanes were not found to be warranted, however, they were recommended for both safety and capacity reasons (namely the reduction of delay for through traffic).

The Oregon Rural Lands Database, April, 2002

This data CD includes aerial photographs, geographic information system shape files for land use information such as contours, county boundaries, forest ownership, zoning, watersheds, wetlands, water resources, vegetation, soils, land ownership, water quality, etc.

US 395 Corridor Refinement Plan

This technical memorandum was completed as a supplement to the US 395 Corridor Refinement Plan, with the specific assignment of evaluating 2025 buildout year development assumption impacts on intersections in the I-84 corridor, including both east and westbound on-off ramps at the I-84/US 395 interchange.

Assuming full build out utilizing peak hour traffic generation based on a reasonable maximum development potential it was found that the I-84/US 395 eastbound on-off ramp intersection requires a signal by 2025 in order to meet capacity demands.

Joint Management Agreement Between City of Echo and Umatilla County

The joint management agreement (JMA) was created in 2004 to facilitate the appropriate developmental transition from rural to urban land uses within the City's urban growth area and to insure cooperation and information sharing in both the establishment and revisions of the UGB. Additionally, the JMA insures cooperation between the City and the County regarding development concerns within the urban growth area and other identified areas of mutual interest.

With relevance to the Stanfield Interchange Area Management Plan, the County shall coordinate with and seek comments from the City regarding major transportation improvement projects. Thus, both City and County Comprehensive Plans must be updated with the results from this study. The Echo UGB extends up to the I-84 eastbound on-off ramps.

Joint Management Agreement Between City of Stanfield and Umatilla County

The joint management agreement (JMA) was created in 2002 and shares the same basic content as the afore mentioned JMA between the City of Echo and Umatilla County.

Both City and County Comprehensive Plans must be updated with the results from the Stanfield IAMP study. The Stanfield UGB extends to and includes the westbound I-84 on-off ramps, meaning that according to the JMA, the City retains responsibility for land use actions as the Stanfield IAMP project will protrude into the City's UGB.

Access Management Rules (OAR 734-051)

The purpose of Oregon's Access Management Rule is to control the issuing of permits for access to state highways, state highway rights-of-way and other properties under the State's jurisdiction. In addition, the ability to close existing approaches, set spacing standards and establish a formal appeals process in relation to access issues is also identified.

These rules enable the State to set policy and direct location and spacing of intersections and approaches on state highways, ensuring the relevance of the functional classification system and preserving the efficient operation of state routes. Regulating access can:

- Protect resource lands
- Preserve highway capacity
- Ensure safety for segments of state routes with sharp curves, steep grades or obstructed sight distance.

The access management standards adopted by ODOT are summarized in Table 2.

Table 2 - ODOT Access Management Standards for US 395

Facility	Posted Speed (MPH)				
	>55	50	40,45	30,35	<20
Statewide Highway (feet)	1320	1100	990	770	550

These standards will be used in the IAMP to verify access spacing for any proposed roadways in the vicinity of the highway interchange and for analysis of current access conditions on congested state highways. These standards will be applied to all rights of way under ODOT's jurisdiction, namely US 395, which is designated as a statewide highway.

Oregon Highway Plan

The basic framework for the Oregon Highway Plan is a refinement and application of the goals and policies stated in the Oregon Transportation Plan applied to the state highway system. These goals include:

- Increasing safety and capacity as well as preserving capital investments previously made on the state highway system.
- Fostering cooperation with both regional and local governments.
- Increasing linkages between land use and transportation.
- Access management development and adherence.
- Providing linkages with other transportation modes.
- Creating a sustainable and environmentally friendly system.

The Highway Plan gives policy and investment direction to large scale corridor plans and TSPs, but is not intended to direct specific projects and modal alternatives. The access spacing standards and maximum volume-to-capacity (v/c) benchmarks are relevant to the Stanfield IAMP.

The highways of statewide importance that are specifically identified in The Highway Plan in the vicinity of the Stanfield Interchange include:

- Interstate 84, which is classified as a Interstate Highway and Major Freight Route with the primary objective being to provide mobility between urban areas and a secondary objective being to provide mobility for regional trips *within* a metropolitan area. The operations of this facility should provide safe and efficient high-speed continuous flow. The maximum volume to capacity ratios for two hour peak hour operating conditions is .90. One mile is required for access spacing between the start and end of tapers of adjacent intersections.
- US 395 is classified as a Statewide Highway and is part of the National Highway System (NHS). The primary objective is to provide inter-urban and inter-regional mobility to areas that are not directly served by Interstate Highways. Statewide Highways should provide safe and efficient, high speed, continuous flow operation. Interruptions in urban areas should be minimal. The maximum volume-to-capacity ratio for two hour peak operating conditions is 0.80.

Freight Moves the Oregon Economy

The movement of freight has a far reaching effect on the Oregon economy. This report attempts to identify some of the concerns and needs about maintaining and enhancing current and future freight mobility. The report simply reports information about freight from numerous federal, state, regional, local, and other sources. Therefore, it serves as a compendium to these documents rather than an independent document that develops new data or ideas. It provides an overview of:

- Importance of freight to the national and Oregon economy
- Freight transportation planning and programming
- Oregon's freight transportation system
- Freight performance, concerns and needs
- Possible future directions for freight capacity

Interstate 84 is one of the most important east-west highways for moving freight in the state of Oregon and is designated as a facility in the National Highway System as well as a State System Route. Truck volumes on I-84 average over 3,000 trucks a day at the Stanfield interchange. Additionally, Union Pacific operates a rail line through the I-84 corridor and an oil distribution line from the Oregon-Washington border to a Union Pacific distribution pick up area. US 395 averages between 500 and 1,500 trucks a day and also supports a rail and gas line within the corridor.

As efficient freight movement will be an important consideration for the Stanfield IAMP, all relevant aspects of this plan will be incorporated.

State Transportation Improvement Program (STIP)

The current (2004-2007) Statewide Transportation Improvement Program (STIP) serves as ODOT's short term capital improvement program and provides funding and scheduling information for transportation projects for both ODOT and the metropolitan planning organizations in the state. Projects funded in the STIP reflect and advance the Oregon Transportation Plan for highways, public transportation, freight and passenger rail and bicycle and pedestrian facilities. Additionally, monies obtained from the sale of state bonds authorized in the 2003 Oregon Transportation Investment Act (OTIA III) and placed in the STIP coffers have been dedicated to modernization, bridge and pavement preservation projects. Therefore, many of the projects in the 2004-2007 STIP are preservation oriented.

The following projects will have an impact on the Stanfield IAMP:

- Reconstruction on US 395 of the US 395/I-84 interchange. Construction is scheduled to begin in 2007 (total cost budgeted for \$2,157,000).
- Access management improvements on US 395 are scheduled to begin in 2006 for the Pilot Truck Stop located on US 395/I-84 interchange (total cost budgeted for \$1,017,000).
- Replace existing bridge on I-84 at the US 395/I-84 interchange and provide access management improvements on I-84 for the Pilot Truck Stop. Construction scheduled to begin 2006 (total cost budgeted for \$21,401,000).

Transportation System Planning Guidelines

The 2001 Transportation System Planning Guidelines updates the Oregon Department of Transportation's 1995 guidelines and is designed to provide assistance to local jurisdictions in the preparation and update of TSPs to comply with requirements associated with:

- Transportation Planning Rule 1999, OAR 660
- Access Management Rules, 2000 OAR 734
- Oregon Public Transportation Plan,, 1997
- Oregon Highway Plan, 1999
- Oregon Aviation Plan, 2000
- Executive Order 12898 on Environmental Justice for Minority and Low Income Populations: USDOT Order 56102 and FHWA Order 6640.23.
- Executive Order EO-23 on Quality Development
- Executive Order EO-00-07 on Sustainability

The Stanfield IAMP will comply with all of the relevant guidelines and will serve as an amendment to several local TSPs including the City of Echo and the City of Stanfield and Umatilla County.

CHAPTER 4: EXISTING CONDITIONS

This chapter defines the geographic boundaries of the IAMP and presents the existing transportation and land use conditions in the study area. This information includes an assessment of land use development patterns, policies, and regulations that could affect the safety, function, and capacity of the street system.

The first step in studying a transportation corridor typically includes an assessment of the facilities currently provided and how well they meet today's travel demands and agencies standards. This is referred to as an Existing Conditions analysis. Key background information was taken from the US 395 Corridor Refinement Plan, a traffic study for the Pilot Travel Center and traffic counts collected by ODOT in August 2003. Field surveys were taken to collect additional inventory data for the purpose of this study. This data was evaluated to establish benchmarks for future assessment of transportation performance in the interchange study area.

Figure 1 shows the interchange study area, located along Thielsen Road and US 395 at Interstate 84 between Echo and Stanfield, Oregon. The study area boundary begins approximately one-half mile south of the I-84/US 395 interchange and extends the same distance to the north.

For an interchange with two-lane crossroads in an urban area, the Oregon Highway Plan (OHP) identifies a minimum spacing standard¹ of 1,320 feet to the nearest restricted access or full access. The study area for the Stanfield IAMP essentially doubles this influence area (approximately 2,640 feet, or one-half mile).

Motor Vehicles

Interstate-84, Thielsen Road and US 395 primarily serve autos, trucks and bus traffic within the study area. The motor vehicle system can be described by their functional designations, the physical characteristics of the existing facilities, current day design standards, and the volume of motor vehicle traffic using them. This information is useful to understanding how well the current facility meets with current standards, and how effectively it serves the existing operational requirements for motor vehicles.

Street Functional Class System

Street system functional classifications relate the roadway design to how it should be used. The City of Echo and Umatilla County TSPs classify Thielsen Road as an arterial street. Arterials form the primary roadway network within and through a region. They provide a facility which distributes traffic between cities, neighborhoods and districts. Generally, arterials are high capacity roadways

¹ *Oregon Highway Plan*, Oregon Department of Transportation, 1999, Table 16.

which carry high traffic volumes entering or leaving the City. Thielsen Road carries the highest amount of traffic in the Echo urban area² and connects the local neighborhood streets in Echo with I-84 and US 395.

On the other side of Interstate 84, the City of Stanfield TSP³ and the Oregon Highway Plan⁴ classify US 395 as a Statewide Highway. According to the 1999 OHP, the primary function of a State Highway is to “provide connections and links to larger urban areas, ports, and major recreation areas that are not directly served by interstate highways.” The management objective for statewide highways is to provide for safe and efficient high-speed, continuous-flow operation in rural areas and high- to moderate-speed operations with limited interruptions of flow in urban and urbanizing areas. Thus, access spacing and other operational roadway characteristics such as traffic control devices are of primary importance. The Umatilla County TSP⁵ classifies all ODOT facilities including Interstate, State and US Highways as arterial roads. Table 3 distinguishes the facility and jurisdictional responsibility and classifications of the roadways within the study area.

Table 3 - Existing Functional Classification

Facility	Jurisdictional Responsibility	State Classification	County Classification	City Classification
I-84	ODOT	Interstate Highway	Arterial	N/A
US 395	ODOT	Statewide Highway	Arterial	Statewide Highway
Thielsen Road	ODOT	District Highway	Arterial	Arterial

Roadway Characteristics

The posted speed along US 395 in the study area is 45 miles per hour (mph). The pavement width along US 395 is approximately 82 feet with four travel lanes and a 14.5-foot, raised-median between the I-84/US 395 interchange and W. Stanfield Avenue. The raised center median was constructed within the last year to improve site circulation and safety for the Pilot Travel Center, which was opened in 1996. The first driveway, approximately 650 feet from the interchange, is restricted to autos only, and general truck and recreational vehicles are directed to W. Stanfield Avenue, approximately 1,300 feet from the nearest off-ramp. The raised center median prohibits left-turns from the Pilot Travel center at the auto driveway approach. There are no turning restrictions at the truck access point via W. Stanfield Avenue. Aside from the median restrictions, there are no other restrictions for motor vehicle movement on US 395 within the study area. To date, there are no pedestrian sidewalks or bicycle facilities along US 395 and pavement condition is considered good based on a subjective evaluation of pavement conditions.

The bridge crossing at the I-84 interchange is also posted speed at 45 mph. There are two travel lanes, one in direction with a four-foot shoulder on each side of the bridge. There are no sidewalks or striped bicycle lanes on the bridge. The five-lane section of US 395 transitions to the two-lane bridge over crossing I-84 by dropping the outside southbound lane as a right-turn only lane onto the freeway westbound, and adding a lane from the westbound off-ramp. The westbound off-ramp right turn onto US 395 is not controlled by stop signs, and is a free-flow movement for motor

² *Echo Transportation System Plan*, David Evans and Associates, February 2001.

³ *Stanfield Transportation System Plan*, David Evans and Associates, June, 2001.

⁴ *Oregon Highway Plan*. Oregon Department of Transportation, 1999.

⁵ *Umatilla County Transportation System Plan*, David Evans and Associates, April 2002.

vehicles. Vehicles that exit I-84 westbound that intend to turn left into the Pilot Travel Center at the first driveway must weave across one lane of through traffic within 400 feet, possibly causing a safety related issue. As noted above, trucks are directed to use the entrance at W. Stanfield Avenue, another 1000 feet to the north.

Thielsen Road is a two-lane facility with a posted speed of 45 miles per hour south of the interchange. The pavement width along Thielsen Road is approximately 50 feet with two travel lanes. This section of Thielsen Road was recently improved, and ownership transferred to ODOT from Umatilla County. There are no dedicated pedestrian or bicycle facilities in place and pavement condition is considered good based on a subjective evaluation of pavement conditions. As noted previously, a multi-use path is planned for this section of roadway, but these improvements have not been reflected in the state's improvement program budget.

Table 4 summarizes the existing roadway characteristics, in table form, for the study area. In addition to the general roadway characteristics mentioned above, driveway and intersection approaches in the study area have specific characteristics as well. Table 5 designates the driveway or intersection approach with the associated characteristics.

Table 4 - Existing Roadway Characteristics

Facility	Posted Speed	Pavement width	Lanes	Pedestrian Facilities	Bicycle Facilities	Pavement Conditions
US 395	45 mph	82 feet	4	No	No	Good
Thielsen Road	45 mph	50 feet	2	No	No	Good
Interchange	45 mph	50 feet	3	No	No	Good

Table 5 - Intersection Approach Characteristics

Access Point	Ownership	Side of Roadway	Approach Width
<i>US 395</i>			
Private Drive 1	Private	East	25 feet
Pilot Truck Stop (autos)	Private	West	45 feet
Private Drive 2	Private	East	25 feet
W. Stanfield Avenue (Pilot Truck Stop – trucks & recreational vehicles)	Public/Private	West	60 feet
Irwin Road	Public	East	30 feet
<i>Thielsen Road</i>			
Private Drive 3	Private	West	25 feet

The recommended stopping sight distance for all three of the above roadways is 495 feet, based on a design speed of 55 mph (10 mph over the posted speed limit), based on standards⁶ published by the American Association of State Highway and Transportation Officials (AASHTO). The private drive 1 (right-in, right-out), immediately north of the overcrossing, has the shortest sight distance at 500' due to vertical curves in the existing bridge, but is still within the required parameters. The other driveways and approaches on US 395 have longer sight distance, and comply with this standard. Similarly, there are no sight distance restrictions on Thielsen Road within the study area.

⁶ *A Policy on Geometric Design of Highways and Streets*, AASHTO 2001.

However, the vertical and horizontal curves of existing bridge structure overcrossing I-84 does limit sight distance for vehicles stopped at the off-ramps. Sight distance at each intersection is approximately 400 feet, which is less than the AASHTO minimum stopping sight distance parameters. This substandard conditions should be corrected with the new overcrossing and interchange alignment.

Access Spacing

Driveway access points and intersection approaches in the study area were inventoried and compared to the access spacing standards in the *Oregon Highway Plan* and local TSPs. These standards state that the minimum distance from the center of the off ramp to the center of the first full access approach is 1,320 feet⁷. Beyond this distance from the interchange, the general spacing standard⁸ between access points (including driveways and intersection approaches) is 990 feet on US 395 (statewide highway) and 500 feet on Thielsen Road (district highway) assuming a posted speed of 45 miles per hour and in a urban setting. Figure 3 the access points along both US 395 and Thielsen Road.

North of I-84, there are three private street or driveway connections within the minimum 1,320 feet access spacing standard. The first is a private driveway, approximately 450 feet north of the ramp junctions, the next is the Pilot Truck Stop access for autos, at 650 feet, and the third is a minor private driveway at 940 feet. South of I-84 on Thielsen Road there is a one access, approximately 460 feet from the ramp junction. This access point is currently a dirt road that is presumed to be a private drive. Public access onto Thielsen Road is provided via Bowman Road, which is located just south of the study area, and well beyond access spacing concerns. Table 6 provides an inventory of intersection approaches and driveways in the interchange study area.

Table 6 - Access Spacing on US 395/Thielsen Road

Route/Access Point	Spacing Standards from Freeway Ramps (feet)	Distance from Ramp Junction (feet)	Distance between Nearest Access Point (feet)
US 395			
Private Drive 1	1,320	450	450
Pilot Truck Stop (autos only)	1,320	650	200
Private Drive 2	1,320	940	390
W. Stanfield Avenue*	990	1,450	510
Irwin Road*	990	1,960	510
Thielsen Road			
Private Drive 3	1,320	460	460

* Spacing for W. Stanfield Avenue (Pilot truck entrance) and Irwin Road based on spacing requirements outside the interchange influence area.

Peak hour traffic turn movement counts were conducted in August of 2003 by the Oregon Department of Transportation. The manual turn movement counts were taken during a 14 hour period including the weekday, AM (7-9 AM) and PM (4-6 PM), peak periods to determine existing operating conditions. Figure 4 shows the existing PM peak hour traffic volumes at the I-84/US 395 interchange. Typically, traffic counts in rural areas are adjusted for “seasonal” volatility, as traffic can be much higher in peak travel months as opposed to the winter months, which tend to

⁷ *Oregon Highway Plan*, Oregon Department of Transportation, 1999.

⁸ *Oregon Highway Plan*, Oregon Department of Transportation, 1999, Tables 13 and 15.

experience the lowest traffic volumes. This variation must be accounted for when analyzing operations or planning mitigation measures. The Automatic Traffic Recorder (ATR 30-004), located on I-84 between the I-84/ US 395 intersection and City of Pendleton, operated by ODOT⁹ indicates that August is the peak traffic month for this area. As a result, the traffic volumes from the August ODOT manual count were not adjusted.

Interstate 84 is designated in the *Oregon Highway Plan* as being a major freight route. Consequently, truck traffic is the majority of vehicles passing through the study area. ATR 30-004 calculates that 38% of vehicles are passenger vehicles, meaning the remaining 62% of traffic is comprised of light trucks (2-axle single units) and heavy trucks (2-axle single unit with heavy trailer, 3-axle and greater single unit and all combinations).

Traffic Levels of Service

Level of Service (LOS) is used as a measure of effectiveness for intersection operation. It is similar to a “report card” rating based upon average vehicle delay. Level of Service A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. Level of Service D and E are progressively worse peak hour operating conditions. Level of service is reported for the major and minor street turning movements. Minor street, lower volume approaches can have low levels of service, LOS E and even LOS F, however, the majority of traffic may not be delayed, in cases where major street traffic is not required to stop. LOS E or F conditions at unsignalized intersections generally indicate that additional study is needed to determine if traffic signal controls are more appropriate for this location.

The August manual turn movement counts described above were used to determine the existing 2004 LOS based on the *2000 Highway Capacity Manual* methodology for unsignalized intersections¹⁰. The PM peak hour serves as the analysis period of this report because the highest traffic volumes were observed during this time. Table 7 lists the existing PM peak hour Level of Service at the I-84/US 395 interchange based on the August ODOT manual turn movement count. Both of the study intersections operate at a LOS of C or better during the PM peak period, and both have acceptable v/c ratios below the required 0.85 identified by the *Oregon Highway Plan*.

Table 7 - Existing PM Peak Hour Intersection Level of Service

Intersection	Traffic Control	Level of Service for Major / Minor Approach
I-84 / US 395 Interchange WB	Stop sign	A/B
I-84 / US 395 Interchange EB	Stop sign	A/C

Safety

In 2002, the section of US 395 between the Stanfield City Limits to the I-84 interchange (including the I-84 westbound on/off ramp and US 395 intersection) had a crash rate of 1.72 per million vehicle miles traveled¹¹. Comparatively, non-freeway routes on the Oregon state highway system had a crash rate of 1.52 per million vehicle miles traveled¹² in 2002. This section of US 395 within the IAMP study area has a slightly above average crash rate when compared to the statewide average of similar facilities. It is noted that the recent raised center median improvement was

⁹ ODOT operates over 130 ATRs throughout the state. These ATRs count traffic flows 24 hours a day 365 days a year.

¹⁰ *2000 Highway Capacity Manual*, Transportation Research Board, 2000.

¹¹ *2002 Oregon State Highway Crash Rate Tables*, Oregon Department of Transportation, September 2003.

¹² *2002 Oregon State Highway Crash Rate Tables*, Oregon Department of Transportation, September 2003.

constructed last year, and the benefits of that improvement are not reflected in these previous statistics. Furthermore, the I-84 westbound/US 395 intersection does not appear on ODOT's 2002 Safety Priority Index System (SPIS) list, which would indicate there is not a significant intersection safety concern.

Table 8 summarizes crash statistics in the study area. Crash data from mile post 9.25 to mile post 12.44 along US 395 between 2001 and 2003¹³ is provided and shows a much lower crash rate than is observed on the section of US 395 discussed above.

Table 8 - Crash Data from 2001 - 2003

Location	US 395 (MP 9.25 to MP 12.44)
Fatalities	0
Injuries	3
Property Damage Only	11
Total Crashes	12
Crash Rate (crashes per million vehicles)	0.59

* Note: The center raised median was installed in 2001 providing some safety benefit in the study area.

Pedestrians & Bicycles

There are currently no existing sidewalks or dedicated pedestrian walkways (such as a multi-use path) along Thielsen Road or US 395 in the interchange study area. There currently exists 4 foot wide shoulders on the interchange bridge, however, no sidewalks are present. The Capital Improvement Program listed in the City of Echo Transportation System Plan (TSP) includes the construction of a multi-use path along Thielsen Road between I-84 and the city limits. The Capital Improvement Program listed in the City of Stanfield TSP also includes the construction of multi-use paths along US 395 to the I-84 interchange, although project specifics are still being worked out with Stanfield, Echo, ODOT and Umatilla County. The proposed multi-use paths would provide adequate pedestrian access between the City of Echo and the City of Stanfield.

Public Transportation

There are no local bus services provided in the study area. Intercity bus service is provided by Greyhound along I-84 and US 395 within the study area utilizing the existing interchange bridge, however terminals for this service are only located in Hermiston and Pendleton so no stops are made in the study area. Both terminals provide connections to the southeast (including La Grande and Boise), west (including Portland) and north (including Pasco and Spokane). Pendleton, Hermiston, Pilot Rock and the Umatilla Indian Reservation have dial-a-ride transit service available for the transportation disadvantaged, however, none is available in the study area.

Rail Service

The nearest rail freight connection to the study area is west of Stanfield and south of Hermiston at the Hinkle Rail yards, approximately 3 miles northwest of the study area. The Hinkle Rail yards is a major maintenance and repair facility and handles over 800 rail cars a day. A major freight line serves these yards and runs parallel to US 395 approximately a quarter mile west of the study area. There are no at-grade railroad crossings in the study area. The line is owned and operated by Union Pacific Railroad as a Class I railroad. Additionally, a Union Pacific main line runs through

¹³ *Umatilla County Transportation System Plan*, David Evans and Associates, April 2002.

Echo eastward through Pendleton. Approximately 1 train an hour passes along this alignment, going through the west side of Stanfield and the heart of Echo.

Existing Land Use

Land in the study area is largely undeveloped. A Pilot Truck and Travel Center is the only commercial use currently in the study area boundaries and is located in the northwest quadrant of the westbound I-84/US 395 intersection. There are two residential lots that have access directly onto US 395 (private drives 1 and 2). Land in the study area is zoned as “urban” according to Umatilla County¹⁴, however, a small portion in the northwest corner of the study area is zoned as “Agricultural”. Figure 3 shows the existing land use in the study area.

The study area north of Interstate 84 is under the jurisdiction of the City of Stanfield, while the study area south of the intersection is under the jurisdiction of the City of Echo. The City of Stanfield identifies five distinct land use categories north of the Interstate 84 interchange along US 395. These are shown in Table 9 and include:

Table 9 - City of Stanfield Zoning Classifications

Zoning Classification	Description	Acres
<i>Within IAMP Study Area</i>		
D/TC	Tourist Commercial	56.94*
LI	Light Industrial	22.00
<i>Adjacent to Study Area</i>		
GI	General Industrial	35.41
LI	Light Industrial	22.00
EFU	Exclusive Farm Use	66.35
R/NC	Residential/Neighborhood Commercial	12.00

*This includes the 18.22 acres currently occupied by the Pilot Travel Center

The study area south of the Interstate 84, under the jurisdiction of the City of Echo, identifies two land use classifications. Additionally, just south of the study area, in the southwest corner of Bowman Road/Thielsen Road a 43 unit, detached single family subdivision has been approved and is currently in the process of being constructed. There are no other development projects currently in the study area involving the undeveloped parcels between the Interstate 84 interchange and the development on Bowman Road. There is, however, potential for future development to occur in this area. The City of Echo Commercial-Light Industrial zoning classification extends from Bowman Road north to the I-84 eastbound ramps, and eastward from the intersection of County Road/ Bowman Road to the edge of the city’s UGB. The area outside of the Commercial-Light Industrial boundaries described above is zoned Farm Residential, with a small section below Bowman Road zoned as Multi-Family Residential. The existing land use classifications within the study area and under the jurisdiction of the City of Echo are shown in Table 10.

¹⁴ *The Oregon Rural Lands Database*, Umatilla County, 2001.

Table 10 - City of Echo Zoning Classifications

Zoning Classification	Description	Acres
C-2	Commercial - Light Industrial	N/A
R-4	Farm Residential	N/A

The US 395 Corridor Refinement Plan¹⁵ estimates that at full build out of these lands, approximately 1,400 additional PM peak hour trips will be generated, and travel through, the I-84/US 395 interchange.

Findings

The foregoing Existing Conditions analysis had the following findings. Several issues should be considered in the design of planned improvements, and for local circulation plan that will be developed as a part of this project:

- Sight distance is limited on the overcrossing bridge at the east and westbound I-84
- Several existing access points to US 395 and Thielsen Road are closer than recommended minimum spacing guidelines. Land access and circulation should be adjusted to better comply with the OHP standards.
- Currently, development within the study area is limited, consisting of a few residential houses and a Pilot Travel Center. At full build-out this urban development could impact the interchange area with significant increases in traffic volumes during the PM peak period.

¹⁵ *US 395 Corridor Refinement Plan Existing/Future Conditions Supplemental Analysis for the I-84/Highway 207 and I-84 US 395 Interchanges*, Kittelson & Associates, April 28, 2002.

CHAPTER 5: FUTURE NEEDS ANALYSIS

This chapter presents the future transportation needs of the interchange study area. This information includes future land use assessment, traffic volumes projections, an evaluation of the transportation system's ability to adequately serve future demand and recommended improvements required to alleviate future deficiencies and safety issues.

Future Land Use Assessment

The initial land use forecast is based on a future full build-out scenario of the interchange area. This approach provides an analysis of a conservative, worst-case scenario that is consistent with the methods used in the US 395 Corridor Refinement Plan. This method does not account for market factors.

The study area is under two local jurisdictions – the cities of Stanfield and Echo. This future build-out analysis is based on existing zoning designations within the respective cities. The zoning codes provide the development standards to characterize the intensity of development. Land Use Codes for each future development are based on the ITE Trip Generation Manual¹⁶.

Key Assumptions

- Tourist Commercial areas assume a mix of commercial service uses typical for an interchange – truck stop (existing); fast food restaurants; gas station; and motel.
- Industrial areas assume small-scale, low-intensity manufacturing and warehouse distribution.
- The existing urban growth boundaries are assumed sufficient to accommodate future growth to 2025 and no additional lands will be designated for urban development in the study area.

Previous Studies

US 395 Corridor Refinement Plan

This study¹⁷ utilized a planning horizon year of 2025 to estimate potential full build-out development scenarios for a larger study area (north to Feedville Road and the Highway 207 interchange), although no documentation is available to characterize these scenarios. It was determined that the future build-out had the potential to generate an additional 3,200 weekday AM peak hour vehicle trips and an additional 4,000 PM peak hour vehicle trips. The study estimated that approximately 30-35 percent of the trips would be oriented to the US 395/ I-84 corridor, which would result in 1,400 additional PM peak hour vehicle trips through the Stanfield interchange.

¹⁶ *Trip Generation Manual*, Institute of Transportation Engineers, Seventh Edition, 2003.

¹⁷ *US 395 Corridor Refinement Plan Existing/Future Conditions Supplemental Analysis for I-84/Highway 207 and I-84/US 395 Interchanges*, Kittelson & Associates, April 28, 2002.

Stanfield TSP

The Stanfield TSP was prepared in June 2001. It assumed that Stanfield would grow at an average annual rate of 1.49 percent to 2020. Umatilla County has not allocated the recent OEA 2025 population forecast to incorporated cities, however the 2025 aggregate forecast is based on a similar growth rate (1.3 percent) to the 2020 forecast used in the TSP. Therefore, there is no indication in the underlying population forecasts to suggest a dramatic change in the growth rates for this area.

A key underlying assumption was that western Umatilla County would experience faster growth driven by four major employers locating in the area – the Two Rivers Correctional Institution, the Umatilla Chemical Agent Disposal Facility, the Union Pacific Railroad Hinkle Locomotive Shop, and the Wal-Mart Distribution Center and Truck Maintenance Facility. All four of these projects have been constructed and are operational. These projects feed into the background traffic growth assumptions for the region, particularly US 395 North through Stanfield.

Echo TSP

The Echo TSP was prepared in April 2001. It assumed that Echo would sustain a 1.0 percent average annual growth rate to 2020. Umatilla County has not allocated the recent OEA 2025 population forecast to incorporated cities, however the 2025 aggregate forecast is based on a similar growth rate (1.3 percent) to the 2020 forecast used in the TSP. Therefore, there is no indication in the underlying population forecasts to suggest a dramatic change in the growth rates for this area.

Future Land Use Forecast

Stanfield (North of Interchange)

The study area north of I-84 is under the jurisdiction of the City of Stanfield. Land within the study area is zoned for Tourist Commercial (D/TC), General Industrial (GI) and Light Industrial (LI). Areas adjacent to the study area are zoned for industrial, residential, and agriculture uses.

Northeast Quadrant

The Northeast quadrant of the interchange has 18.06 acres of land zoned Tourist Commercial. Future build out is assumed to be a mix of uses including a gas station (8 pumps) with mini-mart (2,000 square feet) (Land Use Code 834), a fast food restaurant (3,500 square feet with drive-thru) (Land Use Code 845), and a motel (40 rooms) (Land Use Code 320).

Future access to this site is assumed to be similar to the west side of US 395. The gas station will have a right-in/right-out driveway with a goal to achieve the 750-foot access spacing standard. A new roadway will be provided at US 395 opposite Stanfield Ave to provide access for the fast food restaurant and motel. There will be a link between the gas station and fast-food restaurant.

The adjacent land is zoned EFU and is not assumed to be developed within the planning horizon.

Northwest Quadrant

The Northwest quadrant of the interchange has a mix of Tourist Commercial and Industrial zoning. The major existing use is the Pilot Truck Stop located on 18.22 acres of land zoned Tourist Commercial. In addition to the Truck Stop, the site has a fast food restaurant with a drive-thru and a 43-space RV Park. No additional development is assumed on this site. However, there is vacant land on either side of the Stanfield Avenue intersection that is assumed to develop with a 3,500 square foot fast-food restaurant with drive-thru (Land Use Code 934), and a 6,000 square foot high-turnover, sit-down restaurant (Land Use Code 932).

Light Industrial and General Industrial areas are assumed to develop as an Industrial Park (Land Use Code 130) with a mix of manufacturing, service and warehouse facilities. Using relatively low floor-to-area ratio, this 57-acre area would be expected to develop with about 200,000 square feet of space.

Farther north on US 395, a 12-acre site fronts onto US 395 and is zoned Residential/Neighborhood Commercial. This area is assumed to develop into a small strip shopping center (Land Use Code 814) with 20,000 square feet space containing a variety of shops and services.

There is a 25-acre site on the north side of US 395 (across from the Neighborhood Commercial) that is assumed to develop into another Industrial Park (Land Use Code 130) with 75,000 square feet of space.

Future residential development is expected on both sides of US 395 as turns northwest into Stanfield. An adjacent 33-acre area is zoned R/UH is assumed to develop into 132 detached single-family houses (4 lots per acre). There is an additional 47 acres north of US 395 that is assumed to develop into 188 lots that will have access onto US 395 as well as Ball Avenue.

Echo (South of Interchange)

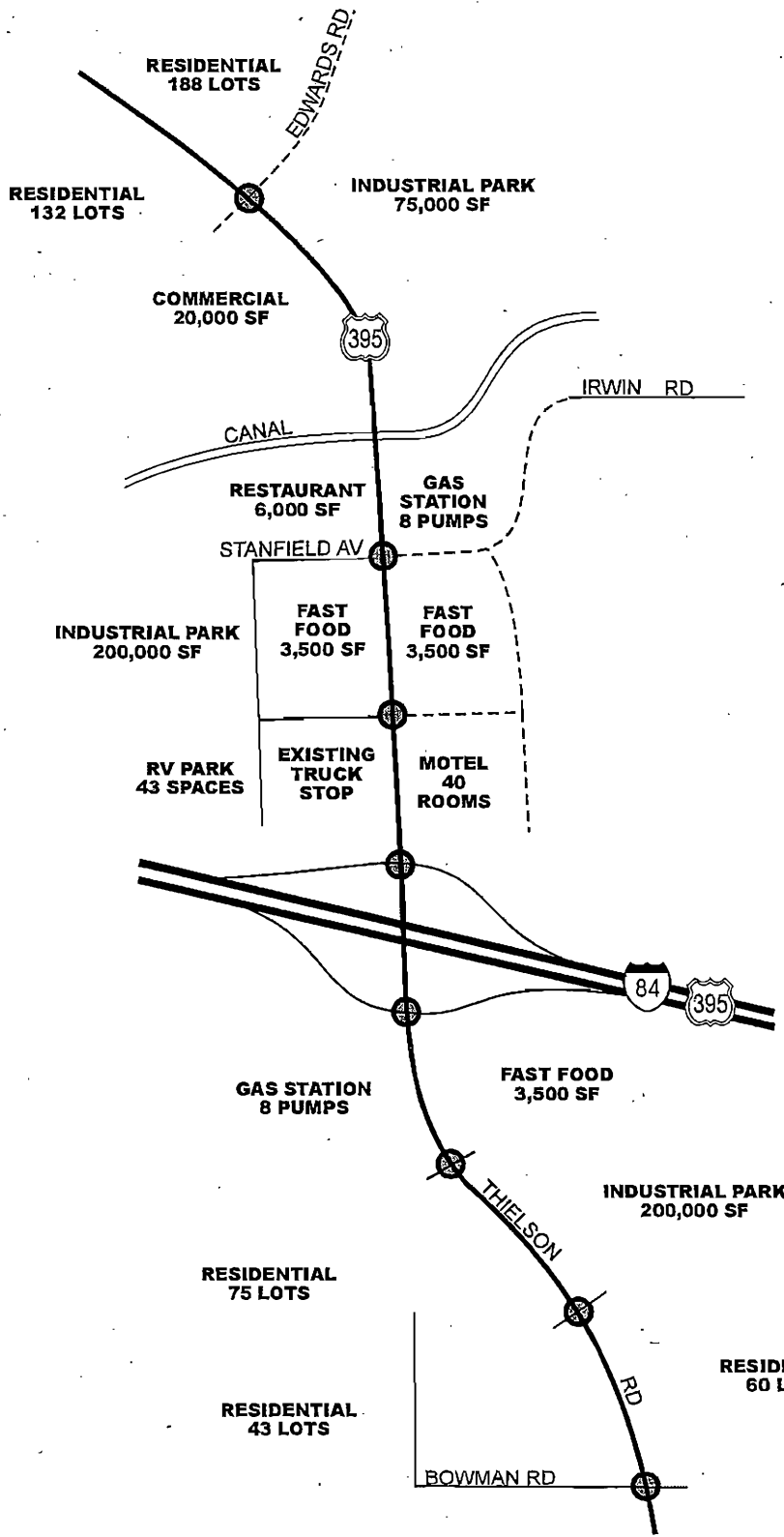
The study area south of I-84 is under the jurisdiction of the City of Echo. Land within the study area is zoned for Tourist Commercial (C-2), Light Industrial (M-1) and Residential (R-4).

The proposed interchange design will include a realignment of Thielsen Road and Bowman Road, which may lead to a change in the zoning designation for either Tax Lot 1700 or 2600.

In the current configuration, Tax Lot 2600 is on either side of Thielsen Road at the interchange. Given the access spacing requirements, it is assumed that the Tourist Commercial zoning will shift slightly to the south. This area is assumed to develop with a gas station (8 pumps) with mini-mart (2,000 square feet) (Land Use Code 853) and a fast food restaurant (3,500 square feet with drive-thru) (Land Use Code 934). The balance of the parcel (approximately 110 acres) is planned for Light Industrial uses and is assumed to develop as an Industrial Park (Land Use Code 130) with a mix of manufacturing, service and warehouse facilities. Using relatively low floor-to-area ratio and accounting for the topography, this area is expected to develop with about 200,000 square feet of space.

Future residential development is expected on both sides of Thielsen Road. The Echo Heights subdivision (43 lots) has been platted along Bowman Road. Tax Lot 1700 is west of Bowman Road and is assumed to develop into 75 detached single-family houses (1 acre lots) after factoring for local streets and topography. A portion of Tax Lot 3300 (approximately 100 acres) on the east side of Thielsen Road is assumed to develop into 60 detached single-family houses (1 acre lots) after factoring for local streets and topography.

A map of the future land use assessment for the full build-out scenario is shown in Figure 1.



LEGEND


 - Study Intersections

Figure 1
FUTURE FULL BUILD-OUT
LAND USE

Future Travel Demand Forecast

The 2024 future full build-out travel demand forecast for the study area was developed from an analysis of anticipated local and regional growth over an approximate 20 year period. Local growth comprises vehicle trips generated by new development within the interchange study area. Regional growth comprises vehicle trips generated outside the study area, including within the cities of Stanfield and Echo. The methodology for estimating the future travel demand for local and regional trips are summarized in the following sections.

Local and Regional Travel Demand Growth

Local travel demand growth was estimated based on the future land use assessment of vacant land the interchange area. Each build-out land use assumption was evaluated to estimate the number of vehicle trips that would be generated during the PM peak hour. The trip generation estimates for each land use were based on available ITE trip generation data¹⁸ and include reductions for passby trips that would occur at retail land uses. Passby trips are existing traffic volumes that are attracted from the adjacent stream of traffic to the site and do not count as new trips. The trip generation estimate for the future full build-out scenario is summarized in Table 11.

Table 11 - Future Year 2024 Build-out Development

Land Use	Size	Daily Trips	PM Peak Hour Trips
Single-Family Residential	498 dwellings	4,766	501
Industrial Park	475,000 SF	3,306	409
Fast Food	10,500 SF	2,910	203
Restaurant	6,000 SF	435	38
Gas Station	16 pumps	990	82
Motel	40 rooms	225	19
Commercial	20,000 SF	1,264	115
Total		13,911	1,383

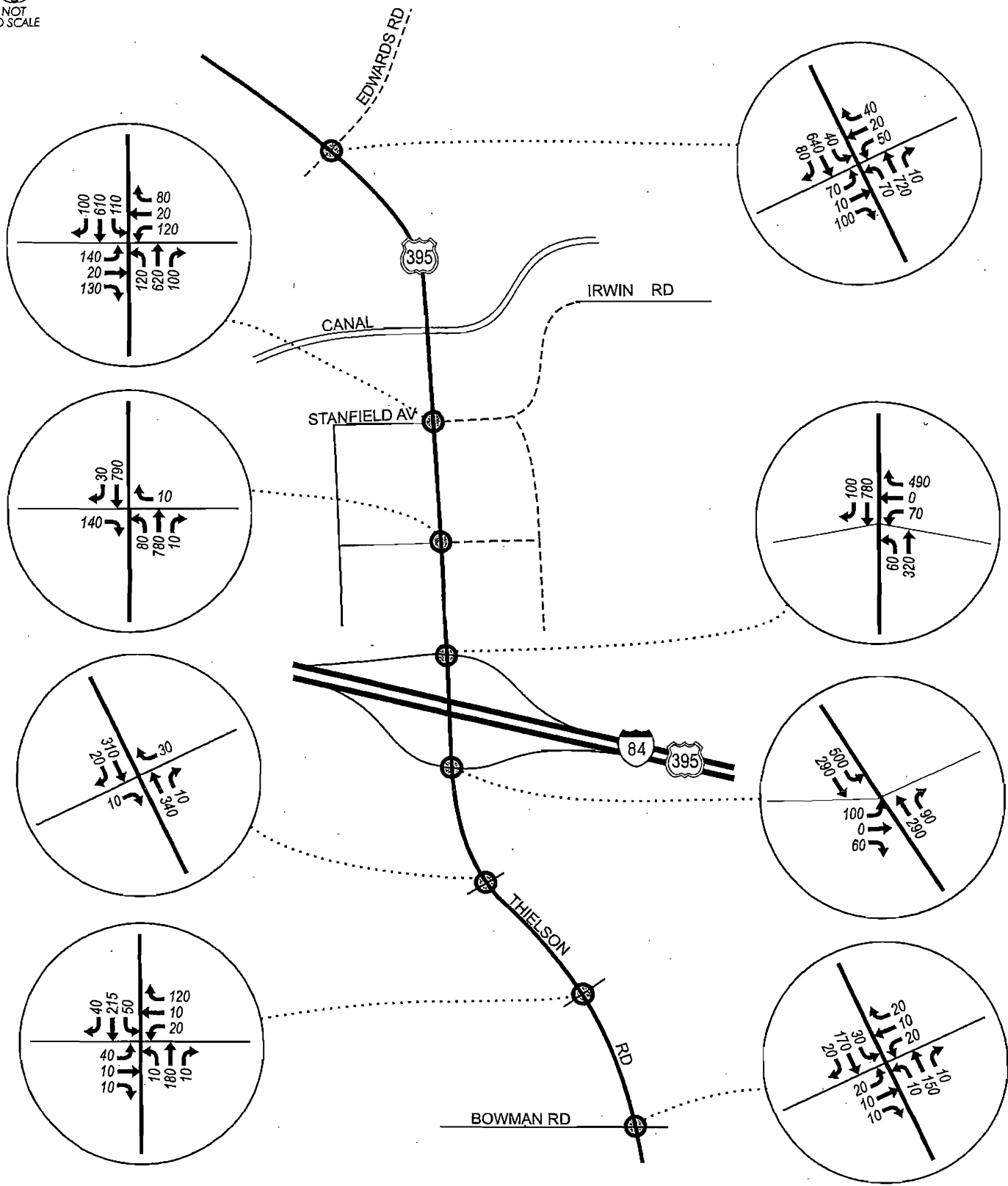
The new vehicle trips generated by the future build-out land use scenario were distributed through the roadway network based on vehicle travel patterns determined from existing PM peak hour turn movement counts within the interchange study area.

Regional travel demand growth within the interchange area was estimated based on available ODOT highway forecast data¹⁹ for US 395. The highway forecast data provided future daily volumes for several locations on US 395 in the vicinity of the study area which were utilized to determine an appropriate total annual growth rate. This total growth was compared to the estimated local traffic growth rate and the remaining portion of the growth was assumed to be regional growth. This methodology resulted in an approximate one-percent per year regional growth rate within the interchange study area.

The forecasted year 2024 volumes are calculated by applying the regional one-percent per year growth rate (22% over 20 years compounded annually) to the existing traffic volumes and adding the local growth trips at each intersections. Figure 2 shows the 2024 future traffic volumes at intersections within the interchange study area.

¹⁸ *Trip Generation Manual*, Institute of Transportation Engineers, Seventh Edition, 2003.

¹⁹ ODOT, Transportation Planning Unit, Transportation System Analysis, Data Resources, Future Traffic Volumes, 2023 Future Volumes – Primary Highways, Highway No. 54.



LEGEND

- - Study Intersections
- ← 00 - Peak Hour Traffic Volumes

Figure 2
2024 PM PEAK HOUR
TRAFFIC VOLUMES

Future Conditions Analysis

The future conditions within the interchange study area were determined to identify expected deficiencies and safety issues. The findings are discussed in the following sections.

Traffic Levels of Service

The future travel demand forecast was evaluated to determine the 2024 study area performance based on the *2000 Highway Capacity Manual* methodology for unsignalized intersections²⁰. The PM peak hour serves as the analysis period of this evaluation because the highest traffic volumes occur during this time. Table 12 summarizes the 2024 PM peak hour operating conditions at intersections within the interchange study area. For stop sign controlled intersections, the volume to capacity ratio represents the condition for the worst minor street approach.

Table 12 - Future Year 2024 PM Peak Hour Intersection Level of Service

Intersection	Traffic Control	Average Delay	LOS	V/C*
I-84/US 395 Interchange WB	Stop sign	9.9	B/D	0.52
I-84/US 395 Interchange EB	Traffic signal	8.6	A	0.69
Pilot Access/US 395	Stop sign	1.4	A/B	0.22
Stanfield Avenue/US 395	Traffic signal	15.5	B	0.47
Edwards Road/US 395	Stop sign	6.3	A/E	0.59
Restricted Access Road/Thielsen Road	Stop sign	0.6	A/B	0.04
Full Access Road/Thielsen Road	Stop sign	3.9	A/C	0.12
Bowman Road/Thielsen Road	Stop sign	2.1	A/B	0.05

* For stop controlled intersections, the v/c represents the condition for the worst minor street approach.

ODOT has set a maximum v/c of 0.70 for an interstate highway, 0.75 for a statewide highway and 0.80 for a district highway based on performance standards set in the Oregon Highway Plan²¹ for facilities inside an urban growth boundary with speeds less than 45 miles per hour. The future signalized intersections operate with acceptable v/c ratios. The majority of study intersections operate at LOS D or better during the PM peak hour.

US 395 at the I-84 westbound ramps operate at LOS D for left turning vehicles on the minor street approach. This operating condition would only be expected during the PM peak hour with minimal vehicle delays during the rest of the day. An analysis of the future 2024 volumes and the Eight-Hour Vehicular Volume traffic signal warrant²² found a traffic signal is not warranted at this intersection.

²⁰ *2000 Highway Capacity Manual*, Transportation Research Board, 2000.

²¹ *Oregon Highway Plan*, Oregon Department of Transportation, 1999, Table 6.

²² *Manual of Uniform Traffic Control Devices*, Chapter 11, Traffic Signal Warrants, Warrant 1 – Eight Hour Vehicular Volume.

US 395 at Edwards Road operates with LOS E for the minor street approach. In the future, it may be difficult for vehicles to turn left from the minor street approach during peak hours when volumes on US 395 are high. This intersection may require an alternative design in the future to improve peak hour operating conditions. A center two-way left-turn lane or other channelized access design would allow minor street left turning vehicles to make a two stage turn movement (vehicles cross one direction of traffic and use the center left turn lane to wait for the other direction to clear). An analysis of the future 2024 volumes and the Eight-Hour Vehicular Volume traffic signal warrant found a traffic signal is not warranted at the US 395/Edwards Road intersection.

Interchange Study Area Needs

Future transportation improvements are required to alleviate future deficiencies and safety issues within the interchange study area. The transportation needs within the interchange study area are shown in Figure 3 and summarized below.

Roadway Improvements

An evaluation of the future year 2024 traffic volumes and operating conditions serves to measure the interchange study area's ability to adequately serve future local and regional demand.

- A traffic signal would be required at the I-84/US 395 eastbound ramps to improve intersection performance and meet ODOT operating standards. The signal should be constructed as volumes at the intersection reaches the minimum levels recommended for traffic signal controls.
- A center two-way left-turn lane (or similar channelized median design) should be considered as a short-term treatment on US 395 along sections with full access unsignalized intersections to safely accommodate major street left turn movements due to high vehicle speeds. This recommendation would apply on US 395 near Edwards Road and on Thielsen Road near Bowman Road.
- As local development occurs, the supporting local street network will be constructed and vehicles will be able to access signalized intersection on US 395 and Thielsen Road. With improved local connectivity, a center median restricting left turn movements should be considered at the full access unsignalized intersections on US 395 and Thielsen Road to reduce vehicle conflicts.

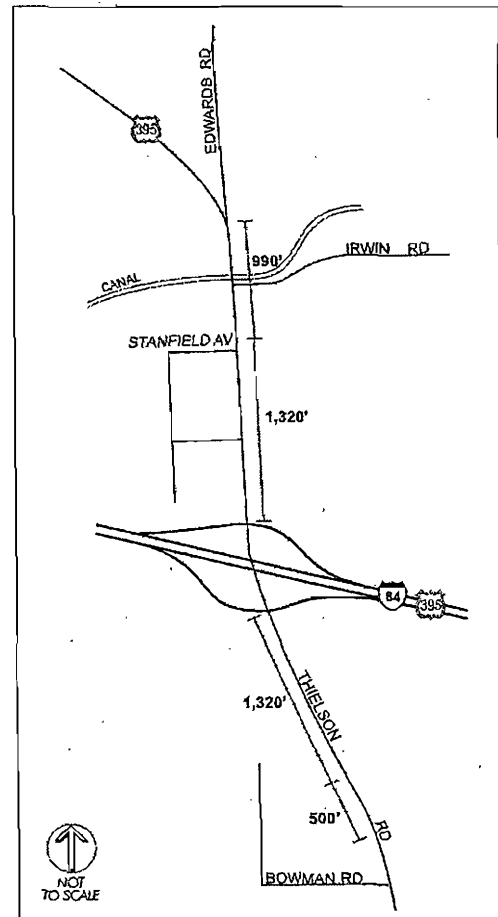
Access Spacing

Several existing access points to US 395 and Thielsen Road are closer than recommended minimum spacing guidelines. For an interchange with two-lane crossroads in an urban area, the minimum spacing standard²³ is 1,320 feet to the nearest full access and 750 feet to the nearest restricted access. This standard applies to US 395 north of the interchange and Thielsen Road south of the interchange. Beyond this distance from the interchange, the general spacing standard²⁴ between access points (including driveways and intersection approaches) is 990 feet on US 395 (statewide highway) and 500 feet on Thielsen Road (district highway) assuming a posted speed of 45 miles per hour and in a urban setting.

²³ *Oregon Highway Plan*, Oregon Department of Transportation, 1999, Table 16.

²⁴ *Oregon Highway Plan*, Oregon Department of Transportation, 1999, Tables 13 and 15.

- The US 395/Pilot Access intersection is located approximately 650 feet from the interchange and is restricted to auto use only. The existing raised center median prohibits eastbound left turn movements exiting the Pilot truck stop.
- The US 395/West Stanfield Avenue intersection is located approximately 1,300 feet from the interchange. General truck and recreational vehicles are directed to utilize this intersection to access the Pilot truck stop. Based on the existing spacing from the interchange, this intersection is an ideal location for a full access intersection. A traffic signal is recommended at this intersection to adequately serve the additional traffic generated by the adjacent future land uses (gas station and three restaurants) and to improve safety for truck turn movement with increasing volumes on US 395.
- Irwin Road should be realigned to the south to connect to the proposed traffic signal at US 395/West Stanfield Avenue. This will ensure compliance with the access spacing standards and provide for safer vehicle movements at intersections on US 395. The new alignment would provide future land uses on the east side of US 395 a connection to a signalized access.
- Edwards Road should be realigned to the west and intersect with US 395 a minimum of 990 feet north of Stanfield Avenue. Full access at the proposed US 395/Edwards Road intersection is recommended to adequately serve the adjacent future land use (commercial and industrial park) and the forecasted volumes on US 395.
- The west leg of the proposed US 395/Edwards Road intersection should be extended to provide a new roadway connection to West Stanfield Avenue south of the canal. A new bridge over the canal would be required to accommodate the proposed roadway. This connection would reduce the vehicle demand at the unsignalized US 395/Edwards Road intersection and overall improve connectivity west of US 395.
- Local roadway circulation should be constructed east of US 395 between Stanfield Avenue and the interchange. A local street network would provide connectivity between future land uses and provide vehicle access to the traffic signal at the US 395/Stanfield Avenue intersection.
- A restricted access point is recommended on Thielsen Road a minimum of 750 feet south of the interchange to meet the recommended interchange access spacing and provide access to the adjacent future land uses (gas station and fast food).
- A full access point is recommended on Thielsen Road a minimum of 1,320 feet south of the interchange to meet the recommended interchange access spacing and provide access to the adjacent future land uses (industrial park and residential).
- The Bowman Road/Thielsen Road intersection is located approximately 2,300 feet south of the interchange. Based on the existing spacing from the interchange, this intersection is an ideal location for an additional full access intersection on Thielsen Road. The Bowman Road/



Thielsen Road intersection would be located approximately 1,000 feet south of the proposed full access (described in the previous bullet).

- Local roadway circulation should be constructed to the east and west of Thielsen Road between Bowman Road and the interchange. A north-south roadway should be provided a minimum of 300-feet to the east and west of Thielsen Road with connections to each proposed access point on Thielsen Road to create a local street grid network. This local street system would provide connectivity between the future land uses and allow vehicles to use the full access intersections.
- A local roadway just south of the interchange on the west side of Thielsen Road has full access today. This existing access point does not meet ODOT spacing standards and should be closed. Alternative access to the local roadway to the south should be provided.

Pedestrian and Bicycle Facilities

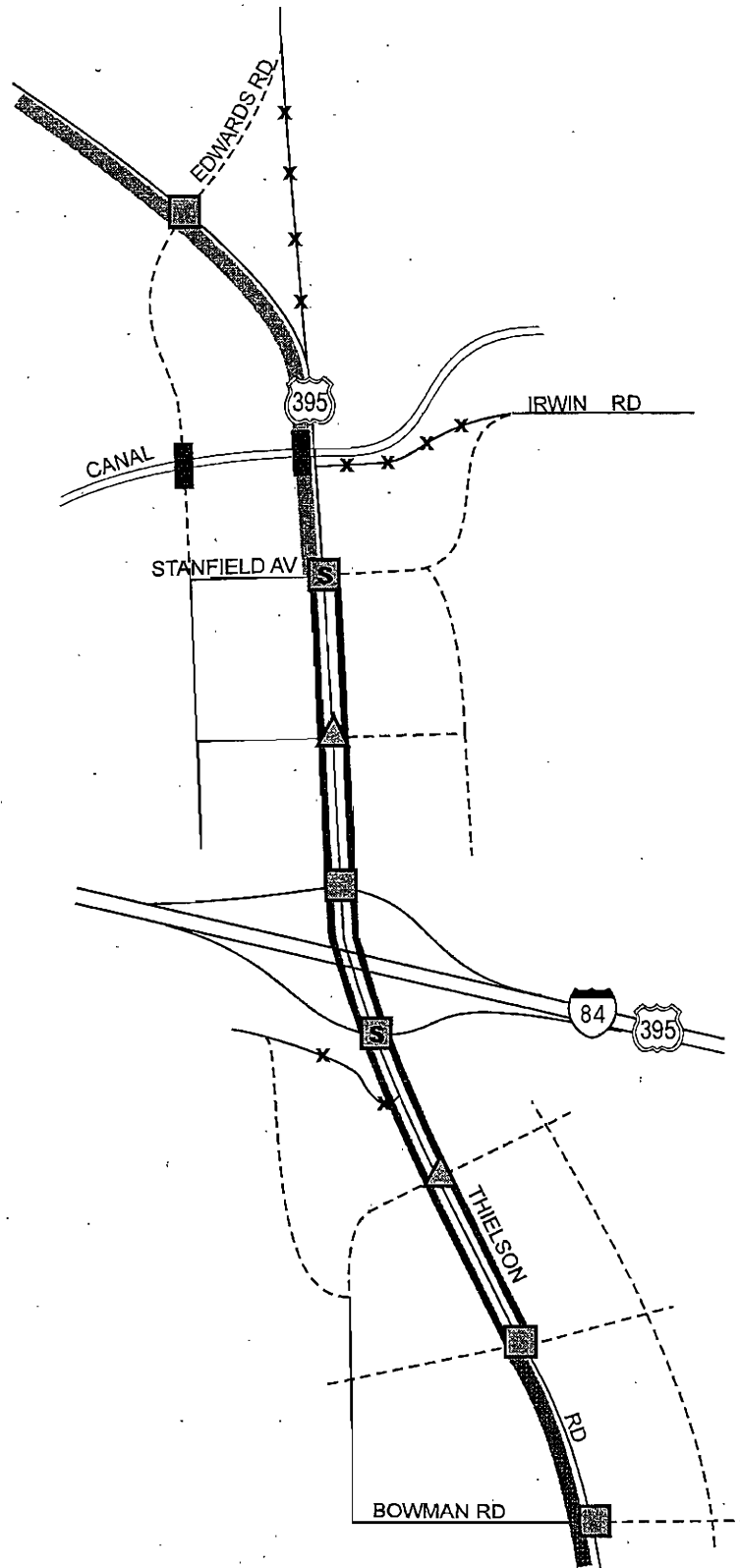
The Capital Improvement Program (CIP) listed in the City of Echo TSP includes the construction of a multi-use path along Thielsen Road between I-84 and the city limits. The CIP listed in the City of Stanfield TSP also includes multi-use paths along US 395 to the I-84 interchange.

- Sidewalks should be constructed on both sides of US 395 and Thielsen Road between the proposed traffic signal US 395/West Stanfield Avenue intersection and the first full access intersection on Thielsen Road south of the interchange. The demand for pedestrians crossing US 395 may increase where the sidewalks on both sides of US 395 transition to a multi-use path provided only on the west side of US 395. The proposed traffic signal would provide a signalized pedestrian crossing across US 395 at this location. The future land uses along US 395 and Thielsen Road would benefit from sidewalks with improved safety and convenience of pedestrian and bicycle travel between developments. For example, a guest at the motel or RV park could walk to a restaurant for dinner.
- A multi-use path should be constructed along the west side of US 395 between Stanfield Avenue and the Stanfield city limits and along the west side of Thielsen Road between the Echo city limits and the first full access intersection south of the interchange. The multi-use path would improve the safety and convenience of pedestrian and bicycle travel between Stanfield and Echo. The multi-use path would connect to sidewalks on the west side of US 395 and Thielsen Road allowing pedestrians and bicyclists access to signalized crossings over US 395 and Thielsen Road. A bridge would be required for the multi-use path to cross the canal north of Stanfield Avenue.

Right-of-Way

The potential future reconstruction of the I-84/US 395 interchange overpass would require additional right-of-way to accommodate each new ramp layout. Figure 4 shows the proposed interchange ultimate design and associated right-of-way needs. The westbound loop on-ramp shown in the northeast quadrant of the interchange is not part of the ultimate design. It will provide temporary vehicle access to I-84 during the initial phases of the construction project.

The eastbound off-ramp would require significant right-of-way to allow for a future southbound to eastbound loop on-ramp. The proposed layout of the eastbound ramps and realignment of Thielsen Road require significant right-of-way impacts to the adjacent property. The westbound off-ramp would require additional right-of-way to accommodate the temporary westbound loop on-ramp. The westbound on-ramp would impact the existing trailer park and truck parking area.

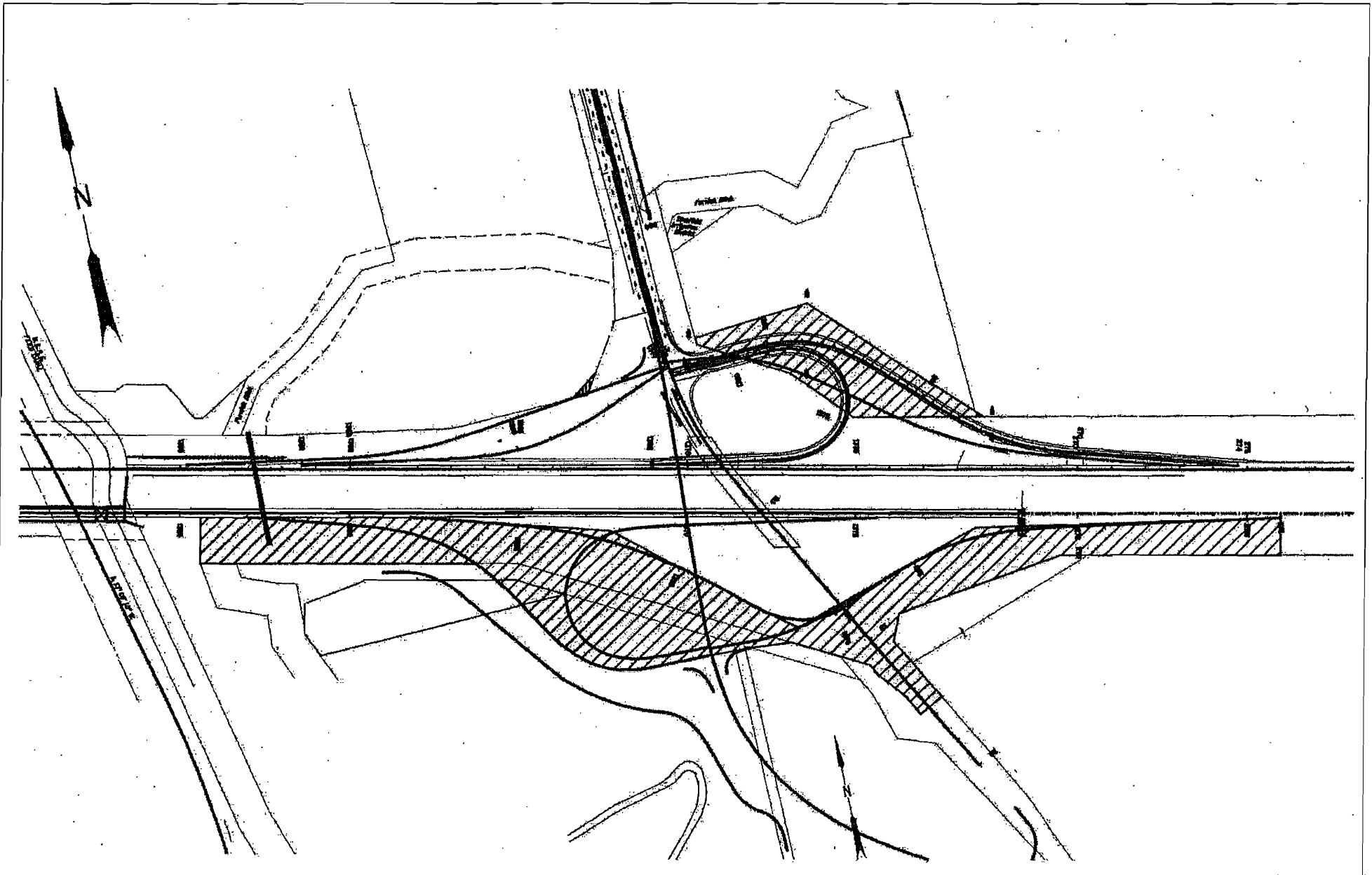


LEGEND

- x-x- - Road Realignment
- - Sidewalk
- ▨ - Off-Street Trail
- - - - Proposed Roadway
- S - Traffic Signal
- ▣ - Full Access
- ▴ - Restricted Access
- ▭ - Bridge

Note: Roadway network does not include the potential future reconstruction of the interchange overpass and Thielson Road.

**Figure 3
INTERCHANGE
STUDY AREA NEEDS**



LEGEND

- - Existing Roadway
- - Proposed Interchange Design

Figure 4
PROPOSED INTERCHANGE
RIGHT OF WAY IMPACTS

CHAPTER 6: INTERCHANGE AREA MANAGEMENT PLAN

This chapter presents the Stanfield interchange area management plan (IAMP) to address future needs for capacity, connectivity and safety in the Stanfield IAMP study area. The recommended interchange management plan is based on the future transportation needs presented in chapter 5.

A recent evaluation of the Stanfield interchange has concluded the bridge structure does not require reconstruction at this time. However, the proposed bridge reconstruction may be needed in the future. To accommodate both future scenarios, the management plan has been developed to consider both future alternatives: with and without the potential future reconstruction of the interchange overpass. The recommended interchange area management plan is summarized below.

Roadway Improvement Plan

An evaluation of the roadway system needs and future operating conditions serves to measure the interchange area's ability to adequately serve future local and regional demand. The recommended improvement projects for the Stanfield IAMP are shown in Table 13. The potential future reconstruction of the interchange overpass is listed as a separate long-term project. The remaining projects identified in Table 13 are recommended with or without the reconstruction of the interchange overpass. Planning level cost estimates were prepared for each improvement based on average unit costs for similar projects. The cost estimates do not include the cost of obtaining additional right-of-way for the improvements.

Table 13 - Recommended Transportation Improvement Projects

Project Description	Cost Estimate
SHORT TERM	
Rehabilitate the Stanfield/I-84 interchange bridge by repaving the interchange ramps and US 395 along the Pilot property. Construct a temporary westbound loop on-ramp. Replace the I-84 eastbound section of the Umatilla River bridge. Take access control on the east side of the Pilot property including building a fence and paving approaches.	\$12,162,000
LONG TERM	
Replace the Stanfield/I-84 interchange bridge and reconfigure the on and off ramps to meet ODOT standards. Construct sidewalks on both sides of the new US 395 overpass.	\$9,300,000
Construct a traffic signal at I-84/US 395 westbound ramps. Intersection should be monitored to assess when volumes reach the minimum level recommended for traffic signal control.	\$300,000
Construct a center two-way left turn lane (or similar channelized median design) on US 395 approximately 200-feet north and south of Edwards Road with appropriate tapers.	\$125,000

Construct a center two-way left turn lane (or similar channelized median design) on Thielsen Road approximately 100-feet north and south of Bowman Road.	\$100,000
Construct a center two-way left turn lane (or similar channelized median design) on Thielsen Road approximately 100-feet north and south of the first full access intersection south of the interchange.	\$100,000
Provide a multi-use path along the west side of US 395 between Stanfield Avenue and the Stanfield city limits. The multi-use path would require a bridge structure to cross the Feed Canal.	\$900,000
Provide a multi-use path along the west side of Thielsen Road between the Echo city limits and the first full access intersection south of the interchange. The multi-use path would require two separate bridge structures to cross the Furnish Ditch and Feed Canal.	\$1,000,000
Construct sidewalks on both sides of US 395 between West Stanfield Avenue and the Stanfield interchange westbound ramps.	\$350,000
Construct sidewalks on both sides of Thielsen Road between the Stanfield interchange eastbound ramps and the first full access intersection on Thielsen Road south of the interchange.	\$350,000
TOTAL SHORT TERM	\$12,162,000
TOTAL LONG TERM	\$12,525,000

Access Management Plan

Access management is the practice of controlling or limiting access onto arterial and collector facilities to balance the need to provide efficient, safe and timely travel with the ability to allow access to the individual destination. Numerous driveways or street intersections increase the number of conflicts and potential for accidents and decrease mobility and traffic flow. With future development and increased traffic volumes, the need for access control within the interchange study area is critical.

The access management plan is recommended to address the access spacing needs within the interchange area. These access management action items are recommended with or without the potential future reconstruction of the interchange overpass. The Stanfield IAMP action items identified below correspond to the numbered items in Figure 5.

1. The current ODOT minimum spacing standards²⁵ should be applied to US 395 and Thielsen Road within the interchange study area.
2. The future reconstruction of the interchange overpass includes the realignment of Thielsen Road south of the interchange approximately 300 feet to the west of the current alignment.
3. ODOT and the responsible local agencies should take steps to protect the required right-of-way for the potential future realignment of Thielsen Road. All future access points on Thielsen Road between the interchange and Bowman Road should be located to adequately accommodate the realignment project. No buildings, structures, etc. should be placed within the realignment area which would prohibit construction of the realignment project.
4. Provide full access at the US 395/West Stanfield Avenue intersection. Add a traffic signal when volumes reach the minimum levels recommended for signalized control.

²⁵ *Oregon Highway Plan*, Oregon Department of Transportation, 1999, Table 13, 15 and 16.

5. Realign Irwin Road to the south to connect to the proposed traffic signal at US 395/West Stanfield Avenue.
6. Realign Edwards Road to the west and intersect with US 395 a minimum of 990 feet north of Stanfield Avenue. Provide full access at the proposed US 395/Edwards Road intersection.
7. Extend the west leg of the proposed US 395/Edwards Road intersection to provide a new roadway connection to West Stanfield Avenue south of the canal. A new bridge over the canal would be required to accommodate the proposed roadway.
8. Construct a local roadway system to the east of US 395 between Stanfield Avenue and the interchange.
9. Provide a full access point on Thielsen Road a minimum of 1,320 feet south of the interchange.
10. Provide a restricted access point on Thielsen Road a minimum of 750 feet south of the interchange.
11. Provide a full access point at the Bowman Road/Thielsen Road intersection.
12. Construct a local roadway network to the east and west of Thielsen Road between Bowman Road and the interchange. Provide a north-south roadway a minimum of 300-feet to the east and west of Thielsen Road with connections to each proposed access point on Thielsen Road.
13. Close the existing local roadway access onto Thielsen Road just south of the interchange. Provide alternative access to the local roadway to the south.

Roadway Cross-Sections

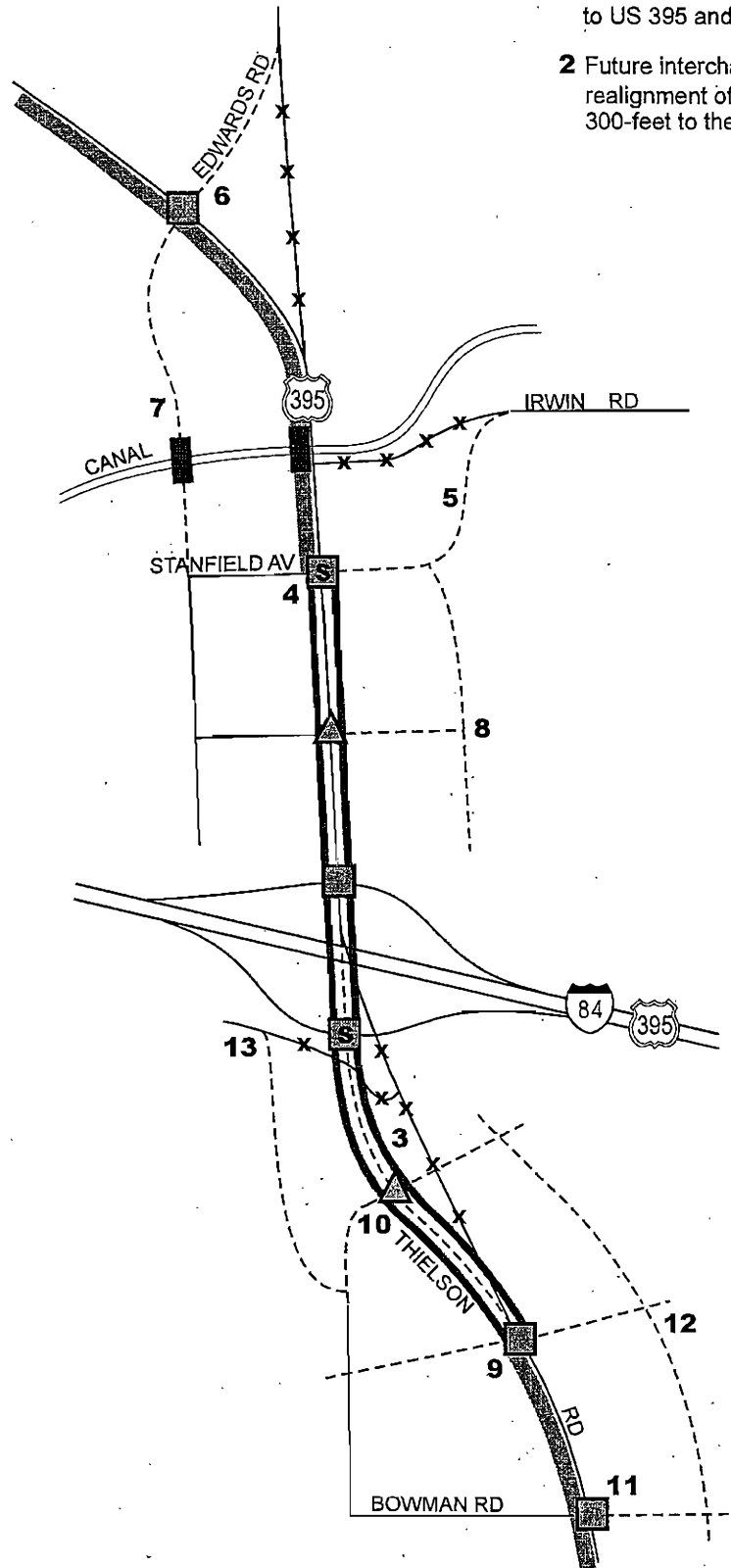
The Stanfield TSP and Echo TSP identify street standard requirements for pavement width, right-of-way, sidewalk width, bike lane width and minimum posted speed limit for each roadway functional classification. Within the interchange study area, Stanfield TSP street standards should be applied to roadway improvement projects north of the interchange and Echo TSP street standards should be applied to roadway improvement projects south of the interchange.

The proposed future full build-out land use (shown in Figure 1) was evaluated to determine the roadway system long-term needs within the interchange area. The recommended functional classification for proposed roadways within the interchange area are shown in Figure 6. The recommended functional classifications include arterial, commercial/industrial arterial, collector, commercial/industrial collector, local residential street. Figure 7a and 7b shows the recommended cross-sections for the City of Echo.

The Stanfield TSP includes street standards for local residential, alley, residential collector, industrial/commercial collector, local streets and arterials. This range of functional classifications should meet the needs of the future roadway system north of the interchange. The Echo TSP includes street standards for residential, alley, collector and arterials. The needs of the future roadway system south of the interchange can not be met by this range of functional classifications. The alley, local residential street, residential collector, downtown arterial, commercial/industrial collector, and the commercial/industrial arterial cross-sections (Figures 7 & 8) should be added to the Echo TSP street standards and the Echo Subdivision ordinance.



- 1 Apply ODOT minimum spacing standards to US 395 and Thielson Road.
- 2 Future interchange reconstruction includes the realignment of Thielson Road approximately 300-feet to the west.

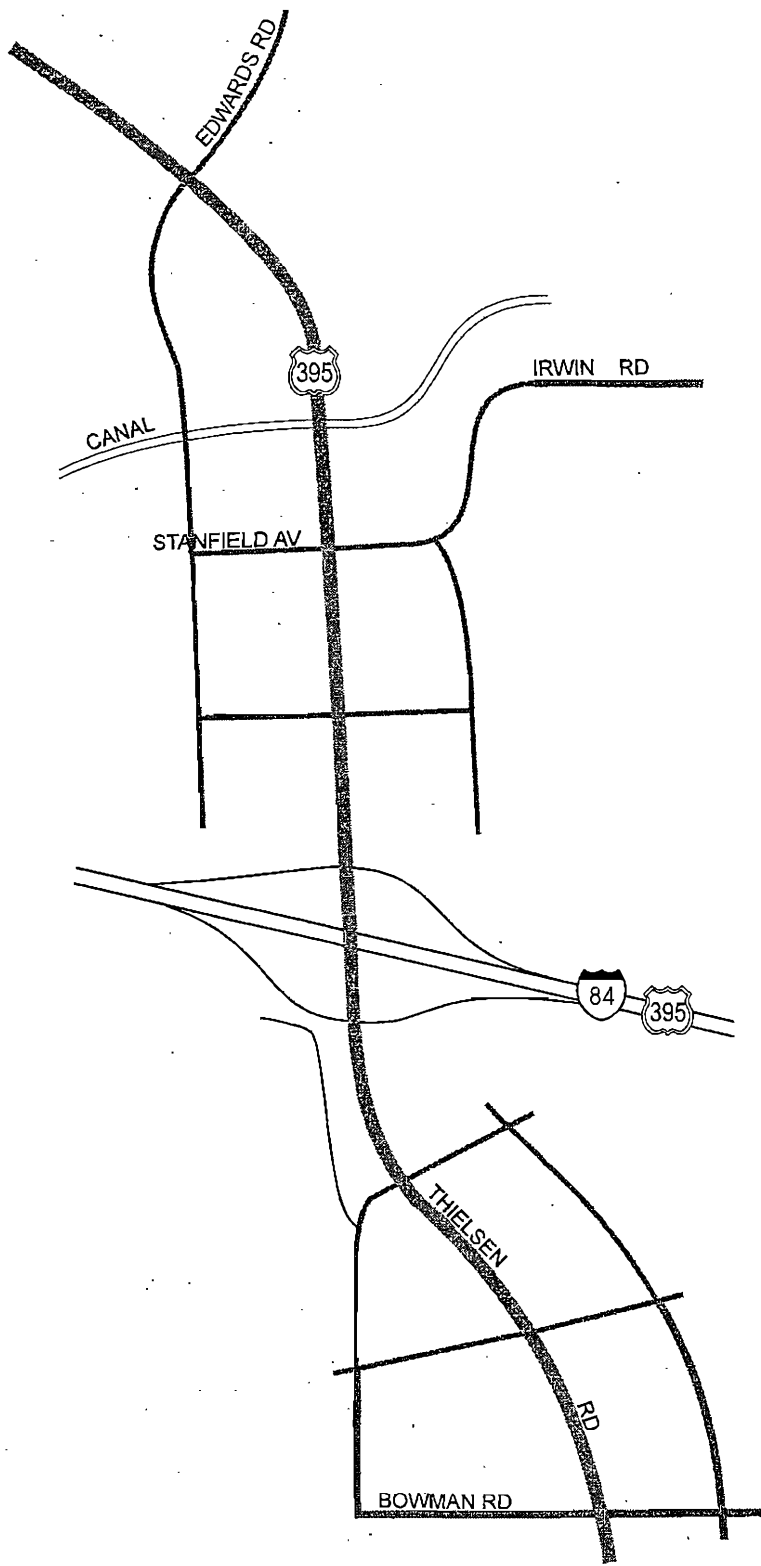


LEGEND

- | | | | |
|-------|------------------|---|-------------------|
| -x-x- | Road Realignment | ■ | Full Access |
| — | Sidewalk | ▲ | Restricted Access |
| ▨ | Off-Street Trail | ■ | Bridge |
| - - - | Proposed Roadway | | |
| S | Traffic Signal | | |

Note: Roadway network includes the potential future reconstruction of the interchange overpass and realignment of Thielson Road.

Figure 5
STANFIELD INTERCHANGE
AREA MANAGEMENT PLAN



LEGEND




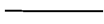
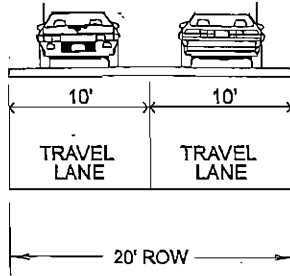
-  - Commercial/Industrial Arterial
-  - Residential Collector
-  - Commercial/Industrial Collector
-  - Local Residential Street

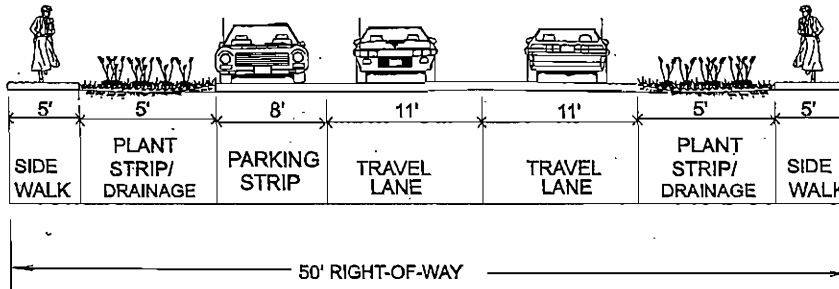
Figure 6
STREET FUNCTIONAL
CLASSIFICATION

Note: Roadway network includes the potential future reconstruction of the interchange overpass and realignment of Thielson Road.

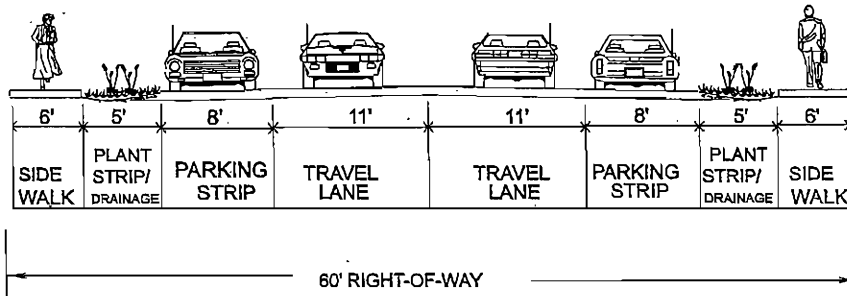
Alley



Local Street



Collector



Downtown Arterial

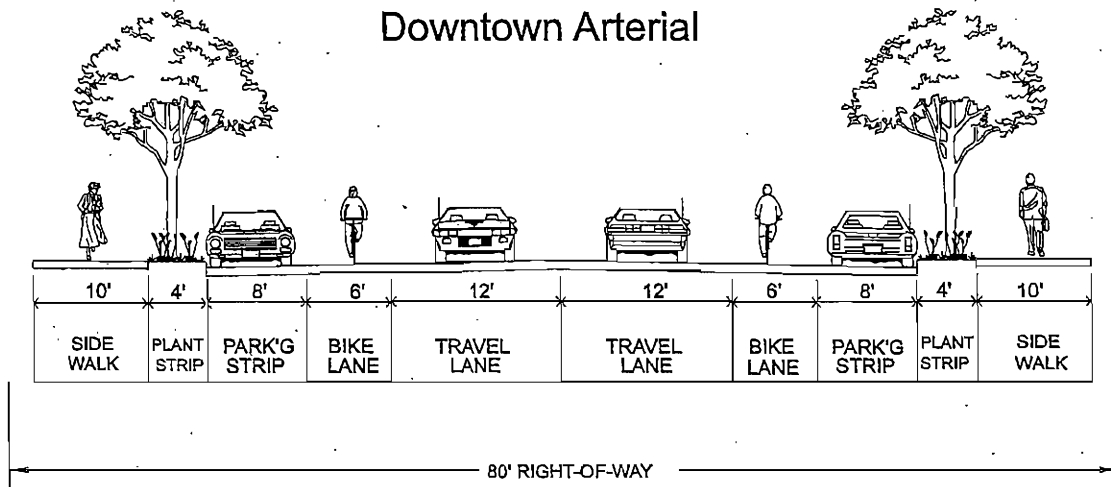
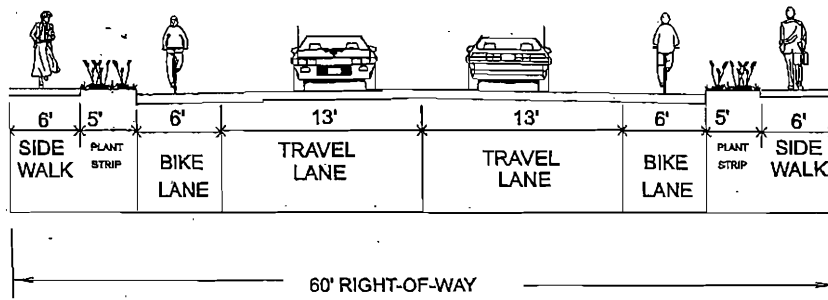


Figure 7
Commercial/Industrial
Cross-section

Commercial/Industrial Collector



Commercial/Industrial Arterial (Thielsen Road)

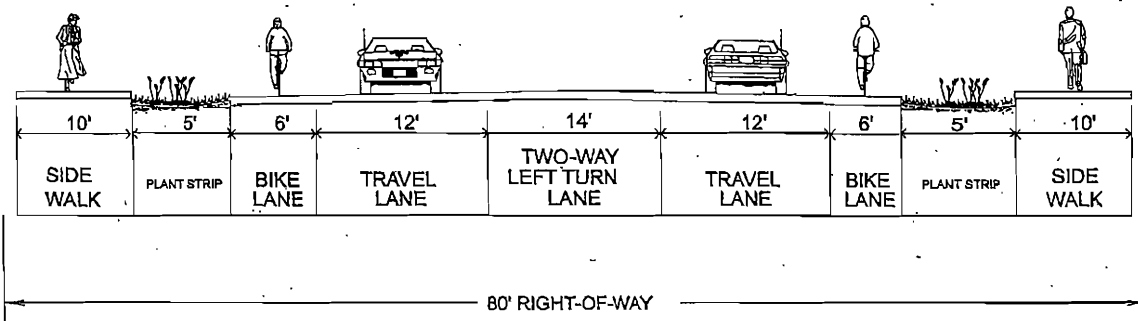


Figure 8
Commercial/Industrial
Cross-section

Land Use Amendments

The following changes to Comprehensive Plan policies and development standards are recommended based on the future transportation needs analysis presented in this study.

City of Echo

The Future Travel Forecasts and Needs Analysis identifies the location of access points necessary to support future development in the interchange area while alleviating future deficiencies and safety issues. The proposed future transportation improvements and access points on Thielsen Road are consistent with the Echo TSP, the 1999 Oregon Highway Plan, Access Management Standards for Interchanges, and the US 395 Corridor Plan recommendations.

The Echo zoning ordinance includes specific provisions (9-3-2-E) that require applicants to obtain an access permit from ODOT prior to final City approval of a development permit. These provisions should be sufficient to implement the recommendations of the Stanfield IAMP. The Echo TSP and associated City ordinance should be amended to include residential collector, commercial/industrial arterial, and commercial/industrial collector cross-section standards.

The City of Echo should amend Table 7-1 in the Echo TSP (page 7-2) to replace the collector cross-section with the residential collector and commercial/industrial collector cross-section standards and add the commercial/industrial arterial to accommodate development in the interchange area. The recommended changes are shown below.

From Echo TSP:

Table 14 - Recommended Street Standards

Classification	Pavement Width	Right-of-way Width	Min. Posted Speed
Alley	20 ft. Gravel	20ft	20 mph
Local/Residential	30 ft. Paved	50 ft.	15 – 20 mph
Residential Collector	38 ft.	60 ft.	25 – 35 mph
Arterial - Downtown	52 ft.	80 ft.	25 mph
Collector – Industrial/Commercial	38 ft.	60 ft.	25 – 35 mph
Arterial – Industrial/Commercial	50 ft.	80 ft.	25 – 35 mph

In addition, the following descriptions should replace the Collectors description on page 7-3 of the Echo TSP and be inserted into the Echo Subdivision Ordinance:

Alley – The standard for an alley shall be two 10’ gravel travel lanes within a 20’ right-of-way.

Local Residential Street – The standard for a local residential street shall be a 28’ paved roadway that includes two 11’ travel lanes, 8’ parking on one side of the street, 5’ planting strip on both sides of the street, and 5’ sidewalks on both sides of the street. The paved roadway shall include a flat curb to protect the roadway from deterioration. The right-of-way for a residential street shall be 50’.

Residential Collector Street – The standard for the residential collector street shall be a 38’ paved roadway that includes two 11’ travel lanes, 8’ parking on both sides of the street, 5’ planting strip on both sides of the street, and 5’ sidewalks on both sides of the street. The paved roadway shall

include a flat curb to protect the roadway from deterioration. The right-of-way for a collector street shall be 60’.

Downtown Arterial – The standard for the downtown arterial street shall be a 52’ paved roadway that includes two 12’ travel lanes, 6’ bike lanes on both sides of the street, 8’ parking on both sides of the street, 4’ planting strip on both sides of the street, and 10’ sidewalks on both sides of the street. The paved roadway shall include a curb and drainage facilities. The right-of-way for the downtown arterial street shall be 80’.

Commercial/Industrial Collector Street – This option should be applied in areas where industrial and/or commercial developments are most prevalent. The standard for the commercial/industrial collector street shall be a 38’ paved roadway that includes two 13’ travel lanes, 6’ bike lanes on both sides of the street, 5’ planting strips on both sides of the street, and 6’ sidewalks on both sides of the street. The paved roadway shall include curbs and drainage facilities. The right-of-way for a commercial/industrial collector street shall be 60’.

Commercial/Industrial Arterial Street – This option should be applied in areas where industrial and/or commercial developments are most prevalent. The standard for the commercial/industrial arterial street shall be a 50’ paved roadway that includes a 14’ center (continuous turning) lane, two 12’ travel lanes, 6’ bike lanes on both sides of the street, 5’ planting strips on both sides of the street, and 10’ sidewalks on both sides of the street. The paved roadway shall include curbs and drainage facilities. The right-of-way for a commercial/industrial arterial shall be 80’.

City of Stanfield

The Future Travel Forecasts and Needs Analysis identifies the location of access points necessary to support future development in the interchange area while alleviating future deficiencies and safety issues. The proposed future transportation improvements and access points on US 395 are consistent with the Stanfield Comprehensive Plan and TSP, the 1999 Oregon Highway Plan, Access Management Standards for Interchanges, and the US 395 Corridor Plan recommendations.

The Stanfield Transportation Goal 1, Objective G calls for limiting access to U.S. 395 south of Ball Avenue and requiring the provision of streets parallel to the highway to serve those areas as development occurs. This objective is consistent with the recommendations of the Needs Analysis.

The Stanfield zoning ordinance includes specific provisions that require applicants to obtain an access permit from ODOT as a condition of City approval for a development permit. These provisions should be sufficient to implement the recommendations of the Stanfield IAMP.

US 395 Access Control

The ODOT has purchased access control rights from many properties along US 395. Once the state has acquired the access rights to a property, road approach permits can only be applied for at locations on the property where the right of access has been reserved. These “reservations of access” give the property owner the common law right of access to the state highway only at specific locations and they are clearly identified in the deed where the property owner sold the right-of-way to the state.

The local street connections shown in the Interchange Area Management Plan are consistent with the future connections identified in the Stanfield Transportation System Plan. Review of this IAMP by ODOT does not imply tacit approval to modify or grant additional access rights. This must be accomplished by applying to ODOT for such modification or grant.

An "indenture of access" is used to modify existing access rights such as moving or widening the reservation or lifting other restrictions that may have been placed on it. A "grant of access" is required to gain an additional access point to the highway and, depending on the circumstances, may require payment to the state for the market value of the grant. Application for both the indenture and grant of access is made to local ODOT district office.

CHAPTER 7: CONCLUSION

The Oregon Highway Plan policies direct ODOT to plan and manage interchange areas for safe and efficient operation. This IAMP is a joint effort between ODOT, the City of Stanfield, the City of Echo and Umatilla County to ensure the I-84/Stanfield interchange area can meet future transportation needs.

The transportation benefits of implementing the Stanfield IAMP include:

- Timely planning to assure suitable placement and spacing of roads before development occurs.
- A plan for the City(s) and County to use as a tool to work with developers for orderly improvements that is consistent with the transportation facility's function, capacity, and performance standards.
- TSPs and implementing ordinances that safely and efficiently accommodate expected traffic in the Interchange Area.

The recommended roadway improvement plan would work to protect the function of the interchange and the adjacent roadway system. Recommended improvements to the interchange overpass were separated into short-term and long-term projects to meet the needs of ODOT. Other recommended improvements would provide traffic control at study intersections for safe and efficient operations between connecting roadways and pedestrian/bicycle facilities along US 395.

With future development and increased traffic volumes, the need for access control within the interchange study area is critical. The access management plan provides an initial concept for a local roadway system within the interchange area based on ODOT and local jurisdiction spacing standards. The identified roadway improvement plan and the access management action items may be implemented with or without the potential future reconstruction of the interchange overpass.

The recommended roadway improvement plan and access management plan are consistent with the Stanfield TSP, the 1999 Oregon Highway Plan, Access Management Standards for Interchanges, and the US 395 Corridor Plan recommendations. To fully coordinate the IAMP with local plans, one change is recommended. The Echo TSP and associated City ordinance should be amended to include residential collector and industrial/commercial collector cross-section standards (text suggested in Chapter 6).