1. EXECUTIVE SUMMARY

This document provides findings of fact and reasons to support exceptions to Statewide Planning Goals 3 (Agricultural Lands), 11 (Public Facilities and Services), and 14 (Urbanization) for (1) the Newberg-Dundee Bypass ("Bypass"), including its terminal connections to Oregon 99W east of Newberg and to Oregon 99W and Oregon 18 near Dayton, and (2) the East Dundee Interchange, including its road connecting the Bypass to Oregon 99W.[1]

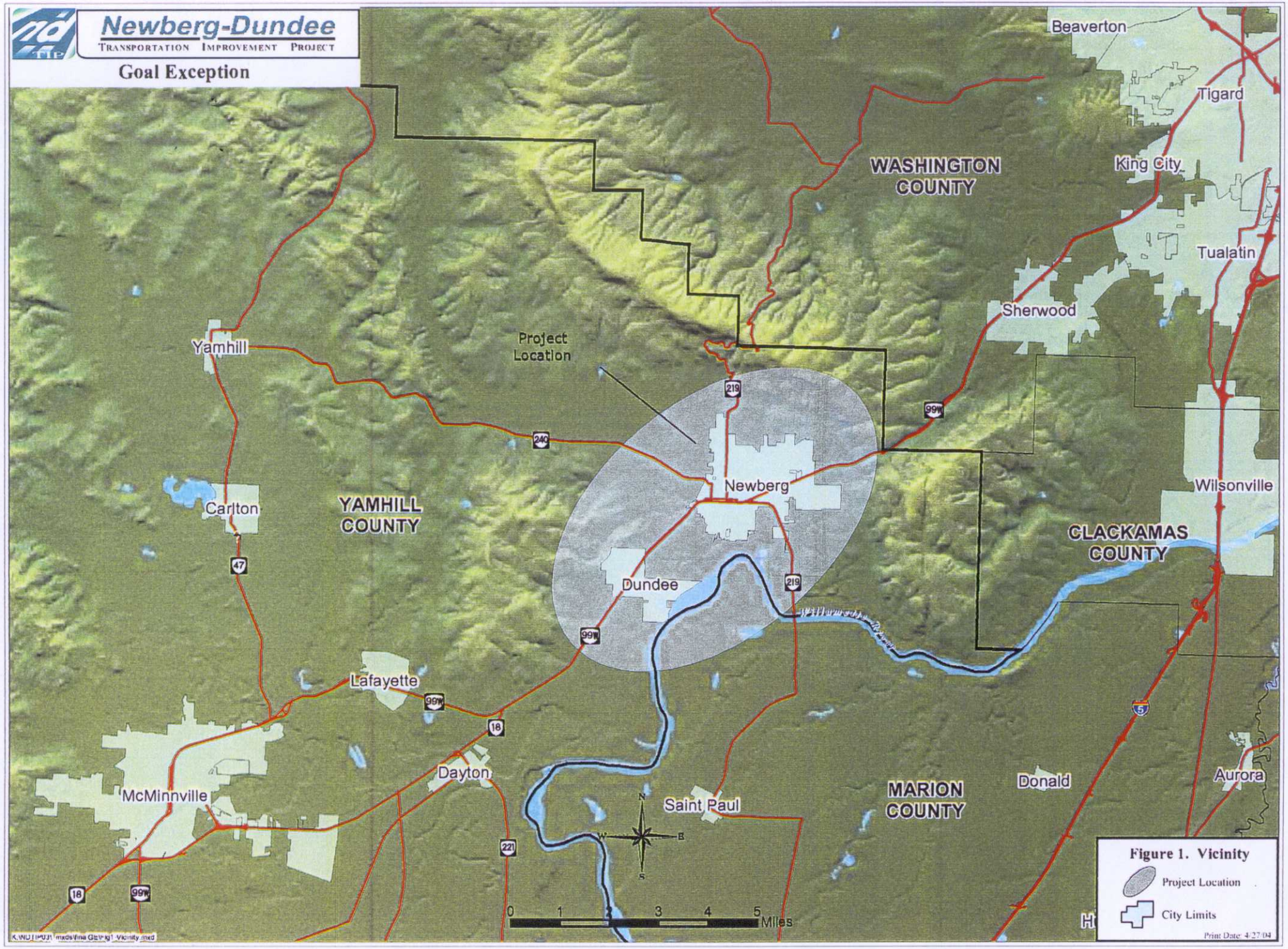
Oregon 99W today serves as the "main street" for both Newberg and Dundee. Oregon 99W connects Newberg and Dundee to the Portland metropolitan area to the northeast and to McMinnville and the Oregon Coast to the west. **See Figure 1**. The highway is a primary route for tourist traffic between the Willamette Valley and Oregon coastal communities. The highway provides access to Oregon's leading wine region, which is centered in the Newberg-Dundee area. It also connects the Portland area to Spirit Mountain Casino, a popular destination located in Grande Ronde. Weekday commuters use Oregon 99W to travel between Yamhill County and the Portland metropolitan area. Regional freight truck traffic movement, particularly en route to and from the central coast, I-5 corridor, and/or the Portland metropolitan area, relies on efficient travel through the corridor.

Over the past decade, traffic on Oregon 99W in Newberg and Dundee has increased by approximately 40 percent. Today, on weekdays and weekends, lines of vehicles on Oregon 99W often stretch for more than one mile in both directions from the traffic signal at the intersection of Oregon 99W and 5th Street in Dundee. This congestion blocks turning movements and access across Oregon 99W and creates an unhealthy and unfriendly environment for residents, shoppers, and tourists using the downtown areas and for people simply trying to get from one side of town to the other. Traffic congestion has reached unacceptable levels for those who live and work in or travel through Newberg, Dundee, and the surrounding areas, including local users, businesses, freight companies, commuters, tourists, and the economically and physically disadvantaged.

During the next 20 years traffic congestion in the area is projected to get much worse. By the year 2025, with some local road improvements but without a bypass, average daily vehicle trips on Oregon 99W are expected to increase over existing volumes by 40 percent in downtown Newberg, 47 percent in downtown Dundee, and 60 percent west of Dundee.

Under the No-Build Alternative, by the year 2025 downtown Newberg would have 15 hours of congestion per day and Dundee would have 14 hours of congestion per day. It would take more than 40 minutes to drive from East Newberg to Dayton with the No-Build, compared to 12–15 minutes with the Bypass. Additionally, the Bypass will greatly improve the safety of local traffic and pedestrian movement along existing Oregon 99W. The improved safety will be accomplished by removing statewide and regional trips from the existing Oregon 99W in Newberg and in Dundee. It is anticipated that for the year 2025, approximately 25,000 daily trips in Newberg and 38,000 daily trips in Dundee will be removed.

[1] The East Dundee Interchange is an element of the Bypass project. However, under the Transportation Planning Rule (TPR), it requires separate goal exceptions.


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Beaverton
Tigard
King City
WASHINGTON COUNTY
Tualatin
Sherwood
Yamhill
Project Location
Newberg
Wilsonville
Carlton
YAMHILL COUNTY
CLACKAMAS COUNTY
Dundee
Lafayette
Dayton
McMinnville
Saint Paul
MARION COUNTY
Donald
Aurora
219
99W
240
47
18
221
5
N
S
E
W
0 1 2 3 4 5 Miles
Figure 1. Vicinity
Project Location
City Limits
Print Date: 4/27/04

Following review of a range of transportation alternatives, including a No-Build Alternative and an alternative focusing on transportation system management, ODOT has determined that a bypass is an integral component in solving this region's growing traffic congestion problem. ODOT's proposal is for a bypass corridor traversing Newberg and Dundee south of existing Oregon 99W.

The proposed Bypass would be a new highway that would constitute a major improvement to the State Highway system. The new facility would function as:

- A "Statewide Highway" under Policy 1A (State Highway Classification System), Action 1A.1 of the 1999 Oregon Highway Plan (OHP);
- An "expressway" under OHP Policy 1A, Action 1A.2; and
- A "freight route" under OHP Policy 1C (State Highway Freight System).

As described in OHP Action 1A.1, Statewide Highways

> "typically provide inter-urban and inter-regional mobility and provide connections to larger urban areas, ports, and major recreation areas that are not directly served by Interstate Highways. A secondary function is to provide connections for intra-urban and intra-regional trips. The management objective is to provide safe and efficient, high-speed, continuous flow operation. In constrained and urban areas, interruptions to flow should be minimal...."[2]

Expressways are a subset of Statewide Highways.[3] As defined in OHP Action 1A.2, expressways "provide for safe and efficient high speed and high volume traffic movements." The primary function of expressways is to provide for interurban travel and connections to ports and major recreation areas with minimal interruptions. A secondary function is to provide for long distance intra-urban travel in metropolitan areas. Expressway speeds are moderate to high in urban areas and high in rural areas. Expressways may include bikeways separated from the roadway.

Freight routes are intended to maintain the efficient through movement of goods.[4] Where feasible, designated freight routes are treated as expressways outside of urban growth boundaries and inside urban growth boundaries where existing facilities are limited access or where corridor or transportation system plans indicate limited access

As a Statewide Expressway, the Bypass would take over the function that existing Oregon 99W currently provides from east of Brutscher Road to the intersection of Oregon 99W and Oregon 18 (McDougal Corner). With the completion and opening of the Bypass, that portion of Oregon

[2] Oregon Highway Plan, Policy 1A, Action 1A.1, page 41.
[3] Expressways also may be subsets of Regional and District Highways. OHP, Action 1A.2, page 42.
[4] OHP, Action 1C.3.

99W would be reclassified as a state District Highway[5] unless it is transferred to Yamhill County or the cities of Dundee and/or Newberg pursuant to OHP regulations. In the event of transfer, the roadway would assume the classifications provided for in the respective transportation system plans (TSPs) of these jurisdictions.

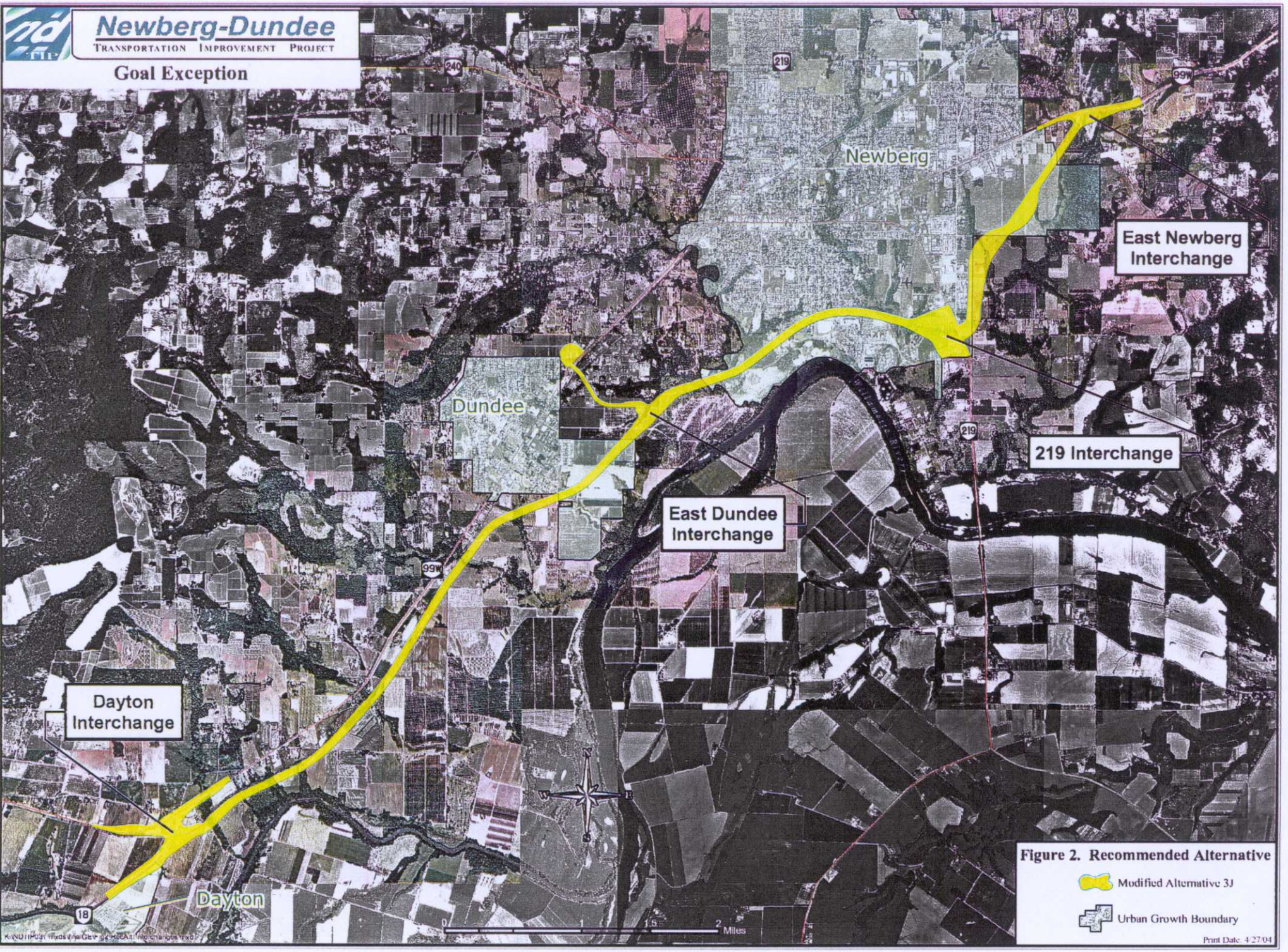
The proposed Bypass would begin east of Newberg and terminate at Oregon 18 (McDougal Corner). **See Figure 2.** The Bypass would be a four-lane expressway with intermediate interchanges located at Oregon 219 in Newberg and between the cities of Newberg and Dundee. The segments of the Bypass located inside urban areas do not require goal exceptions. These segments are recognized and provided for in the TSPs of the cities of Newberg and Dundee. However, those roadway segments located on rural lands do require goal exceptions. These include the segments located east of Newberg, between Newberg and Dundee, and west of Dundee. Exceptions for the terminal interchanges at East Newberg and Dayton are part of the Bypass exceptions. The Oregon 219 Interchange does not require goal exceptions because it will be located entirely within the City of Newberg Urban Growth Boundary (UGB). The East Dundee Interchange and the roadway connecting the Interchange and Bypass to Oregon 99W requires separate exceptions under the Transportation Planning Rule (TPR).

The Bypass is part of a larger transportation improvement project known as the Newberg-Dundee Transportation Improvement Project (NDTIP). In accordance with the Oregon Transportation Plan, the NDTIP represents an effort to develop a balanced transportation system that includes roadway, multimodal, transportation system management (TSM), transportation demand management (TDM), and land use components.[6] The multimodal, TSM, TDM, and land use components of the NDTIP are not a part of this application.[7] Nonetheless, those components are identified in this application to provide the reader with a better understanding of the bypass component within its broader context. ODOT, Yamhill County, and the cities of Newberg, Dundee, and Dayton will be negotiating Intergovernmental Agreements to identify and provide future implementation of those other (non-Bypass) components where financially feasible.

[5] OHP Action 1A.1 provides that District Highways "are facilities of county-wide significance and function largely as county and city arterials and collectors. They provide connections and links between small urbanized areas, rural centers and urban hubs, and also serve local access and traffic. The management objective is to provide for safe and efficient, moderate to high-speed continuous flow operation in rural areas reflecting the surrounding environment and moderate to low-speed operation in urban and urbanizing areas for traffic flow and for pedestrian and bicycle movements."

[6] Transportation system management refers to techniques such as access management or ramp metering that increase the efficiency, safety, capacity or level of service of a transportation facility without increasing its size. Transportation demand management refers to actions such as carpooling that are designed to change travel behavior in order to improve performance of transportation facilities and to reduce need for additional road capacity. Multimodal means more than one mode of transportation (e.g., roadway, pedestrian, bicycle, transit).

[7] While not part of this application, some elements of these components will be addressed concurrently with this application.


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Newberg
Dundee
Dayton
East Newberg Interchange
219 Interchange
East Dundee Interchange
Dayton Interchange
240
219
99W
18
0 1 1.5 2 Miles
Figure 2. Recommended Alternative
Modified Alternative 3J
Urban Growth Boundary
Print Date: 4/27/04

2. DESCRIPTION OF BYPASS PROJECT AND LARGER NDTIP PROJECT

This plan amendment application concerns (1) those portions of the proposed Newberg-Dundee Bypass located in unincorporated Yamhill County, including its terminal connections (interchanges) east of Newberg and near Dayton, /and (2) the East Dundee Interchange, including the road connecting it to Oregon 99W.

This application does not address the proposed Oregon 219 Interchange because, although an element of the Bypass project, it will be located entirely inside Newberg's urban growth boundary and, as such, will not require goal exceptions.[8]

Besides the corridor and interchanges, the "Bypass project" also includes modifications or improvements to portions of the local street system where that system is affected directly by the Bypass or where the modifications or improvements are required to support the Bypass function or to achieve compliance with regulatory standards (e.g., the TPR, the OHP and ODOT access management standards). Some of these modifications or improvements are identified in this application. Others cannot be addressed until the design phase of the project.[9]

The Bypass project is a component of the larger Newberg-Dundee Transportation Improvement Project. Other components of the NDTIP include (1) improvements to other parts of Oregon 99W, (2) improvements to local street systems not addressed by the Bypass project, and (3) an Alternate Mode and Land Use (AMLU) program that is intended to further reduce the number of vehicles traveling in the Oregon 99W/Bypass corridor. These other components are not a part of this application because their implementation does not change the need or scope of the Bypass project. However, to provide the reader with a better understanding of the full NDTIP program, brief descriptions of these street improvements and the AMLU program are provided below.

In developing the Bypass project, ODOT is using a two-tiered process. First the location for the Bypass corridor and associated interchanges are identified (the "location" phase). Later the precise roadway design and alignment are determined (the "design" phase).[10] During this second phase ODOT also identifies the location of all supporting roadways, crossing roadways, and interchange connections.

[8] Should it be determined, during the design stage for the Bypass, that goal exceptions are needed to construct the Oregon 219 Interchange, then additional goal exceptions will be taken at that time as provided in the Transportation Planning Rule.

[9] Some of these modifications or improvements may require subsequent local land use decision-making. Others may be permitted without any need for additional land use decision-making.

[10] The National Environmental Policy Act (NEPA) provides that major highway can be considered as two-tiered projects, with the first tier determining the general project location and the second tier addressing project design.

2.1 BYPASS PROJECT DESCRIPTION

The proposed Bypass is a modified version of the bypass route shown in the Bypass Element Location (Tier 1) Draft Environmental Impact Statement (September, 2002) (hereinafter "LDEIS")[11] as Alternative 3J.[12] It is a bypass located along the south sides of Newberg and Dundee that extends for approximately 11 miles from east of Newberg in the Rex Hill area to where Oregon 99W intersects with Oregon 18 (McDougal Corner) west of Dundee. See Figure 2.

The Bypass includes the following elements as stated in the LDEIS:

- A four-lane bypass "Expressway." As defined in the 1999 Oregon Highway Plan, expressways provide for high-speed, high-volume travel between cities with minimal interruptions.[13] This facility would also serve as a statewide freight highway as defined in OHP Policy 1C.
- A landscaped median or median barrier between the travel lanes as well as shoulders on both sides of the travel lanes.
- Four interchanges, described as follows:
  - A **Dayton Interchange**, located at the junction of Oregon 99W and Oregon 18, that represents the western terminus of the Bypass. This interchange will be a directional interchange providing free flow connections westbound onto Oregon 99W and Oregon 18 and eastbound from those highways onto the Bypass.[14] The interchange will replace the existing Oregon 18/Oregon 99W intersection at McDougal Corner.
  - An **East Dundee Interchange**, located on rural land between Dundee and Newberg that is predominantly designated Very Low Density Residential in the Yamhill County Comprehensive Plan.[15] The interchange will be located at the Bypass, and a new connector road will link the Bypass and Oregon 99W. The connector road will have no intermediate access points between the Bypass and its intersection with Oregon 99W. The connector road intersection with Oregon 99W will include a grade separation across the railroad tracks located just south of Oregon 99W.

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[11] As its title suggests, the LDEIS focused on locating the bypass component of the NDTIP. The LDEIS reviewed the impacts of eight potential bypass corridors plus a No-Build Alternative. Following selection of a preferred corridor, additional studies will be conducted to identify a specific bypass alignment within the selected corridor. The design details will be the subject of a future design level environmental review. See LDEIS at S-1.

[12] The modification to Alternative 3J involves the relocation of the southern-most interchange. The interchange was moved from a location near Dundee to a location near the existing junction of Oregon 99W and Oregon 18 (MacDougal Corner). This interchange is called the Dayton Interchange.

[13] OHP, Action 1A.2, page 42.

[14] The Dayton Interchange is directional and would not provide for movements between eastbound Oregon 18 to westbound Oregon 99W nor from the eastbound Oregon 99W to westbound Oregon 18..

[15] The proposed East Dundee Interchange is not that shown as part of Alternative 3J in the LDEIS. Instead, it is the North Option Alternative, which is located farther to the north and east of the Alternative 3J interchange. The North Option is described in greater detail in Section 7.7.2 of this document.

  - An **Oregon 219 Interchange,** located in south Newberg along Oregon 219. This interchange will be located inside Newberg's UGB and offer full turning movements.
  - An **East Newberg Interchange** located southwest of Rex Hill. Like the Dayton Interchange, the East Newberg Interchange will be a directional interchange, providing free flow connections from the Bypass onto Oregon 99W eastbound and from Oregon 99W westbound onto the Bypass.16 This is the eastern terminus of the Bypass.

- Bicycle facilities, provided either as part of the roadway cross-section or as a separate, parallel facility.
- Restricted access. Access to the Bypass is restricted to interchanges, with no access from private properties allowed. The Bypass would be grade-separated. Major county and city roads would be rerouted under or over the Bypass. Some local streets, crossed by the Bypass, would be rerouted around or away from the Bypass or stopped at the Bypass.
- Bridges crossing larger fish-bearing streams. Bridges would be used to cross larger fish-bearing streams. Smaller drainages may be crossed using fish-passable culverts.
- Improvements to Oregon 99W and local streets, including but not limited to, left and/or right turning lanes at key Oregon 99W intersections throughout the project area.
- Improvements needed to maintain connectivity within and among communities.
- Improvements needed to meet OHP access management standards, including road realignments and private driveway consolidations or relocations.
- A typical operating speed of 45–55 mph.

Consistent with OHP requirements, Interchange Area Management Plans (IAMPs) will be completed for each of these interchanges. These plans will be developed during the design phase of the Bypass project, when the precise locations of the Bypass and its interchanges are determined. As appropriate, the IAMPs will include provisions addressing access management, road connections, local circulation, design and capacity controls, land uses near interchanges, and agency coordination. A primary purpose of the IAMPs will be to protect the function of the Bypass and its associated interchanges to accommodate predominantly long-distance through traffic and regional trips with either an origin or destination outside of the project area. The IAMPs also are intended to minimize accessibility from the Bypass to surrounding rural lands and to support the continued rural use of those lands.

The affected governments will adopt the IAMPs following review and approval by the Oregon Transportation Commission (OTC). The IAMPs will likely require amendments to the local

[16] The East Newberg Interchange provides no connection from the Bypass onto Oregon 99W westbound or from Oregon 99W eastbound onto the Bypass.

comprehensive plans or TSPs.[17] The nature of these amendments, as well as the other components of the IAMPs, are being identified in location phase Intergovernmental Agreements (IGAs) currently being developed and entered into by ODOT, Yamhill County, and the cities of Newberg, Dundee, and Dayton in conjunction with this application. The nature of the amendments being identified in the location phase IGAs will be both general and specific, depending on the issues being addressed and the amount of information available from the location level EIS analysis. An additional round of IGAs may be needed and additional land use actions may be required during the development of the design level EIS.

The Bypass and its associated interchanges also will require changes to the regional and local street network in and around Newberg and Dundee. The Bypass would cut off some streets. Of these, some would remain cut off, while others would be rerouted or grade-separated. Also, some streets may require realignment or new channelization to comply with ODOT access management standards. Realignments and channelization in rural areas may require land use decision-making by Yamhill County. If new frontage roads are needed, they also would require additional land use actions. However, these land use actions cannot be taken until a specific alignment for the Bypass and its interchanges and the necessary improvements to the local road system are determined during the design level EIS process.[18]

The Bypass corridor can best be described by breaking it down into five distinct sections as illustrated in **Figure 3**.

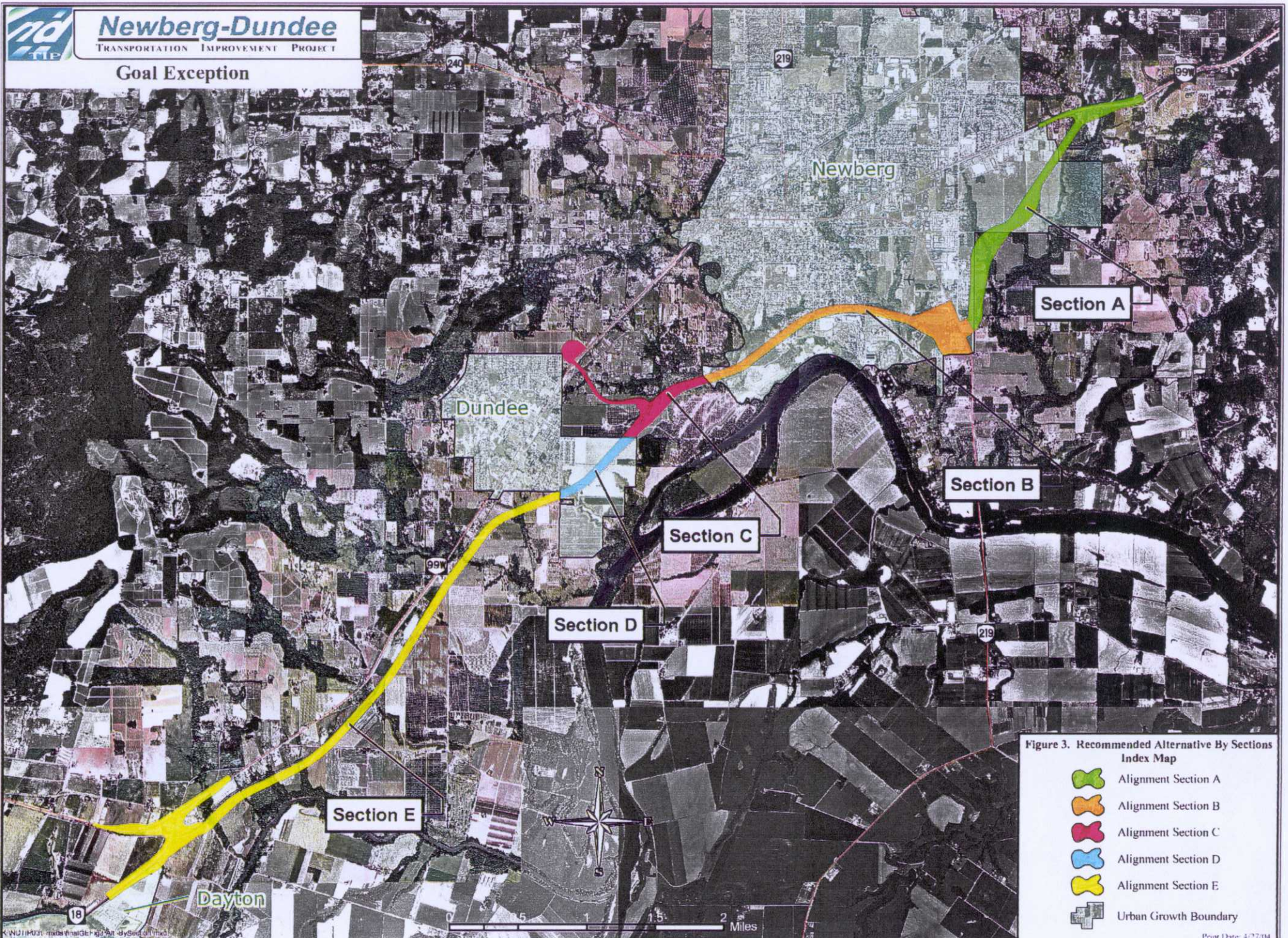
2.1.1 Section A – Eastern Terminus to Oregon 219

Section A begins at the eastern terminus of the project, or East Newberg Interchange, in the Rex Hill area east of Newberg, and ends at the Oregon 219 Interchange. The East Newberg Interchange is a directional interchange located at Oregon 99W and the Bypass. The interchange would not provide for movements between eastbound Oregon 99W to the westbound Bypass nor from the eastbound Bypass to westbound Oregon 99W.

From the East Newberg Interchange, the Bypass corridor in this section runs southwest along the eastern edge of Newberg to the Oregon 219 Interchange. The Bypass in this section travels through both urban and rural land within and outside the UGB. Within the UGB the Bypass corridor is primarily sited on land zoned industrial, most of which is undeveloped. In this area, the Bypass is located west of a planned golf course and south of the future Providence Newberg hospital site. Outside of the UGB, the bypass is located on land designated Rural Residential.

[17] It is not necessary that these IAMPs be adopted and in place in order to approve the requested goal exceptions. However, Yamhill County and the cities of Newberg, Dundee, and Dayton have or are in the process of adopting some specific plan policies or land use regulations prior to approval of this application to ensure certain results upon which the exceptions depend. These policies include some of the land use elements in the AMLU program, such as policies to preclude or limit highway oriented commercial development at or near proposed access points, that are needed to protect the identified functions of the Bypass and its interchanges.

[18] After the design level detail is provided, ODOT will submit applications for any remaining land use actions, if required.


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Newberg
Dundee
Dayton
Section A
Section B
Section C
Section D
Section E
240
219
99W
18
N
S
E
W
0
.5
1
1.5
2
Miles
Figure 3. Recommended Alternative By Sections Index Map
Alignment Section A
Alignment Section B
Alignment Section C
Alignment Section D
Alignment Section E
Urban Growth Boundary
Print Date: 4/27/04

Newberg-Dundee
TRANSPORTATION IMPROVEMENT PROJECT

Goal Exception

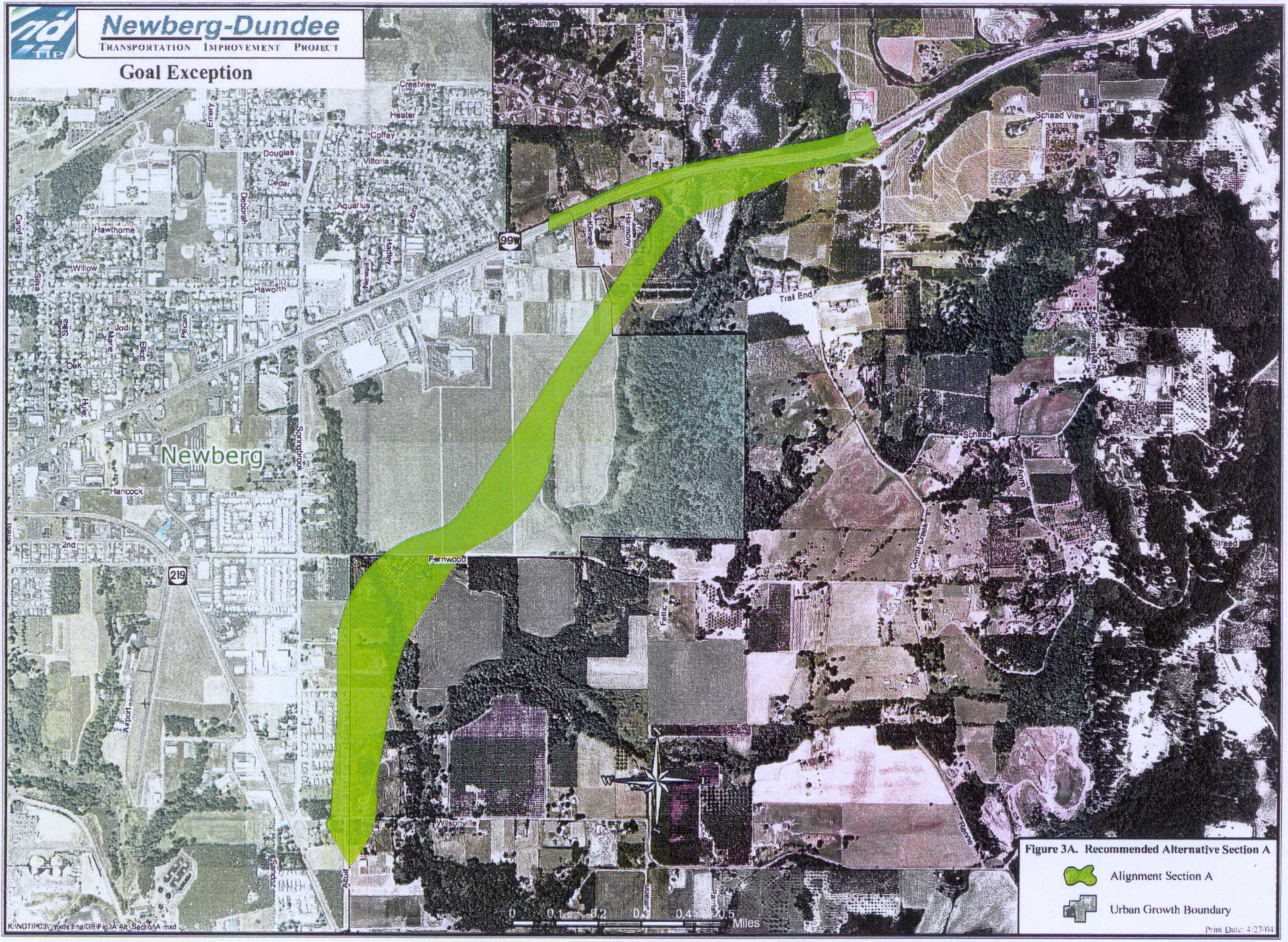


Figure 3A. Recommended Alternative Section A

Alignment Section A

Urban Growth Boundary

Print Date: 4/27/04

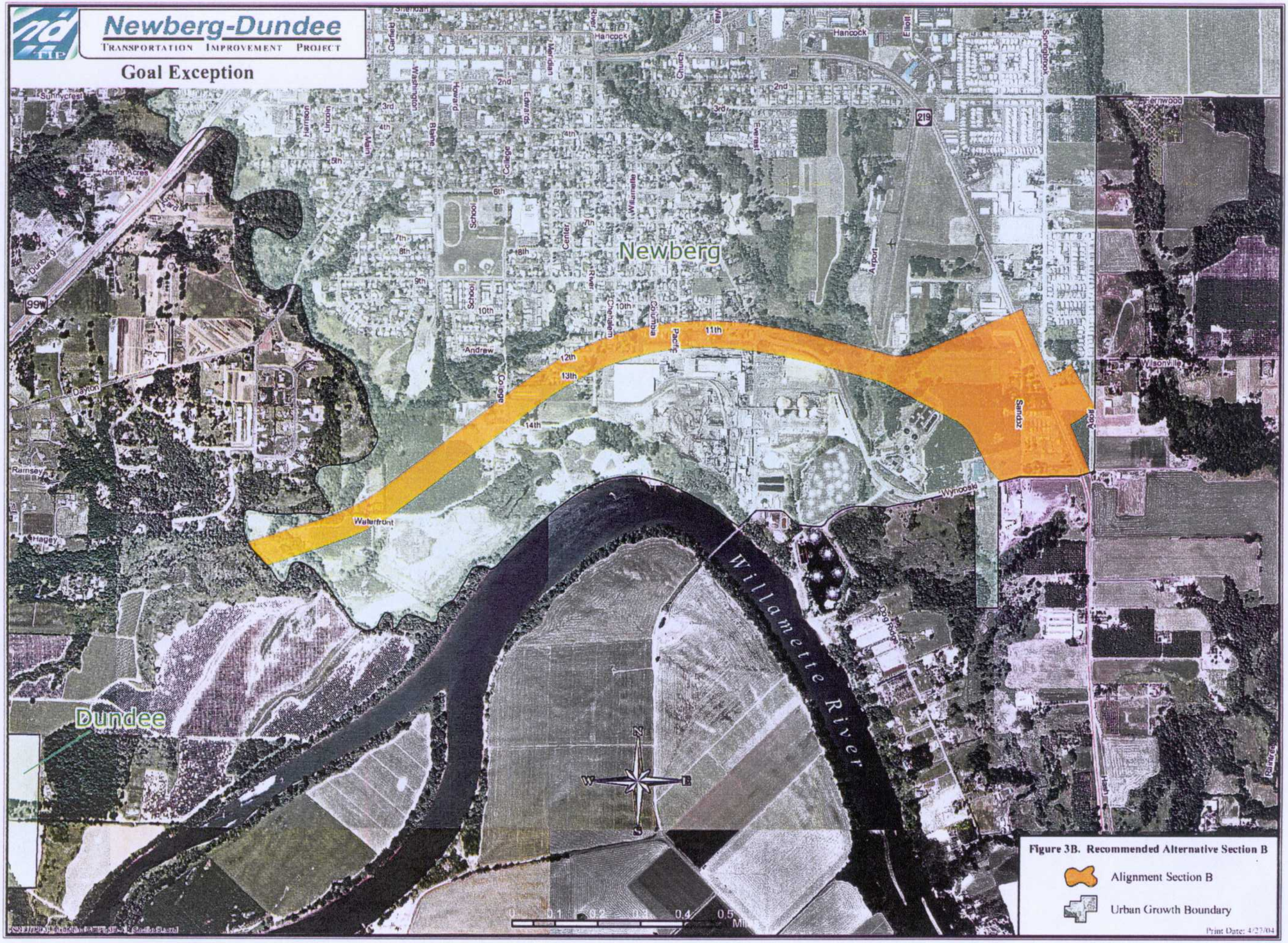
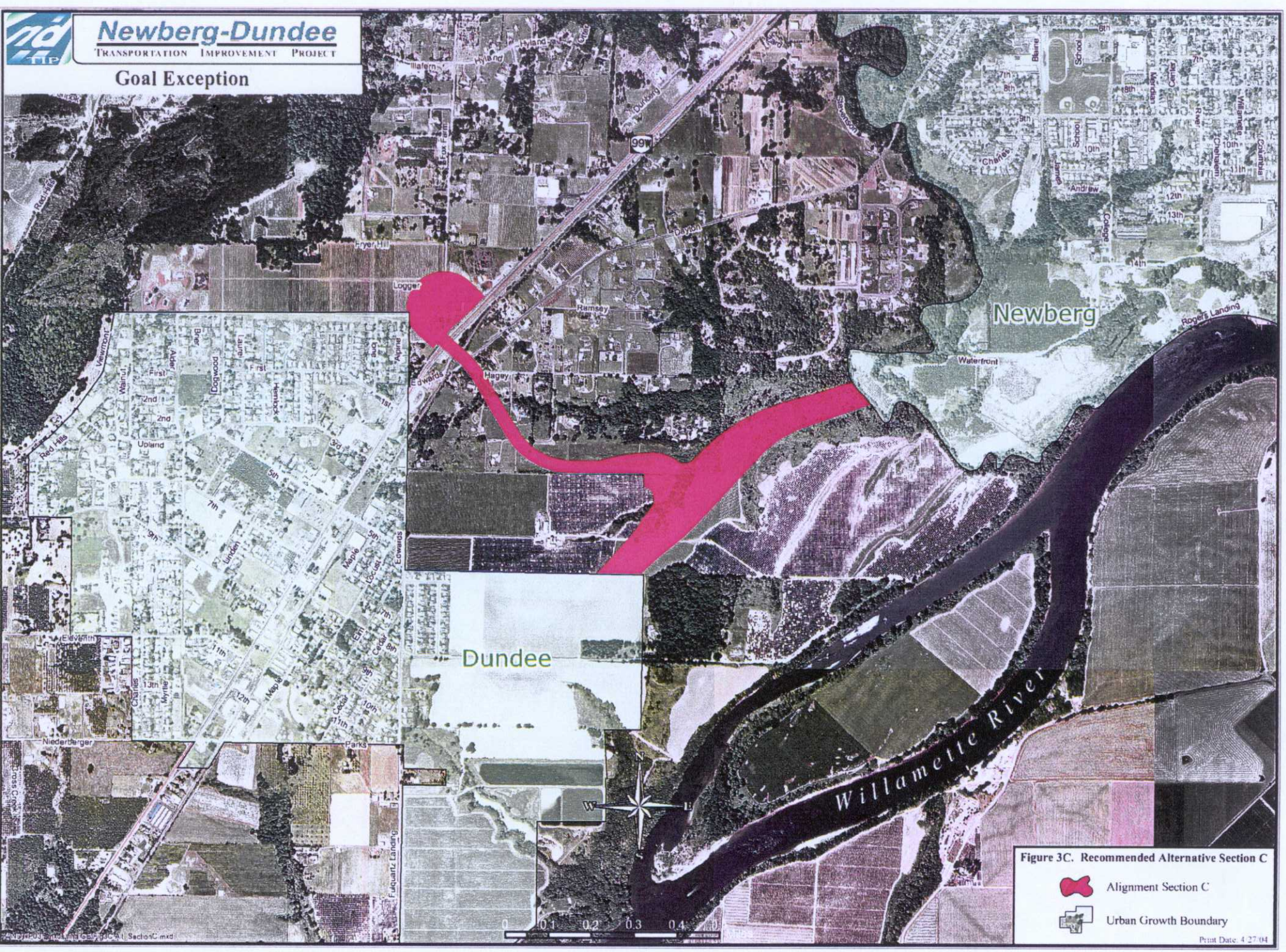


Figure 3B. Recommended Alternative Section B


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Newberg
Dundee
Willamette River
99W
Hyland
Dunking
Ramsey
Hagey
Edwards
Logger
Fryer Hill
Waterfront
Rogers Landing
Red Hills
Upland
Elmwith
Niederberger
Parks
Fulquartz Landing
Cross Creek
Figure 3C. Recommended Alternative Section C
Alignment Section C
Urban Growth Boundary
Print Date: 4/27/04
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Newberg-Dundee
TRANSPORTATION IMPROVEMENT PROJECT

Goal Exception

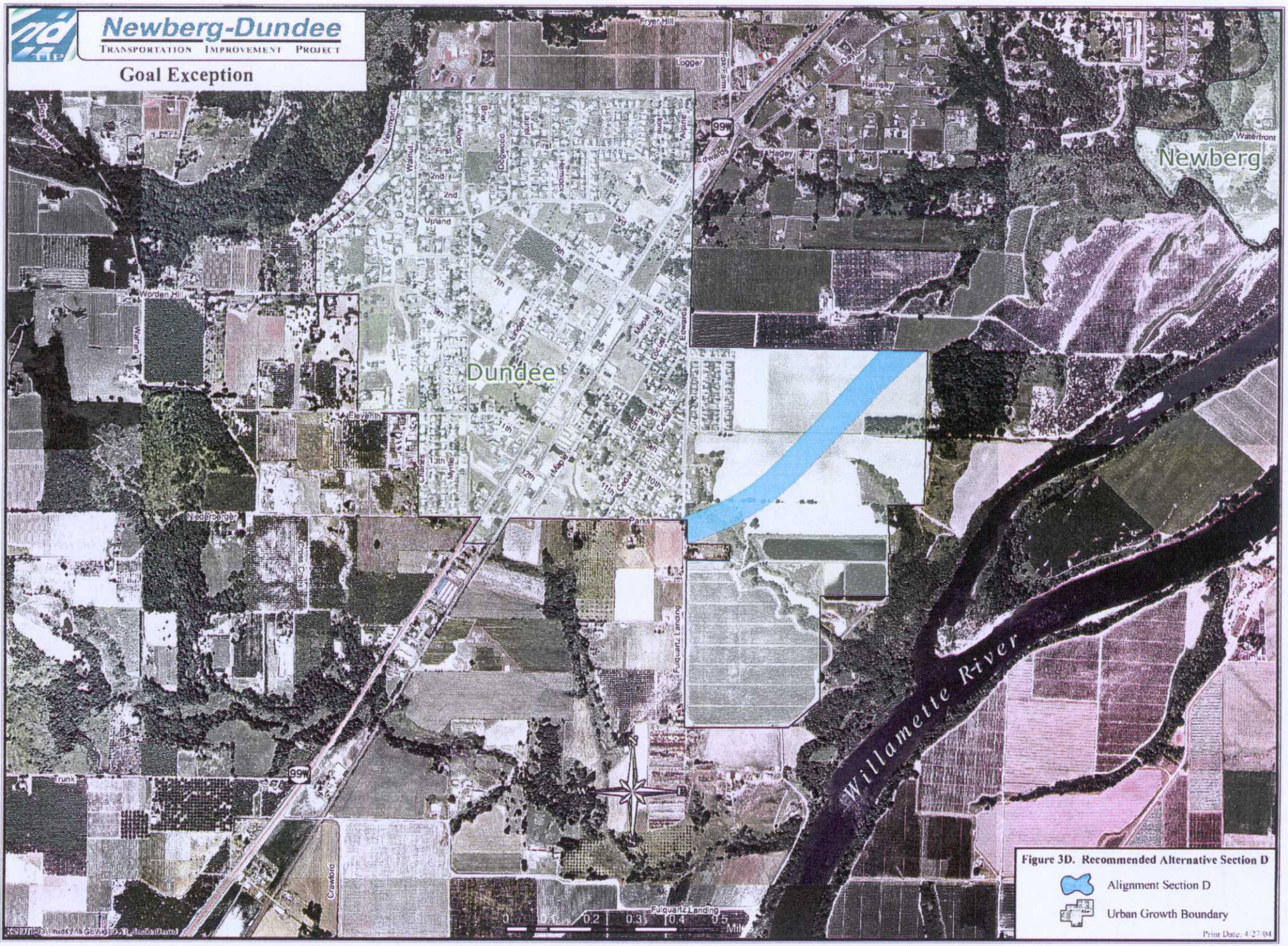
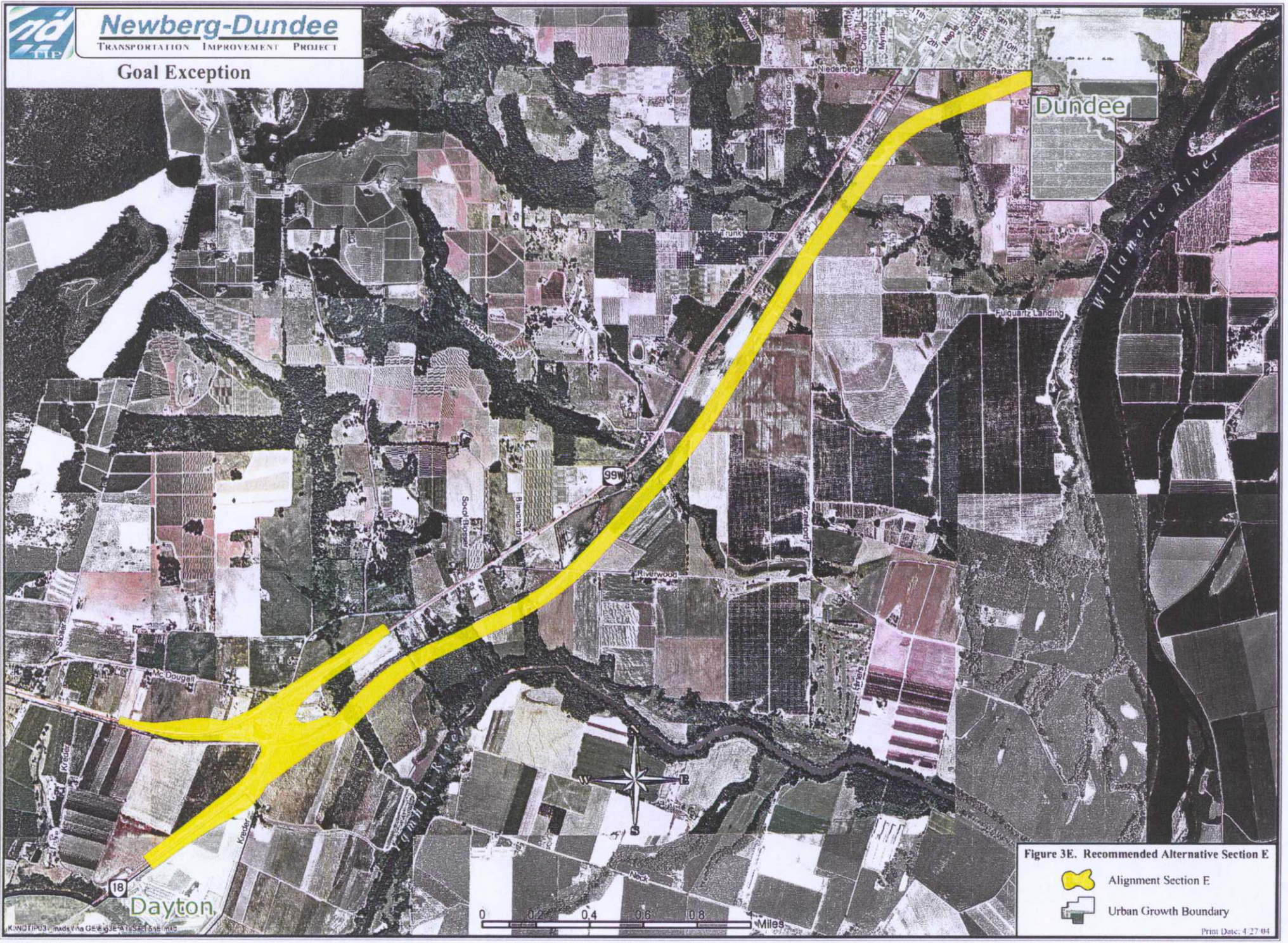


Figure 3D. Recommended Alternative Section D

Alignment Section D

Urban Growth Boundary

Print Date: 4/27/04


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Dundee
Dayton
Willamette River
Fulquartz Landing
Riverwood
99W
18
0 0.2 0.4 0.6 0.8 Miles
Figure 3E. Recommended Alternative Section E
Alignment Section E
Urban Growth Boundary
Print Date: 4/27/04

2.1.2 Section B – Newberg Urban Area

Section B begins at the Oregon 219 Interchange and runs west to the western edge of Newberg. The Bypass in this section, including the Oregon 219 Interchange, is located within the UGB on land zoned industrial and residential. The Oregon 219 Interchange is a full movement interchange. The Bypass in this section is located in areas with existing industrial and residential development.

2.1.3 Section C – Rural Area between Newberg and Dundee

Section C is located between the cities of Newberg and Dundee. It runs southwest through the rural land between the western edge of Newberg and the eastern edge of Dundee, and includes the East Dundee Interchange. The Bypass in this section is located approximately 0.9 to 1.1 miles south of and parallel to Oregon 99W. The East Dundee Interchange consists of a full movement interchange at the Bypass, a connector road that runs between the Bypass and Oregon 99W and an intersection of the connector road with Oregon 99W. The two-lane connector road will not have access to abutting properties. Designers are currently planning for a speed limit of 45 mph for the connector road, which is approximately 0.7 miles long and located on land designated "Very Low Density Residential" in the Yamhill County Comprehensive Plan. One of the primary uses that the connector road crosses is a private airstrip. The intersection of the connector with Oregon 99W will be grade separated across both Oregon 99W and the adjacent railroad.

Section C is located outside the Newberg and Dundee UGBs. A small area of the connector road and ramps to the Bypass is located on land designated Exclusive Farm Use (EFU), but this section is otherwise located on land designated Rural Residential.

2.1.4 Section D – Dundee Urban Area

Section D begins west of the East Dundee Interchange and runs through the City of Dundee. The Bypass in this section is located within the UGB on land that is zoned residential. Most of this land is currently undeveloped.

2.1.5 Section E – Rural Area West of Dundee to Western Terminus

Section E begins at the western edge of the City of Dundee and runs west to the western terminus of the project. The Bypass corridor in this section parallels Oregon 99W and terminates at the Dayton Interchange, where Oregon 99W intersects with Oregon 18. Nearly all of this section is located on rural lands designated EFU. However, a small area of the Dayton Interchange area is located within the City of Dayton's UGB on land zoned industrial. The Dayton Interchange is directional and would not provide for movements between eastbound Oregon 18 to westbound Oregon 99W nor from the eastbound Oregon 99W to westbound Oregon 18.

2.2 OTHER NDTIP ROADWAY COMPONENTS

Besides the Bypass and its associated interchanges, the NDTIP will consider various improvements to Oregon 99W, including local street system improvements within the project area, provision of pedestrian and bicycle facilities, and improvements to existing local or collector roadways within and between Newberg and Dundee.

The specific roadway improvements will be determined during the design phase of the project. While these improvements will be important elements of the NDTIP, they are not a part of this current application for the NDTIP's bypass component. Appropriate amendments to local TSPs will occur prior to completion of the design level EIS.

2.3 ALTERNATE MODE AND LAND USE PROGRAM

In accordance with the Oregon Transportation Plan, ODOT will advocate and facilitate ways to assist local governments and other state and federal agencies in developing an Alternate Mode and Land Use (AMLU) program to reduce the number of vehicles traveling in the Oregon 99W corridor. Provision of alternate (non-highway) modes, such as transit and demand management, and implementation of land use strategies to support existing downtowns or encourage mixed use development were determined to not be able to reduce traffic and congestion enough to adequately meet the identified transportation system performance thresholds. While implementation of an AMLU program does not change the need for the Bypass project as described in this application, implementation of these elements could extend the useful life of the Bypass investment by several years. Consequently, the program is an important element of an overall transportation strategy for the area and thus is included as part of the NDTIP.

The AMLU program will be developed and implemented through a process that will function independently from the Bypass project. This will happen on a timeline that could extend beyond the development of the Location and Design Environmental Impact Statements (EIS's) for the Bypass project. To this end, a separate set of IGAs will be negotiated between ODOT and Yamhill County and the cities of Newberg, Dundee, and Dayton to document the various roles, responsibilities, and desired outcomes of the AMLU process. The process will include, but not be limited to, assessment and analysis of:

- The viability and possible structure of local transit services;
- Possible land use changes to support transit use;
- Improving local transportation system function through transportation system management (TSM) or transportation demand management (TDM)[19];
- Various means of capitalizing, funding, and operating transit services; and

[19] Transportation system management means techniques such as access management or ramp metering that increase the efficiency, safety, capacity, or level of service of a transportation facility without increasing its size. Transportation demand management means actions such as carpooling or vanpooling programs that are designed to change travel behavior in order to improve performance of transportation facilities and to reduce need for additional road capacity. See OAR 660-012-0005(6) and (25).

- Various means of funding and implementing other local land use and transportation system improvements not directly associated with the Bypass project.

ODOT's role in the AMLU process will be to help fund and support the needed analysis and committee work, to facilitate workable solutions, and to advocate for implementation of agreed to improvements and services at the local, regional, state, and federal levels. ODOT also will provide planning and technical assistance to support the formation of the necessary institutions needed to implement these non-highway elements of the NDTIP.

3. BACKGROUND

3.1 PROJECT HISTORY

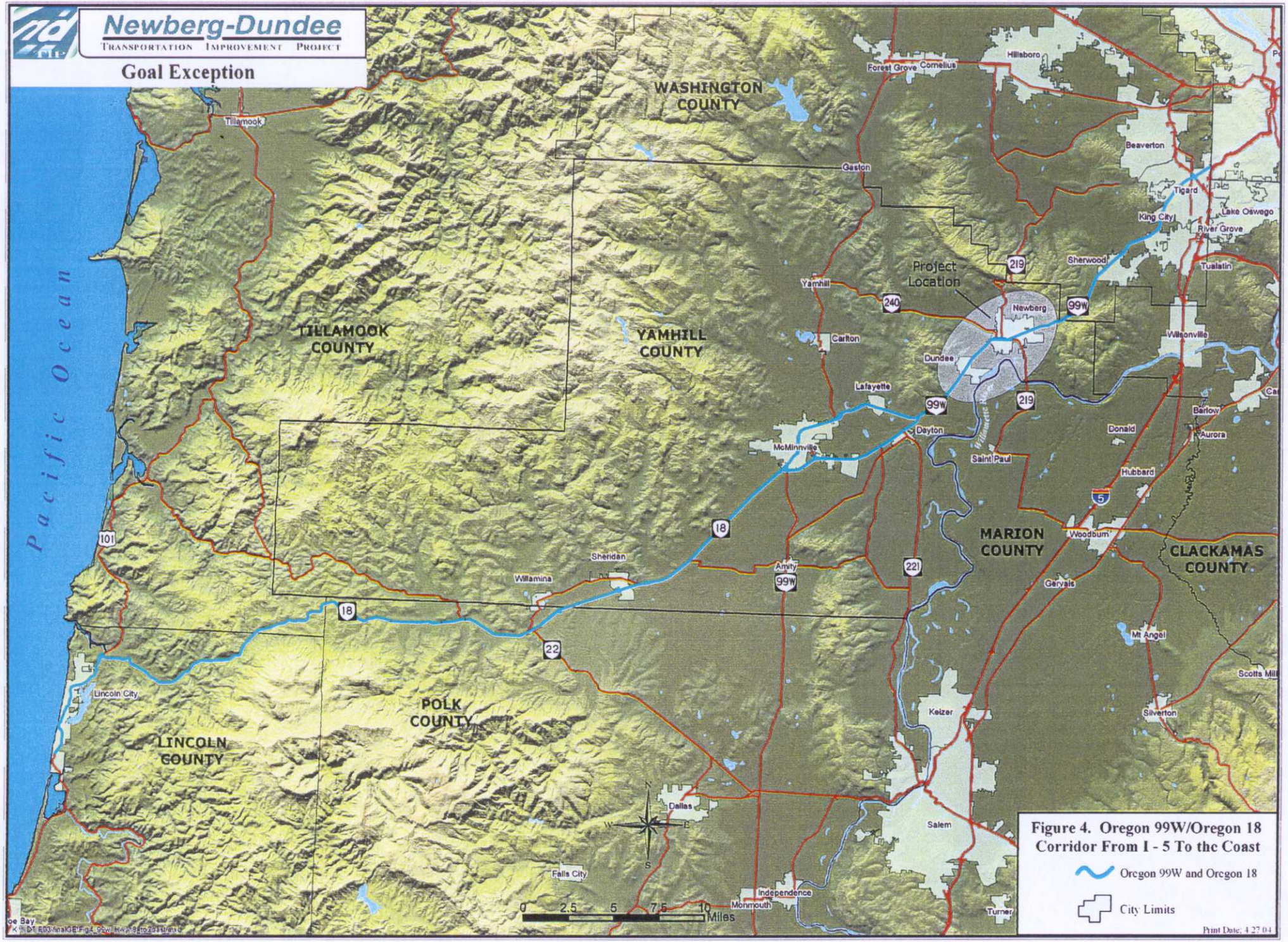
Newberg, Dundee, and surrounding areas in Yamhill County, Oregon, have experienced substantial growth over the past decade. Newberg, the second largest city in Yamhill County, currently has a population of approximately 17,000 residents, while Dundee has approximately 3,000 residents.

Oregon 99W serves as the "main street" for both Newberg and Dundee. Oregon 99W connects Newberg and Dundee to the Portland metropolitan area to the northeast and to McMinnville and the Oregon Coast to the west. **See Figure 4**. This highway has become a primary route for tourist traffic between the Willamette Valley and Oregon coastal communities. Weekday commuters also use Oregon 99W to travel between Yamhill County and the Portland metropolitan area. Regional truck freight movement, particularly from and en route to the central coast, I-5 corridor, and/or the Portland metropolitan area, relies on efficient travel through the corridor.

Over the past decade, traffic on Oregon 99W in downtown Newberg and Dundee has increased approximately 40 percent. Lines of vehicles on Oregon 99W often stretch for more than one mile in both directions on weekdays and weekends. This congestion blocks turning movements and access across Oregon 99W and creates an unfriendly and unhealthy environment for residents, shoppers, and tourists using the downtown areas and people trying to get from one side of town to the other side. Traffic congestion has reached unacceptable levels for those who live and work in or travel through Newberg, Dundee, and the surrounding areas. This includes local users, businesses, current commuters, freight companies, tourists, and the economically and physically disadvantaged. Traffic volumes are expected to increase substantially over the next 20 years.[20]

County residents and ODOT have discussed ways to relieve traffic congestion on Oregon 99W through Newberg and Dundee for many years. In 1990, ODOT published a Reconnaissance Study that considered options for a bypass to Oregon 99W. The study focused on accessibility, the safe and efficient movement of through traffic, economic vitality, roadway safety, and the reduction of traffic congestion. Subsequently, the City of Newberg and Yamhill County incorporated a southern bypass of Oregon 99W in their Transportation System Plans. Funding shortfalls postponed further action until the Oregon Legislature passed Senate Bill 626 in 1995, enabling ODOT to consider a Newberg-Dundee bypass as a potential toll road.

[20] This congestion has occurred despite numerous highway/local street improvement, access management improvement, and transit improvement projects taken over the past 30 years on and in the vicinity of Oregon 99W to increase capacity and safety and relieve congestion. A partial list of these improvements is set out in Section 7.4.3 of this document.


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Pacific Ocean
WASHINGTON COUNTY
TILLAMOOK COUNTY
YAMHILL COUNTY
MARION COUNTY
CLACKAMAS COUNTY
POLK COUNTY
LINCOLN COUNTY
Project Location
Tillamook
Forest Grove
Cornelius
Hillsboro
Beaverton
Gaston
Tigard
King City
Lake Oswego
River Grove
Sherwood
Tualatin
Yamhill
Newberg
Carlton
Dundee
Wilsonville
Lafayette
McMinnville
Dayton
Saint Paul
Donald
Aurora
Barlow
Hubbard
Woodburn
Sheridan
Willamina
Amity
Gervais
Mt Angel
Scotts Mill
Lincoln City
Keizer
Silverton
Dallas
Salem
Falls City
Independence
Monmouth
Turner
101
18
22
99W
240
219
221
5
0 2.5 5 7.5 10 Miles
Figure 4. Oregon 99W/Oregon 18 Corridor From I - 5 To the Coast
Oregon 99W and Oregon 18
City Limits
Print Date: 4.27.04

In 1996, ODOT began the alternatives development phase (Phase 1) of the NDTIP. By 1997, the Project Oversight Steering Team (POST) recommended three multimodal alternatives to the OTC. At the same time, the Governor of Oregon curtailed project development on major transportation projects, so the OTC took no action on the 1997 recommendations.

Local support and funding re-energized the Bypass project in 2000, when the current phase (Phase 2) of the NDTIP began. One outcome of this phase will be a Location Final Environmental Impact Statement (LFEIS) for the bypass component of the NDTIP that selects a specific bypass corridor within which detailed facility design can occur.[21] The other outcome will be intergovernmental agreements, followed later by Interchange Area Management Plans, to protect the function of the Bypass and its interchanges, minimize accessibility to rural lands from the Bypass, and achieve other elements of the NDTIP.

3.2 PROJECT GOALS AND OBJECTIVES

The NDTIP seeks to improve regional and local transportation along the Oregon 99W corridor in the Newberg-Dundee area by reducing traffic congestion. The transportation improvements must also satisfy community values and maintain or enhance economic, social, environmental, safety, and energy conditions. To accomplish these goals, the NDTIP integrates a balance of related transportation efforts. These include a new highway that will bypass downtown Newberg and Dundee, improvements to existing Oregon 99W and to local and collector streets, and land use changes. In addition, ODOT will propose increased opportunities for transit, bicycles, and pedestrians as defined in the AMLU program.

In 1997, during Phase 1 of the NDTIP, project participants developed a list of objectives for the NDTIP. The Project Oversight Steering Team (POST) used the objectives in deciding which alternatives to forward to Phase 2 of the study.[22] When Phase 2 began in 2001, the POST reviewed and slightly modified the 1997 list of project objectives. This review occurred concurrently with the POST's work defining the project's purpose and need. The POST then developed evaluation criteria and measures to help select alternatives that meet the project objectives. The project objectives are:

- Improve transportation performance.
- Protect human health and safety.
- Improve environmental quality.
- Maximize benefits to community economics.
- Improve social/cultural quality.
- Minimize total project costs.

[21] The LFEIS will select a 330-410 foot wide corridor where a bypass can be developed. LDEIS at 2-4.

[22] Members of the POST include representatives from the cities of Newberg, Dundee, Dayton, and McMinnville, Yamhill County, Marion County, ODOT, the Oregon Department of Land Conservation and Development (DLCD), the Federal Highway Administration (FHWA), and the Yamhill Parkway Committee, as well as two State Representatives.

- Maximize likelihood of implementation.

3.3 PUBLIC AND AGENCY INVOLVEMENT

Public and agency involvement strategy for the NDTIP involved designing and facilitating an open and iterative process. The process encouraged consideration and selection of the best alternative that solves current and future transportation needs, while enhancing community livability. An integrated, interdepartmental (local, state, and federal) planning and decision-making procedure completed the public process leading up to a recommendation for a bypass.

Broad public information exchange and involvement were project priorities, as evidenced by extensive media outreach, a project Web site, fact sheets, a project video, and well-attended public meetings and events in affected communities. The project team conducted special outreach in areas where environmental justice could be an issue. In particular, there are locations within the project study area with lower than average income populations and higher incidences of Hispanic or Spanish-speaking residents.

Phase 1 of the NDTIP ended in 1997 with the selection of three multimodal alternative packages that should receive further consideration through the EIS process. Phase 2 began in 2000.

At the beginning of Phase 2, ODOT reconvened the POST established during Phase 1. The POST guided the NDTIP and advised ODOT on identifying a preferred location alternative. POST members met seven times through the completion of the LDEIS.

A Project Advisory Committee (PAC) made up of representatives of a variety of community stakeholders including citizen organizations, businesses, schools, and other interest groups, as well as staff from affected city, county, and state agencies, provided input and guidance on the needs and interests of the communities within the project area. Members also were conduits from the project to the groups, jurisdictions, and organizations they represent.

The Agency Advisory Committee (AAC), also reconvened from Phase 1, helped coordinate the regulatory side of the location selection process early in 2000. However, a new statewide group undertaking an inter-jurisdictional process, the Collaborative Environmental and Transportation Agreement for Streamlining (CETAS), replaced the AAC. ODOT coordinated the work of CETAS to seek agreement on the project's Purpose and Need and evaluation criteria for selecting a preferred alternative. Several AAC/CETAS members participated in the summit meetings and conducted elements of presentations at a community-wide meeting in Newberg. Committee members helped identify a range of alternatives evaluated in the LDEIS. They were also consulted during development of the analytical methods. CETAS members were particularly helpful in identifying regulatory issues associated with the alternatives.

Additionally, a project management team, made up of representatives of ODOT and the consulting team, facilitated discussions between ODOT and the Department of Land Conservation and Development (DLCD) concerning land use and transportation impacts. Project managers also regularly updated members of the OTC.

3.4 LOCAL COMPREHENSIVE PLAN POLICIES RELATING TO A BYPASS

This section provides a brief overview of the Yamhill County, Newberg, and Dundee comprehensive plan and transportation system plan policies that are most directly relevant to the Bypass and East Dundee Interchange. Section 10 provides a more detailed analysis of consistency with applicable Yamhill County Comprehensive Plan and Transportation System Plan policies.

3.4.1 Yamhill County Comprehensive Plan and Transportation System Plan

Yamhill County adopted a Comprehensive Plan in 1974. The 1974 Plan directed the bulk of urban development to existing urban centers and called for the preservation of highly productive farm and forestlands. The 1974 Plan also provided for rural residential development in limited areas. The Comprehensive Plan was updated in 1979 to address the requirements of the statewide planning goals. The County most recently updated its plan in 1996.

The Yamhill County Comprehensive Plan includes a strong policy base to direct growth and development to the ten incorporated cities in the County. Parallel with the direction of urban growth to the cities, the comprehensive plan also includes a strong policy emphasis to protect agricultural and forest lands and the resource-based economy.

Excerpts of key comprehensive plan goals and policies are highlighted below.

3.4.1.1 Urban Area Development

- To encourage the containment of growth within existing urban centers.
- Yamhill County will recognize the lands within established urban growth boundaries as the appropriate and desired location for urban development.
- To encourage the containment of urban facilities and other public capital improvements within existing urbanizing areas in order to achieve an orderly pattern of urban growth.

3.4.1.2 Commercial Development

- Highway service and tourist commercial uses catering to the needs of the traveling public will be encouraged to locate within existing urban centers. Traditional central commercial uses will be encouraged to locate or relocate only in existing town centers and the dispersal of such uses to peripheral highway locations will be discouraged.
- New highway-oriented commercial development at limited-access highway interchanges will only be permitted in urban areas where direct access is provided from a local street system. The county will prohibit direct access from the State highway system for commercial development oriented to limited-access highways.
- To maintain the integrity and function of the highway system, new commercial development shall be discouraged along the route of any limited-access highway.

3.4.1.3 *Agricultural Lands*

- Yamhill County shall provide for the protection of farmland in large blocks through minimum lot sizes of 20, 40, and 80 acres, as appropriate, on the Comprehensive Plan and official zoning maps. (Note: State law now establishes an 80-acre minimum.)

- Yamhill County will provide for the conservation of farm lands through various plan implementation measures and the review of any public or private land use determination subject to county jurisdiction, including urban development activity and the location and construction of highways and utility transmission lines.

3.4.1.4 *Transportation*

- Yamhill County will utilize existing facilities and right-of-way to the fullest extent possible if such use is consistent with the county comprehensive plan.

- The county will continue to work with the State, the City of Newberg, and the City of Dundee on alternatives for routing Oregon 99W traffic through or around Newberg and Dundee.

3.4.1.5 *Transportation System Plan*

- Yamhill County has an acknowledged Transportation System Plan (TSP), which it adopted in 1996. The TSP does not authorize construction of a Bypass in the County, but it expressly supports the concept of a bypass to relieve congestion on Oregon 99W and to enhance the efficiency of the transportation system.

3.4.2 Newberg Comprehensive Plan and Transportation System Plan

The Newberg City Council adopted the Newberg Comprehensive Plan in 1979. The City completed the first periodic review of the plan in 1991. The Plan maintains a strong central core while providing for neighborhood commercial centers. In general, medium and high-density residential areas are clustered around commercial areas and along arterials. Lower density residential areas are generally located to the north of downtown and in peripheral areas. The floodplain and drainage ways provide a basic framework for Newberg's open space network.

Excerpts of key comprehensive plan goals and policies are highlighted below.

3.4.2.1 *Commercial Area Policies*

- The City shall encourage the retention of the downtown core as a shopping, service, and financial center for the Newberg area. New commercial developments shall be encouraged to locate there.

- To maintain the integrity and function of the highway system, new commercial development shall be discouraged along the route of any limited access highway.

- New highway oriented commercial development at limited access highway interchanges will only be permitted where direct access is provided from a local street system. The City will prohibit direct access from the State highway system for commercial development oriented to limited access highways.

3.4.2.2 Transportation Policies

- The City shall promote transportation improvements that would result in less through automobile and truck traffic on 1st Street and maintain the option of future development of light rail to serve the downtown core area.

- Minimize the impact of regional traffic on the local transportation system.

- Enhance the efficiency of the existing collector/arterial street system to move local traffic off the regional system.

- The City actively supports the development of a by-pass of the City along a southern alignment, and the development of a northern east/west minor arterial street.

- The City will continue to work with the State, Yamhill County, and the City of Dundee on alternatives for routing the Oregon 99W traffic through or around Newberg/Dundee.

3.4.2.3 Urbanization

- To maintain Newberg's identity as a community that is separate from the Portland Metropolitan area.

- The designated Urban Reserve Area identifies the priority lands to include within the Newberg Urban Growth Boundary to meet projected growth needs to provide a 30–50 year land supply.

3.4.2.4 Transportation System Plan

- Newberg adopted a TSP in the mid 1990s. The plan currently is undergoing amendments. Existing policies relevant to the Bypass include a policy to provide an alternative route for regional traffic and a policy to continue working with the State of Oregon, Yamhill County and the City of Dundee on alternatives for routing Oregon 99W traffic through or around Newberg/Dundee. The NDTIP is consistent with these policies.

- Proposed new policies would direct the City to adopt regulations to manage land uses and access in the vicinity of interchanges that are consistent with the primary function of the Bypass to serve through traffic and are consistent with the Oregon Highway Plan. They also would provide for implementation of IAMPs and for designation of

the Bypass as a principal arterial. However, these policies have not yet been adopted by the City and thus are not yet in effect.

3.4.3 Dundee Comprehensive Plan and Transportation System Plan

The City of Dundee adopted a Comprehensive Plan and development ordinances in the 1970's. The City completed a limited periodic review and update of the Plan in 1990 and is currently involved in a more comprehensive periodic review, including an update of population projections, buildable land inventories, and housing and commercial/industrial needs analyses.

Excerpts of key comprehensive plan goals and policies are highlighted below.

3.4.3.1 Land Use and Urbanization

- Preserve and enhance the character of Dundee by not combining with Newberg.
- Recommend that Dundee work with Yamhill County and Newberg to manage land between the two cities.
- Place agricultural lands in the eastern portion of the UGB in an agricultural holding designation, to be rezoned incrementally for residential uses when need is shown.

3.4.3.2 Commercial & Industrial Policies

- Limit further strip commercial development as much as possible.
- Avoid strip or scattered commercial development along Oregon 99W.
- Protect areas well suited for business use from encroachment by other uses.
- Assure that commercial and industrial developments preserve and enhance the aesthetic character of Dundee.
- Upgrade businesses along Oregon 99W by supporting traffic improvements that alleviate traffic congestion, by requiring off-street parking, and by requiring high design standards in new developments.

3.4.3.3 Transportation Policies

- Encourage a safe, convenient, aesthetic and economic transportation system.
- Ensure pedestrian safety along Oregon 99W.

The 1978 plan included specific transportation policies requiring special setbacks along Oregon 99W to allow for road widening, and it supported the concept of widening Oregon 99W to four lanes. These policies were specifically deleted from the plan when it was updated in 1990. The

1978 plan expressed a community preference for a bypass around Newberg and Dundee. Transportation System Plan

The City Council adopted a TSP for Dundee in the spring of 2003. The TSP supports a bypass south of Oregon 99W, located as close to the Willamette River and as far from "developed Dundee" as possible in order to minimize impacts on existing developed areas. The TSP also supports an interchange between Dundee and Newberg in order to maintain Oregon 99W as a three-lane facility through the City.

Excerpts of key TSP goals and policies are highlighted below:

- Provide a transportation system that minimizes the adverse impact of through travelers on Dundee.
- Provide a transportation system that fosters a pleasant, small city and preserves and enhances existing neighborhoods and businesses.
- Develop and implement parking and circulation strategies that minimize pedestrian and vehicle conflicts and support downtown business retention and development.
- Develop a transportation system that is consistent with and supports the goals, objectives and visions of the Dundee community.
- Develop plans and ordinances to foster development of facilities that support safe and efficient travel by bicycle, pedestrian and public transportation.
- Develop a transportation system that protects the health and safety of transportation system users.
- Provide and maintain a transportation system that supports the economic vitality of the Dundee community.

4. THE AFFECTED ENVIRONMENT

4.1 TRAFFIC[23]

4.1.1 Detailed Description of Existing Oregon 99W

Oregon 99W is a state highway providing statewide travel and freight movements between Portland and the Oregon coast. As designated in the OHP, Oregon 99W is a highway of statewide importance and a statewide freight route. Generally, this route has 55 mile per hour travel speeds in its rural sections and 35–45 mile per hour travel speeds in the urban sections. The sections in the Newberg-Dundee area are described below.

East of Newberg: East of Newberg, as Oregon 99W approaches Newberg coming off of Rex Hill, it is a four-lane divided highway with paved shoulders, traffic signals at major intersections, and center left-turn lanes at minor street intersections. The designated speed in this section is 55 mph.

Newberg: Oregon 99W has two distinctive street sections within Newberg: the eastern, newer section is a 4–5 lane suburban-style highway and the western, older section is divided into a one-way couplet on two downtown streets. The eastern section is generally higher speed with no on-street parking, and greater spacing between signalized intersections. The western section has more tightly spaced traffic signals and therefore more protected pedestrian crossings, three through lanes in each direction, on-street parking, bike lanes, and slower posted travel speeds.

Oregon 99W is a four-lane road, with designated bike lanes and protected left turn pockets at intersections, in its section from the East Newberg city limits to Springbrook Street. Posted speeds step down from 55 mph east of Newberg to 40 mph at the city limit and to 35 mph at Elliott Street and westward to River Street. From Springbrook Street to Villa Road, Oregon 99W has a center two-way left-turn lane, with two through lanes, designated bike lanes and sidewalks in each direction. The section from Villa Road to River Street is five lanes (three westbound and two eastbound) with a center-raised median, designated bike lanes, and sidewalks. In this eastern 4–5 lane section, Oregon 99W has traffic signals at Springbrook Street, Elliot Road, and Villa Road.

Oregon 99W transitions from a two-way four-lane highway to a downtown one-way couplet at River Street. In the section from River Street to Harrison Street, the one-way couplet is Hancock Street in the westbound direction and 1st Street in the eastbound direction. Each of these streets has three travel lanes, parking on both sides (except at north side of Hancock Street), bike lanes, sidewalks, and a posted travel speed of 25 mph. Traffic signals with protected crosswalks are located at River Street, Meridian Street, College Street, Howard Street, and Main Street. There is also a signalized railroad crossing at Blaine Street. The one-way couplet converges to a five-

[23] Traffic impacts are addressed in more detail in the LDEIS Technical Memorandum: Transportation.

lane section including a continuous center-turn lane on the west side of Newberg at Harrison Street. West of this point, posted travel speeds increase first to 30 mph and then to 55 mph.

Between Newberg and Dundee: Oregon 99W transitions to a four-lane divided highway with paved shoulders for the two-mile distance from Newberg to Dundee. Center turn lanes are provided at minor street intersections. The designated travel speed is 55 mph. Oregon 99W converges to two through lanes with no center median at the Fox Farm Road-Dayton Avenue intersection, with the designated travel speed reducing to 35 mph.

Dundee: For the two-mile section within Dundee, Oregon 99W is three lanes with a single travel lane in each direction and a continuous center-turn lane. There is a single traffic signal within Dundee at 5th Street. There are shoulder bike lanes and the designated speed is 35 mph. There are generally sidewalks on the north side and partially on the south side through Dundee.

West of Dundee: For the two-mile section of Oregon 99W to Dayton, Oregon 99W is generally an undivided two-lane highway with paved shoulders, left-turn lanes at minor street intersections, and a posted travel speed of 45 mph. There is also a divided four-lane portion (with a posted speed limit of 55 mph) as well as a three-lane portion (including a continuous left-turn lane) between Dundee and the Oregon 18 junction. In Dayton, Oregon 99W becomes a business route through McMinnville, while through travelers to the coast would use Oregon 18.[24]

4.1.2 Description of Existing Traffic Conditions in the Area

Oregon 99W today serves as the "main street" for both Newberg and Dundee. Oregon 99W connects Newberg and Dundee to the Portland metropolitan area to the northeast and to McMinnville and the Oregon Coast to the west. The highway is a primary route for tourist traffic between the Willamette Valley and Oregon coastal communities. The highway provides access to Oregon's leading wine region, which is centered in the Newberg-Dundee area. It also connects the Portland area to Spirit Mountain Casino, a popular destination located in Grande Ronde. Weekday commuters use Oregon 99W to travel between Yamhill County and the Portland metropolitan area. Regional freight truck traffic movement, particularly en route to and from the central coast, I-5 corridor, and/or the Portland metropolitan area, relies on efficient travel through the corridor.

Over the past decade, traffic on Oregon 99W in Newberg and Dundee has increased by approximately 40 percent. Today, on weekdays and weekends, lines of vehicles on Oregon 99W often stretch for more than one mile in both directions from the traffic signal at the intersection of Oregon 99W and 5th Street in Dundee. This congestion blocks turning movements and access across Oregon 99W and creates an unhealthy and unfriendly environment for residents, shoppers, and tourists using the downtown areas and for people simply trying to get from one side of town to the other. Traffic congestion has reached unacceptable levels for those who live and work in

[24] Oregon 99W is a two-lane highway as it approaches McMinnville, with designated travel speeds of 55 mph. As the bypass route of McMinnville, Oregon 18 diverts from Oregon 99W at an unsignalized stop-controlled intersection. Oregon 18 south of this diverge point is 55 mph with two through travel lanes, paved shoulder, and center-turn lanes at minor street intersections.

or travel through Newberg, Dundee, and the surrounding areas, including local users, businesses, freight companies, commuters, tourists, and the economically and physically disadvantaged.

Traffic volumes in Newberg and Dundee are expressed in terms of average daily vehicle trips (ADT). Existing ADT at key locations within the study area have been calculated as follows, based on weekday p.m. peak hour modeling forecasts, assuming the peak hour is approximately 10 percent of the daily volumes:[25]

Location	ADT
East of Rex Hill	32,000
East Newberg	36,000
Newberg Couplet	40,000
Between Newberg and Dundee	34,000
Dundee at 5th Street	32,000
West of Dundee	25,000

4.1.3 Projected 2025 No-Build Traffic Conditions

Traffic forecasts indicate that by the year 2025, average daily traffic volumes will increase substantially along Oregon 99W in Newberg and Dundee. Under a No-Build Alternative, Year 2025 ADT forecasts are estimated as follows:

Location	ADT
East of Rex Hill	55,000
East Newberg	48,000
Newberg Couplet	56,000
Between Newberg and Dundee	49,000
Dundee at 5th Street	47,000
West of Dundee	40,000

Under a No-Build Alternative, downtown Newberg and Dundee would experience, respectively, 15 and 14 hours of congestion each day.[26] Under this alternative it would take more than 40 minutes to drive the approximately eleven-mile distance from East Newberg to MacDougal Corner near Dayton.

4.2 LAND USE

4.2.1 Overview of Urban and Rural Land Uses in the Area

Figure 5 highlights generalized comprehensive plan designations for Newberg, Dundee, and the unincorporated area of Yamhill County in proximity to the two cities. The comprehensive plan designations largely capture existing land use patterns. The figure also displays the plan

[25] Newberg-Dundee Transportation Improvement Project, LDEIS Technical Memorandum: Transportation, page 6.
[26] Congestion is defined here as traffic volumes that exceed the applicable volume to capacity performance standard for the roadway facility.

designations for the northeast corner of the Dayton Urban Growth Boundary (UGB) where the Newberg-Dundee Bypass would connect with the Oregon 18 bypass.

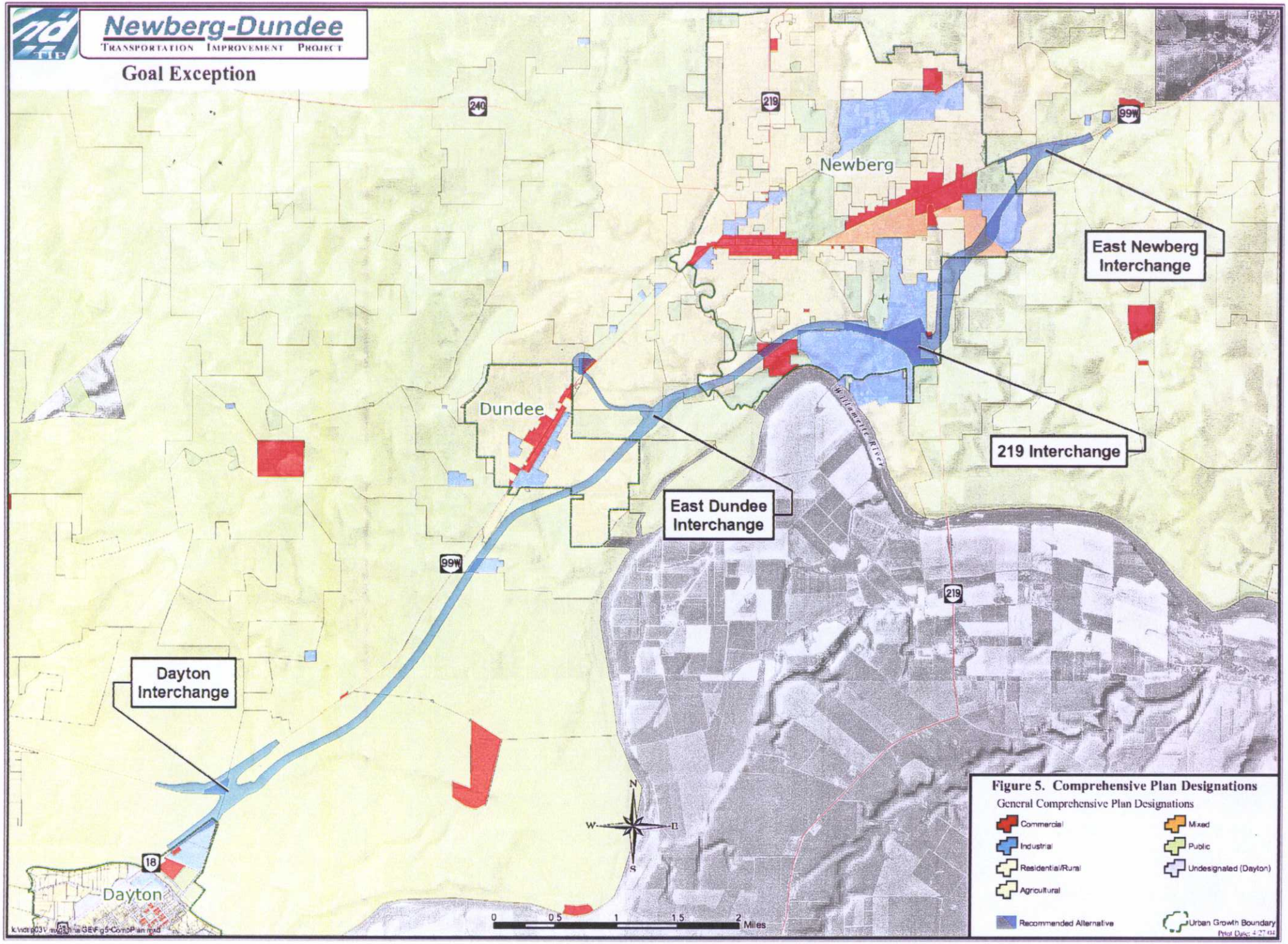
The existing Oregon 99W corridor through Newberg is largely planned and used for commercial development. The traditional downtown area is located at the west end of Newberg, in an area with older buildings with a traditional storefront character, smaller blocks and lots, and primarily on-street parking. The commercial area with a stronger highway orientation extends along the easterly half of the city. This area includes newer and larger commercial buildings, fewer local street connections, and large off-street parking areas.

Oregon 99W bisects Newberg into two halves and residential neighborhoods are located north and south of the state highway. Most of the vacant land for future residential development is located in northern Newberg. Industrial uses are generally located in southern Newberg in the riverfront area and along Oregon 219. Additional industrial and employment areas are located north of Oregon 99W along the railroad corridor. Several public and institutional facilities are located in Newberg, including a public use airport, a university, several school and park facilities, numerous churches, and a hospital.

Oregon 99W between Newberg and Dundee passes through lands that are in rural residential or agricultural use. A small amount of commercial development also is located in this segment. The Oregon 99W corridor through Dundee is planned for commercial development. Existing commercial uses include restaurants, small stores, and winery oriented businesses. A few industrial businesses, including the Westnut processing and packing plant, are located between Oregon 99W and the railroad to the south of the highway.

Most existing residential development in Dundee is located north of Oregon 99W and extends up the hills. While a large area south of Oregon 99W and the railroad is included in the Dundee UGB and planned for future residential development, it is currently in agricultural use.

The Dundee Elementary School is located on the north side of Oregon 99W. Other community facilities, including the post office, city hall/police station, and park, are also located north of Oregon 99W along 5th Street.


Newberg-Dundee
Transportation Improvement Project
Goal Exception
240
219
99W
Newberg
East Newberg Interchange
Dundee
219 Interchange
East Dundee Interchange
99W
219
Dayton Interchange
18
Dayton
N
W
E
S
0 0.5 1 1.5 2 Miles
Figure 5. Comprehensive Plan Designations
General Comprehensive Plan Designations
Commercial
Industrial
Residential/Rural
Agricultural
Mixed
Public
Undesignated (Dayton)
Recommended Alternative
Urban Growth Boundary

The west end of the Bypass will connect with Oregon 18 at the Dayton Interchange. Oregon 18 already bypasses downtown Dayton. Land adjacent to the south side of Oregon 18 within the Dayton UGB is planned for commercial, industrial and public facility uses. Existing land uses in the immediate area include an RV park and the city's sewage treatment plant. The City of Dayton has approved plans for development of a gas station and restaurant to the east of the RV park. The remainder of the property within the UGB abutting the south side of Oregon 18 is vacant and designated for industrial use on the Dayton Comprehensive Plan.

Agriculture is the dominant land use outside of the UGB's of Newberg, Dundee, and Dayton. Agriculture is the principal industry in Yamhill County, with the proportion of employment in agriculture twice that of the average in the state. The county ranks seventh out of the 36 counties in the annual market value of agricultural production. Yamhill County is one of the nation's major producers of hazelnuts. Other principal agricultural products grown include wheat, tree and plant nursery stock, wine grapes, a variety of fruits and vegetables, and legume and grass seed.[27]

Yamhill County is Oregon's leading wine region. Many of the more than 100 vineyards and 40 wineries in Yamhill County are concentrated in the Newberg-Dundee area. The vineyards are a growing industry, and local and international vintners have made a large financial investment around Newberg and Dundee.

While the Newberg-Dundee area is a productive agricultural area, there is also a significant amount of rural residential development located outside the UGB's and between the two cities. As of 1999, there were 468 developed lots in this rural residential area, with the potential for development of up to 330 additional dwellings based on acknowledged Yamhill County zoning.[28]

4.2.2 Population and Employment Trends

The population of Yamhill County more than doubled in the 30-year period between 1970 and 2000, increasing from approximately 40,000 in 1970 to approximately 85,000 in 2000. During this same 30-year period, the population of Newberg tripled from approximately 6,500 in 1970 to approximately 18,000 in 2000. The magnitude of growth in Dundee was even more dramatic, with city population increasing from approximately 590 in 1970 to more than 2,500 in 2000.

The percentage of total Yamhill County population residing in incorporated cities has increased over the past 30 years. More than 50 percent of the total county population resided in the two largest cities of McMinnville and Newberg in the year 2000. The remaining eight cities in the county all have individual populations under 3,000, including Dayton at 2,119 and Dundee at 2,598. The City of Newberg is capturing a larger share of the total county population, increasing from 16 percent in 1970 to 21 percent in 2000.

[27] OSU Extension Service for Yamhill County, 2000 Estimate of Agricultural Commodity Sales.
[28] Yamhill County Planning Department, Inventory of Rural Area Development for Exception Area 1.8, 6/99.

The State of Oregon Department of Administrative Services (DAS) prepares population and employment forecasts for the 36 counties in the state. For the year 2020, DAS projects a Yamhill County population of approximately 120,000. The Newberg Urban Reserve Area Plan projects that Newberg's population will reach 33,200 in 2020 and the Dundee Transportation System Plan/Periodic Review projects that Dundee's population will reach 5,744 in 2020.[29]

The economy of northeast Yamhill County, including the cities of Newberg and Dundee, has become more diverse. The area's original economic base revolved around agriculture. While the area retains a strong agricultural economy, energized by the growing wine industry, a diverse manufacturing economy has also developed over the past 20 years.

More than 25 percent of all jobs in Yamhill County are located in the Newberg area, and the City is home to several large manufacturing firms. Major employers in Newberg include A-Dec (dental equipment), SP Newsprint Co. (newsprint), EFTC Northwest (circuit board assembly), Newberg Public Schools (education), George Fox University (private university), and Providence Newberg Hospital (health care).

The employment base in Dundee and Dayton is much more limited. Major manufacturing employers include nut processing and wineries. Other local employment is associated with commercial service and public sector categories.

The geographic location of the cities of Newberg, Dundee, and Dayton, combined with the existing state highway network, provide convenient options for commuting in several directions to different employment centers. Residents of northeast Yamhill County have access to the jobs and services of a much larger metropolitan region within a relatively short commute. The regional urban growth boundary for the Portland metropolitan area extends to the City of Sherwood, less than 9 miles from the City of Newberg via Oregon 99W.

- Within Yamhill County, jobs are concentrated in Newberg and McMinnville, accessible by Oregon 99W and Oregon 18.

- Northeast of Newberg, the 4-lane Oregon 99W provides access to growing employment centers in the southern Portland metropolitan area, including Tualatin, Tigard, Beaverton, Kruse Way, and Wilsonville.

- Oregon 219 provides a highway connection south to I-5 and jobs in Salem.

Despite the convenient location and accessibility of Newberg to high-growth employment areas, the City has not developed solely as a bedroom community to the Portland metropolitan area. The growth of employment in Newberg has generally kept pace with household growth. Still, there is significant commuting between Newberg and Dundee and the Portland metropolitan area.

[29] The City of Dayton has a year 2015 population projection of 2,705. Dayton's 2020 population has not yet been forecasted.

Residential real estate brokers active in the Newberg and Dundee market areas believe that commute trends are related to housing price trends in the larger Portland metropolitan market. As housing prices have increased in Sherwood, Tigard, and Beaverton, Newberg brokers have seen an increase in the number of people looking for entry level housing in Newberg and willing to commute to jobs located elsewhere.

4.3 THE AFFECTED RURAL AREA[30]

Outside of urban growth boundaries, goal exceptions are required to allow new transportation facilities like a bypass or a new interchange to be located on rural lands. Because this application requests approval of exceptions to allow such uses, this section provides a more detailed description of the rural lands and land uses within the NDTIP study area.

Rural areas are located (1) east of the Newberg UGB, (2) between Newberg and Dundee, and (3) west of Dundee. Each of these areas has distinctive characteristics, described below. East of Newberg and between Newberg and Dundee, the predominant land use pattern is a combination of farming operations and rural residential development. West of Dundee, agricultural uses predominate. See Figure 5. Agricultural areas throughout the study area are characterized by a combination of small-scale farms (less than 10 acres to 60 acres in size) and much larger farms (100 acres to approximately 875 acres) that often are owned or leased as part of larger agricultural operations. Some of the smaller farm properties operate more like hobby farms than commercial farms, with the primary use being residential and the primary source of income not related to farming. Portions of several farm properties are not farmed and include forested areas.

4.3.1 East of Newberg

Small farms, forested areas, and rural residential areas characterize the rural areas east of Newberg. Plan designations for this rural area are Agriculture and Very Low Density Residential. See Figure 5. The Rex Hill winery and vineyards are located north of Oregon 99W, just to the east of the proposed East Newberg Interchange terminus. Farther west, also north of Oregon 99W, is an approximately 70-acre farm, Stoneybrook Farms, an approximately 10-acre portion of which is listed on the National Register of Historic Places, and north and west of Stoneybrook Farms is a very large rural residential area.

South of Oregon 99W is an area of interspersed agricultural and rural residential uses. Some properties in this area are protected by EFU zoning. However, others are designated AF-10 (Agriculture/Forestry Small Holding), which is a zone applied to rural exception lands. A mix of EFU and AF-10 lands and some rural residential areas also are present east of the proposed Oregon 219 Interchange.

[30] The rural lands and land uses in the affected rural areas are described in greater detail in two memoranda from Donna Robinson to Mark Greenfield, one regarding "Comprehensive Plan, Zoning Designations and Land Uses" (November 21, 2003) and one regarding "Exclusive Farm Uses (EFU) Within the Goal Exception Project Area" (November 21, 2003).

4.3.2 Between Newberg and Dundee

A distance between approximately 0.5 and 1.25 miles separates the urban growth boundaries of Newberg and Dundee. Both to the north and south of Oregon 99W, this area is characterized by very large blocks of rural residential land and large areas designated and zoned for agricultural use. See Figure 5. There also are some forested areas north of Oregon 99W.

The rural residential area south of Oregon 99W contains approximately 240 acres and is characterized by parcels ranging in size from less than one acre to 22 acres. The rural residential area north of Oregon 99W contains approximately 270 acres and is characterized by parcels ranging in size from less than one acre to 38 acres. In both of these rural residential areas the average parcel size is three to five acres. The majority of the parcels include a residence. The larger parcels often include additional outbuildings. Hobby farming activities occur on some of these properties. Approximately one third of the area south of Oregon 99W and one fourth of the area north of Oregon 99W is forested.

Orchards, perennial grasses (including rye, hay, clover, and wheat), and grain crops characterize the agricultural uses on the EFU-zoned lands located north of Oregon 99W. Much of the land here is leased for agriculture. Farm properties include the 230-acre Kjersten property, which is currently used for growing ryegrass seed, and several 35–40 acre properties used for growing grasses, grains, or Christmas trees.

The dominant agricultural feature south of Oregon 99W is the approximately 300-acre Dundee Farm that is part of a much larger agricultural enterprise owned by Columbia Empire Farms, which includes facilities for production, processing, marketing and sales of farm products. Crops grown at Dundee Farm include filbert orchards (140 acres), berries (60 acres), and honey. The company employs over 350 people either full or part time, mostly in Yamhill County. The Dundee Farm is identified as high value farmland. Portions of the farm are tiled and irrigated. The farm also includes a barn, an office, 25 units of farm worker housing, and a small production facility.

4.3.3 West of Dundee

The area between Dundee and Dayton is the longest rural portion of the Bypass project. Most of the land here consists of "high value" farmland, and farming is the dominant land use. See Figure 5. Crop production includes orchards (filberts and walnuts), berries, vineyards, perennial grasses, grains, Christmas trees, beans, corns, and flowers. Several farms raise livestock, including cattle, sheep, chickens, pigs, and rabbits.

Evergreen Agricultural Farm Enterprises operates two farms in this area, the Hawman Farm (approximately 550 acres) and the Greenpatch Farm (approximately 850 acres). Both farms are part of a larger, parent operation, Evergreen Aviation. The company employs approximately five to 80 workers at these farms, depending on the time of the year.

The Greenpatch Farm has 750 acres in filbert orchards and 100 acres in vineyard. The orchards are not irrigated. However, the vineyard has a drip irrigation system with irrigation rights to the

Willamette River. The property includes six residences, some farm worker housing, and numerous outbuildings. The Hawman Farm has 230 acres in Christmas tree production, approximately 190 acres in row crops (beans and corn), and another 100 acres that currently are idle. The Hawman Farm is irrigated and tilled, with irrigation rights to the Yamhill River.

Other large farming operations in this area include the Dundas Farm (116 acres), which is a Century Farm producing clover, wheat, berries and livestock; the Paine Farm (179 acres), which produces wheat, alfalfa, red clover and hay as well as walnut trees and livestock; the Leppin Farm (157 acres), used for growing ryegrass, hay, and pasture and for raising cattle, chickens, rabbits, and pigs; and the Arland McDougal Farm (212 acres), used primarily for growing wheat. Several smaller farm properties ranging in size from approximately 23–43 acres also are located in this area.

Accepted farming practices in all of the agricultural areas include spraying with pesticides or herbicides and fertilizing (both liquid and dry). Generally, these are spread by spreader or sprayer tractor attachments, although aerial application is used for some limited purposes. Farming practices also include irrigation (where available), the use of tiles for drainage, and practices associated with tilling, planting, and harvesting, including the movement of farm equipment and machinery.

5. INTRODUCTION TO THE TRANSPORTATION PLANNING RULE AND OVERVIEW OF THE GOAL EXCEPTIONS PROCESS

For many years Yamhill County and the cities of Newberg and Dundee have envisioned construction of a new "bypass" to accommodate "through" traffic (i.e., traffic with origins and destinations outside the Newberg-Dundee urban area) and "regional" traffic (i.e., traffic with either an origin or destination, but not both, in the urban area) now traveling on existing Oregon 99W. A bypass has long been identified as a future transportation facility in their TSPs, subject to approval of required goal exceptions.

To authorize a bypass, Yamhill County and the cities of Newberg and Dundee must demonstrate compliance with applicable statutes and with the Transportation Planning Rule (TPR), codified at Oregon Administrative Rules (OAR) Chapter 660, Division 12.[31] For the cities of Newberg and Dundee this task is less difficult because the TPR allows new roads to be planned and constructed inside UGBs.[32] A bypass has been part of Newberg's acknowledged comprehensive plan for many years. A bypass also is an element of Dundee's recently adopted TSP.

Outside UGBs, however, ORS 215.283 and the TPR prohibit new roads and new interchanges except when the local government governing body or its designee adopts "an exception to the goal related to agricultural lands and to any other applicable goal with which the facility or improvement does not comply."[33] The standards governing such exceptions are set out in the TPR at OAR 660-012-0070.

In this instance, because the Bypass and the East Dundee Interchange would be located in part on agricultural lands that are protected through "exclusive farm use" (EFU) zoning, an exception is required to the policy in Statewide Goal 3 (Agricultural Lands) to preserve agricultural land for farm uses. In addition, because the Bypass would be considered an urban use and an urban facility, its location on rural lands requires exceptions to the policies in Statewide Goal 14 (Urbanization) and Goal 11 (Public Facilities and Services) that direct urban growth and urban-scale facilities inside urban growth boundaries. Hence, for Yamhill County to authorize a Bypass on unincorporated lands outside the Newberg and Dundee UGBs, it must adopt these goal exceptions and include them in its TSP.

Under OAR 660-012-0070 in particular and ORS 197.732(1)(c), Goal 2 Part II, and OAR 660, Division 4 more generally, goal exceptions must provide reasons justifying (1) why the state policy embodied in the applicable goals should not apply, and (2) why areas not requiring a new

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[31] The Oregon Land Conservation and Development Commission (LCDC) adopted the TPR in 1991 to implement Statewide Planning Goal 12 (Transportation), which requires local governments to provide and encourage a safe, convenient and economic transportation system.

[32] See, e.g., OAR 660-012-0020(2)(b), 660-012-0030 and 660-012-0035.

[33] ORS 215.283(3)(a). While ORS 215.283(1) and (2) allow outright or as conditional uses a number of transportation improvements on lands that are zoned for exclusive farm use (EFU), including "reconstruction and modification of public roads and highways" (ORS 215.283(1)(l) and 2(r)), they do not authorize new roads or new interchanges. Likewise, OAR 660-012-0065 does not authorize new roads or new interchanges of the nature proposed here.

exception cannot reasonably accommodate the use. Additionally, an exception must (3) compare the economic, social, environmental, and energy (ESEE) consequences of the proposed location and other alternative locations requiring exceptions, determining whether the net adverse impacts associated with the proposed exception location are "significantly more adverse" than the net adverse impacts from other locations requiring exceptions; and (4) describe the adverse effects the proposal is likely to have on adjacent uses and explain how the proposal will be rendered compatible with adjacent land uses. See OAR 660-012-0070(7) and (8). These requirements are discussed in detail in Section 7 below.

The principal focus of analysis for transportation facilities is on the identified "transportation need" and on the reasons why that need "cannot reasonably be accommodated" through alternative methods (including alternative modes of transportation, traffic management measures, and improvements to existing transportation facilities) or locations not requiring goal exceptions. Without a demonstration of compliance with these standards, the proposed transportation improvement cannot go forward.

When considering goal exceptions for transportation improvements like a bypass, it is important to recognize and understand the unique role that roads and highways play in Oregon's land use framework. Roads and highways are linear facilities that interconnect to form an overall transportation network. The Newberg-Dundee urban area, Yamhill County, and the State of Oregon are traversed by roads and highways that cross both urban and rural lands to form a comprehensive transportation system. This network is necessary to move people and goods locally, regionally, and throughout the state, thereby helping to secure the welfare and well being of Oregon residents.

As linear facilities, roads and highways are very different from site-specific land uses such as residential, commercial, and industrial, and from facilities and infrastructure such as public sewer and water lines. It is feasible and appropriate to restrict or prohibit the extension of urban sewer and water systems outside of urban growth boundaries because such systems typically are designed to serve uses that are accommodated within a UGB. However, it is often not feasible or appropriate to preclude the extension or major improvement of roads or highways outside of UGBs, even if the roads predominantly serve the traffic needs of urban residents. Indeed, extending roads into rural areas is often essential for the safety and well being of Oregon residents and for the economic health and well being of the State of Oregon. The need for connectivity sometimes necessitates such action to achieve the policy objectives of Goal 12 (Transportation).

The competing policies of Goals 3, 11, and 14 come into play with the Newberg-Dundee Bypass project. The areas in which the Bypass and the East Dundee Interchange would be located include agricultural lands zoned EFU and rural non-resource lands identified for rural scale residential development. Typically, roads in such areas carry levels of traffic that is commensurate with the rural nature and scale of the area, including farm vehicles and equipment. However, the Bypass would accommodate traffic that is urban in its scale and character. Indeed, much of the traffic it would handle would originate in or be destined to urban areas like the Portland metropolitan area, McMinnville, or communities along the Oregon coast. Because the Bypass would serve urban area residents and convert agricultural land into a non-farm use, goal

exceptions are required and must be justified in furtherance of the planning objectives of Goal 12.

6. COMPLIANCE WITH TRANSPORTATION PLANNING RULE NON-GOAL EXCEPTIONS CRITERIA

While the principal focus of this application is on demonstrating compliance with the TPR standards for taking exceptions to Goals 3, 11, and 14, other TPR standards apply and must be addressed as well. These other provisions are identified and addressed in this section, while the goal exception standards (in OAR 660-012-0070) are addressed in Section 7 below.

As explained in **OAR 660-012-0010(1)**, the TPR divides transportation planning into two phases, (1) transportation system planning and (2) transportation project development. Transportation system planning establishes land use controls and a network of facilities and services to meet overall transportation needs. Transportation project development implements the TSP by determining the precise location, alignment, and preliminary design of improvements included in the TSP.

The primary purpose of this application is to amend Yamhill County's TSP to authorize and establish general locations for the Bypass and the East Dundee Interchange.[34] As such, this application involves transportation system planning, even though elements of project development are reflected in the selection of corridors for the Bypass and the Interchange. However, additional work is still required to determine the precise alignment and design of these facilities and to allow their construction to proceed. That additional work will constitute the project development phase of the NDTIP.

OAR 660-012-0015 provides for coordination between the State of Oregon and affected cities and counties in developing transportation system plans. As the LDEIS and its supporting documents show, the Bypass project has been coordinated among ODOT, Yamhill County, and the cities of Newberg and Dundee. Coordination also has extended to Marion County and the Federal Highway Administration.[35]

The Newberg and Dundee TSPs already provide for the Bypass. Through this goal exception, Yamhill County is bringing its TSP into consistency with the city TSPs.

OAR 660-012-0020(1) requires that a TSP establish a coordinated network of transportation facilities adequate to serve state, regional and local transportation needs. As described in detail in Section 7 below, the Bypass would serve state and regional transportation needs and would free up capacity on existing Oregon 99W to serve local and regional travel needs. Again, Newberg and Dundee already authorize this new facility within their urban areas. By adopting

[34] As noted earlier, the Bypass already is permitted within the cities of Newberg and Dundee under their respective Transportation System Plans.

[35] The Bypass project also has been coordinated with the City of Dayton, which is working with ODOT to develop an intergovernmental agreement addressing land management near the Dayton Interchange. The Bypass affects only a few acres inside the Dayton UGB, which are located adjacent to Oregon 18.

these goal exceptions, Yamhill County's transportation network would be coordinated with those of Newberg and Dundee.

Consistent with **OAR 660-012-0020(2)**, the Bypass will become part of the "road plan" in Yamhill County's TSP. Consistent with **OAR 660-012-0025(2)**, Yamhill County will adopt findings of compliance with the statewide planning goals and its acknowledged comprehensive plan policies and land use regulations in conjunction with this application. Transportation needs have been determined consistent with **OAR 660-012-0030**, as explained in more detail in Section 7. And consistent with **OAR 660-012-0035(1)**, this application evaluates a broad range of alternatives including improvements to existing facilities and services, transportation system management and demand management measures, and a no-build system alternative.

OAR 660-012-0035(2) requires local governments in Metropolitan Planning Organization (MPO) areas of larger than 1,000,000 population additionally to "evaluate land use designations, densities, and design standards to meet local and regional transportation needs." Because the Newberg-Dundee urban area is not within an MPO area, this requirement does not apply.

OAR 660-012-0035(3) requires consideration of various factors in evaluating and selecting alternatives. Those factors include the provision of appropriate types and levels of transportation facilities and services; compliance with air, land and water quality standards; minimizing adverse economic, social, environmental and energy consequences; and minimizing conflicts and facilitating connections between modes of transportation. These factors were considered during preparation of the LDEIS and are addressed in the LDEIS and/or Section 7 below.

OAR 660-012-0040 requires that the TSP include a financing program, including a general estimate of the timing for planning transportation facilities and major improvements and a determination of their rough cost estimates.

As explained in Section 2, ODOT is using a two-tiered process to develop and obtain approval of the Bypass project. The first tier, the "location" phase, establishes the transportation corridor within which the Bypass would be located. It is during this phase that goal exceptions justifying the Bypass are required. The second tier, the "design" phase, establishes the precise Bypass alignment and determines other necessary transportation improvements, such as supporting roadways and interchange connections.

The "location" phase has been fully funded by ODOT. Funding to complete the "design" phase is provided in the State Transportation Improvement Program (STIP). At the time the final design is approved and the Bypass project is adopted as a construction project, the STIP will need to be amended to reflect the funding for construction. At that time, local TSPs can be amended to reflect local contributions to Project costs. The process for developing a financing component is addressed as part of the IGA being negotiated by ODOT and Yamhill County.

The planning cost estimate for the Bypass (including the East Dundee Interchange) is approximately $311 million. Funding for the Bypass will come from a variety of sources, including federal, state, and local governments. Innovative financing methods, including but not limited to tolling and various forms of public/private partnerships, are also being explored.

Because of the magnitude of the cost of this project, it is expected that special actions outside the normal transportation revenue stream will be needed. This project currently shares with the proposed Woodburn Interchange the number one priority ranking for funding as determined the Mid-Willamette Valley Area Commission on Transportation (MWACT).[36]

Despite its high priority, the large cost of the Bypass project makes it difficult to specify when full construction funding will become available. To date, ODOT has identified approximately $9.8 million for project development and right-of-way acquisition. Efforts to secure the remainder of the funding needed are ongoing. Given the priority of this project and the on-going effort to secure its funding, ODOT is hopeful that full funding can be secured upon completion of final design in the 2008–2010 timeframe.

OAR 660-012-0045 requires that local governments adopt regulations to protect transportation facilities for their identified functions. The Bypass project complies with this requirement because concurrent with the application for approval of the Bypass project, Newberg, Dundee, and Dayton are adopting new comprehensive plan policies expressly intended to protect the functions of the Bypass and East Dundee Interchange to accommodate predominantly long-distance through traffic, and because similar new policies also are before Yamhill County for adoption at this time. Moreover, as part of project development following preliminary design, ODOT, Yamhill County and the cities of Newberg, Dundee, and Dayton will prepare and adopt Interchange Area Management Plans also aimed at protecting these functions.

In addition, to further limit local trips on the Bypass, the interchanges at the north and south termini will be directional.[37] At the eastern terminus (East Newberg Interchange) there would be direct connections from Oregon 99W westbound to the Bypass westbound, and from the Bypass eastbound to Oregon 99W eastbound. At the western terminus (Dayton Interchange) there would be direct connections for southbound traffic heading toward Lafayette/McMinnville on Oregon 99W and northbound traffic on Oregon 99W from Lafayette/McMinnville. Also, local accesses will not be permitted along the East Dundee Interchange connector road between the Bypass and Oregon 99W.

As defined in ORS 197.732(8), an exception means a comprehensive plan provision, including an amendment to an acknowledged comprehensive plan. Because adoption of this exception requires Yamhill County to amend its comprehensive plan,[38] **OAR 660-012-0060** applies.

OAR 660-012-0060(1) provides that amendments to acknowledged comprehensive plans and land use regulations that "significantly affect" a transportation facility must "assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g., level of service, volume to capacity ratio, etc.) of the facility." As relevant to this application,

[36] MWACT is a commission chartered by the Oregon Transportation Commission to provide the OTC with local recommendations for project priority and funding.
[37] A directional interchange is one in which high-speed free-flow movements are provided for selected movements rather than all possible movements. This type of interchange is typically used for the intersection of two higher-order facilities, such as highways and freeways.
[38] TSPs are elements of local comprehensive plans.

this can be achieved by (1) limiting allowed land uses to be consistent with the planned function, capacity and performance standards of the proposed facility; (2) amending the adopted transportation system plan to provide transportation facilities adequate to support the proposed land uses; or (3) altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes.

OAR 660-012-0060(2) identifies the circumstances under which a plan or land use regulation amendment "significantly affects" a transportation facility. These include circumstances where the amendment (1) changes the functional classification of an existing or planned transportation facility; (2) changes standards implementing a functional classification system; (3) allows types of levels of land uses that would result in levels of travel or access, which are inconsistent with the functional classification of a transportation facility; or (4) would reduce the performance standards of the facility below the minimum acceptable level identified in the TSP.

The Bypass would greatly improve the performance standard of Oregon 99W by removing statewide traffic and a significant amount of regional traffic from that facility in the Newberg-Dundee urban area. See Table 1 in Section 7.4.1 below. To the extent that the Bypass improves highway performance, OAR 660-012-0060 does not apply to it.[39]

Nonetheless, the Bypass must demonstrate compliance with OAR 660-012-0060(1) by reason of the fact that it will cause a change in the classification of existing Oregon 99W from a Statewide Highway to either a regional or district highway under ODOT's jurisdiction or to an arterial highway under county or city jurisdiction. As stated in OAR 660-012-0060(2), whenever a plan amendment changes the functional classification of a roadway, it "significantly affects" that roadway, thus triggering the application of OAR 660-012-0060(1).

This application satisfies OAR 660-012-0060(1) because the amount of traffic traveling on existing Oregon 99W following construction of the Bypass and the East Dundee Interchange would be consistent with ODOT's volume to capacity performance standard of 0.85 (if the facility remains a state facility), with Yamhill County's and Newberg's existing performance standards of Level of Service D[40] (if the facility is transferred to the County or to Newberg),[41]

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[39] See *Friends of Eugene v. City of Eugene*, 44 Or LUBA 239 (2003), aff'd without opinion 185 Or App 335 (2003).

[40] As described in the 2000 Highway Capacity Manual published by the Transportation Research Board, Level of Service "D" at signalized intersections has the following characteristics: "The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle length, or high volume/capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable." For traffic analysis purposes, Level of Service "D" generally corresponds with a volume to capacity ratio of approximately 0.80 to 0.90.

[41] If transferred to Yamhill County, Oregon 99W would become part of the County's arterial and collector system. Section 5.2.4 (Level of Service, LOS) of the Yamhill County Transportation System Plan provides: "It is the goal of Yamhill County to maintain level of service D or better during the peak hour throughout the County-owned arterial and collector system over the next twenty years." As noted earlier in this subsection, Level of Service D corresponds to a volume to capacity (v/c) ratio of approximately 0.80 to 0.90. However, it should be noted that Yamhill County Resolution 02-12-19-2 (December 19, 2002) provides that if operational control of Oregon 99W in Dundee is transferred from ODOT to either the County or the City of Dundee through intergovernmental agreement, then Yamhill County intends to support maintaining the OHP operational mobility standard for district highways (volume to capacity of 0.85) as the operational mobility standard for Oregon 99W as a city or county road.

and with the City of Dundee's performance standard of v/c 0.85 (if transferred to Dundee).[42] The East Dundee Interchange would be provided on the Bypass with a connector road to Oregon 99W. The ramp terminals have been analyzed as separate intersections. The intersections would operate within acceptable OHP standards during year 2025 weekday p.m. peak-hour traffic conditions with the exception of the Oregon 99W/Springbrook intersection. Mitigation such as adding left-turn lanes on Oregon 99W and through lanes on Springbrook Road can be provided at this intersection to achieve acceptable OHP performance standards.[43]

[42] The adopted Dundee TSP does not contain performance standards for arterials, as there are no city-owned arterial roadways in Dundee. Instead, for Oregon 99W (which is the only arterial in Dundee) it provides that the appropriate OHP standard will apply. As noted, for district highways the standard is v/c 0.85. Should Oregon 99W be transferred to Dundee, the City has stated its intent to apply ODOT's district highway standard to the facility. See Dundee Resolution 02-45 (adopted January 6, 2003). In the event of transfer, the City likely would adopt a refinement plan amending the TSP to include language to this effect.

[43] NDTIP LDEIS Technical Memorandum: Transportation, p. 9, at Alternative 3J.

7. COMPLIANCE WITH TRANSPORTATION PLANNING RULE EXCEPTIONS STANDARDS

7.1 OAR 660-012-0070(1)

OAR 660-012-0065(3) lists the transportation facilities, services, and improvements that may be permitted on rural lands consistent with statewide planning goals 3, 4, 11, and 14 without a goal exception. OAR 660-012-0070(1) provides that transportation facilities and improvements that do not meet the requirements of OAR 660-012-0065 require an exception to be sited on rural lands. Neither the Bypass nor the East Dundee Interchange meet the requirements of OAR 660-012-0065(3). Accordingly, exceptions to Goals 3, 11 and 14 are required and are taken herein.

7.2 OAR 660-012-0070(2)

OAR 660-012-0070(2) provides that where exceptions to Goals 3, 4, 11, or 14 are required, "the exception shall be taken pursuant to ORS 197.732(1)(c), Goal 2, OAR 660, Division 4 and this division." Because OAR 660, Divisions 4 and 12 implement Goal 2 and ORS 197.732(1)(c), a demonstration of compliance with these administrative rule requirements demonstrates compliance with all of these review standards.[44]

This application provides the findings of fact and reasons demonstrating compliance with the applicable exception standards, as required by Goal 2 and ORS 197.732.

7.3 OAR 660-012-0070(3)

OAR 660-012-0070(3) requires that "an exception adopted as part of a TSP or refinement plan shall, at a minimum, decide need, mode, function and general location for the proposed facility or improvement." Because the exceptions for the Bypass and East Dundee Interchange would be adopted as amendments to Yamhill County's TSP, this section applies.

The *need* for the Bypass and the East Dundee Interchange is identified in Section 7.4 (addressing compliance with OAR 660-012-0040). The selected transportation *mode* is highway. The Bypass will *function* as a Statewide Expressway within the state highway network. The East Dundee Interchange will function as an element of that statewide facility. The *general locations* of the Bypass and East Dundee Interchange are shown in Figure 2 and on oversized maps included in the record of this proceeding.

These general locations are identified as corridors within which the facilities will be constructed following project development. For the Bypass, these corridors generally range between

[44]The language in ORS 197.732(1)(c) is identical to the Goal 2 exception language set out above in the analysis of compliance with statewide planning Goal 2.

330–410 feet in width.[45] As the LDEIS explains, the corridors are approximately 40 percent wider than the bypass facility itself would be.[46] Following approval of the corridor, additional studies will be conducted to identify the bypass route within the corridor.

7.4 OAR 660-012-0070(4), ORS 197.732(1)(c)(A), Goal 2 Part II(c)(1), OAR 660-004-0020(2)(a) and OAR 660-004-0022

OAR 660-012-0070(4) states:

> "To address Goal 2 Part II(c)(1) the exception shall demonstrate that there is a transportation need identified consistent with the requirements of 660-012-0030 which cannot reasonably be accommodated through one or a combination of the following measures not requiring an exception:
>
> (a) Alternative modes of transportation.
>
> (b) Traffic management measures; and
>
> (c) Improvements to existing transportation facilities."

In this application, the transportation need is described and analyzed in two parts, (1) the need for a new limited access Statewide Highway that will also be classified as an expressway and freight route (i.e., the Bypass) and (2) the need for an intermediate interchange on rural lands (i.e., the East Dundee Interchange and its connecting road to Oregon 99W). The distinction between these two transportation needs reflects a long-standing policy in the TPR, as interpreted by DLCD, requiring justification for intermediate interchanges separate from the justification for the highway itself.

7.4.1 Transportation Need Consistent with OAR 660-012-0030 (Bypass)

To comply with OAR 660-012-0070(4), a transportation need first must be identified that is consistent with the requirements of OAR 660-012-0030. For the Bypass, the relevant provisions of OAR 660-012-0030 are subsections (1) and (2). OAR 660-012-0030(3) and (4) are inapplicable because they apply, respectively, to lands inside urban growth boundaries and to Metropolitan Planning Organization areas, and the property subject to these goal exceptions does not fall within either category. Moreover, OAR 660-012-0030(3) applies to determinations only of local and regional transportation needs as opposed to determinations of statewide transportation needs.

OAR 660-012-0030(1) directs local governments and ODOT to identify specific transportation needs relevant to the planning area and the scale of the transportation network being planned, including state, regional, and local transportation needs, the needs of the transportation disadvantaged, and needs for movement of goods and services to support planned industrial and

[45] LDEIS at 1-1.

[46] LDEIS at S-1 and 4-1. The bypass facility will potentially require a strip of land approximately 198–246 feet wide. The additional corridor width includes area required for cut and fill slopes. LDEIS at 2-4.

commercial growth.[47] For the following reasons, the Bypass is needed to serve state and regional transportation needs and to free up existing Oregon 99W to serve regional and local transportation needs.

The TPR defines "state transportation needs" as "needs for movement of people and goods between and through regions of the state and between the state and other states."[48] State transportation movements include "through" trips (trips that both originate and end outside the project area). Examples include trips between the Portland Metropolitan Area and the Oregon coast via Oregon 99W and Oregon 18, trips between Portland and the Yamhill County wineries, and trips between Portland and the Spirit Mountain Casino.[49]

Regional transportation needs are defined as "needs for movement of people and goods between and through communities and accessibility to regional destinations within a metropolitan area, county, or associated group of counties."[50] Regional transportation movements include "regional trips" (trips that have one trip end within the project area and the other trip end elsewhere within the region). Examples would include trips between Newberg and the Spirit Mountain Casino and between Dundee and McMinnville. Trips between the Newberg-Dundee area and the southwestern portion of the Portland metropolitan area also might reasonably be considered "regional trips" due to the relatively close proximity of Newberg and Dundee to the cities of Sherwood, Tualatin, Tigard, and Hillsboro. Whether longer trips into Portland or Gresham are more appropriately classified as regional or statewide trips is a more difficult question to answer. For purposes of the LDEIS analysis, these trips were identified as regional trips.

Local transportation needs are "needs for movement of people and goods within communities and portions of counties and the need to provide access to local destinations."[51] Examples of local transportation movements ("local trips") include trips within or between Newberg and Dundee.

As described immediately below, the Bypass is intended primarily to accommodate the movement of people and goods through this region of the state or between this region and other regions of the state. This is consistent with policies in the 1999 Oregon Highway Plan (OHP) to serve the needs for movement of people and goods and to provide adequate highway access.[52] It also is consistent with the Bypass's proposed designation as a Statewide Expressway.

The Bypass also is needed to remove congestion from existing Oregon 99W, thereby freeing up capacity on that roadway facility to serve local and regional transportation movements. In addition to decreasing congestion on Oregon 99W, the Bypass would increase the efficiency of

[47] Yamhill County adopted its TSP in 1996. As an acknowledged plan, the TSP is deemed to comply with OAR 660-012-0030. The Bypass and North Dundee Interchange represent amendments to that TSP.
[48] OAR 660-012-0005(29).
[49] State transportation movements also may include movements with one trip end (origin or destination) in the project area and the other trip end outside the region, such as a trip from Newberg or Dundee to the coast or to eastern or southern Oregon. However, for purposes of the LDEIS, trips with one trip end in Newberg or Dundee were classified as regional trips.
[50] OAR 660-012-0005(28).
[51] OAR 660-012-0005(27).
[52] Compliance with OHP policies is addressed in Section 9 of this document.

through traffic movements by reducing travel time through Newberg and Dundee, reduce the number of freight trips through Newberg and Dundee, improve pedestrian and bicycle connectivity and circulation in the area, and improve traffic safety along Oregon 99W. Indeed, with construction of the Bypass and the East Dundee Interchange, existing Oregon 99W will comply with applicable state and local highway performance standards without need for additional highway widening along that facility.

In its present circumstance, Oregon 99W serves as both a Statewide Highway and OHP-designated freight route and as the "main street" for both Newberg and Dundee. The highway connects Newberg and Dundee to the Portland metropolitan region to the northeast and to McMinnville and the Oregon coast to the west. Oregon 99W has become a primary route for tourist traffic between the Willamette Valley and Oregon coastal communities. It provides the Portland area with access to Spirit Mountain Casino, which is the most popular tourist destination in the state, and to the wineries of Yamhill County.[53] Weekday commuters use Oregon 99W to travel between Yamhill County and the Portland region. Regional freight truck movement, particularly en route to and from the central coast, the I-5 corridor, and/or the Portland metropolitan area, relies on efficient travel through the corridor.[54]

Over the past decade, traffic on Oregon 99W in downtown Newberg and Dundee has increased by approximately 40 percent. On both weekdays and weekends, lines of vehicles on Oregon 99W often stretch for more than a mile in both directions from the intersection of Oregon 99W and 5th Street in Dundee, where Oregon 99W has only one travel lane in each direction, and these lines can last for hours. The congestion slows movement through Newberg and Dundee and blocks turning movements and access across Oregon 99W.[55] This has created an unfriendly and unhealthy environment for residents, shoppers, and tourists using the downtown areas and people trying to get from one side of town to the other. The congestion has adversely impacted a broad range of people, including local users, businesses, current commuters, freight companies, tourists, and the economically and physically disadvantaged. With anticipated population and employment growth over the next 20 years, this congestion will only get worse.[56]

According to traffic estimates, traffic volumes will increase substantially over the next 20 years. Under the No-Build Alternative, by the year 2025, downtown Newberg would have *15 hours of congestion per day*, while Dundee would experience *14 hours of congestion each day*. With the No Build, it would take more than 40 minutes to drive from East Newberg to Dayton, compared to 12–15 minutes under the Build Alternatives.[57]

This level of congestion runs counter to a basic objective of the TPR that local governments develop and maintain a transportation network where allowed land uses are consistent with the identified function, capacity, and performance standards of transportation facilities. See, for

[53] According to the Oregon Tourism Commission, Spirit Mountain Casino drew 3.3 million visitors in 2002, ahead of the Woodburn Company Stores, which drew over 3.0 million visitors, and Multnomah Falls, which drew 2.5 million visitors (Oregon Tourism Commission, March 2003).
[54] LDEIS at 1-1.
[55] LDEIS Supplemental Land Use Technical Memorandum, pages 5-6.
[56] LDEIS at 1-2.
[57] LDEIS Supplemental Land Use Technical Memorandum at 6; LDEIS at S-7 and Table 4-3.

example, OAR 660-012-0060(1). The level of congestion on existing Oregon 99W already exceeds ODOT's peak hour performance standards for Statewide Highways in both Newberg and Dundee.[58] In Newberg, ODOT's performance standard currently is not met at the intersections of Oregon 99W with Villa Road, Springbrook Street, Brutscher Road, Vittoria Street, River Street, and Main Street.[59] In and just north of Dundee, the standard is not met at any of the local road intersections with Oregon 99W, most notably with Fox Farm Road and 5th Street.[60]

The anticipated 20 year level of congestion under a No-Build scenario also contradicts TPR planning objectives to develop a transportation system that complies with federal and state clean air standards and minimizes adverse economic, social, environmental, and energy consequences. See OAR 660-012-0035(3)(a) and (b). In particular, very high levels of congestion have adverse economic impacts (through delay, reduced movement of goods and people, reduced accessibility to businesses and reduced desirability of new businesses to locate in commercial districts), social impacts (increased noise, poor air quality, higher accident rates, divided neighborhoods, and reduced community cohesion), and safety impacts (increased potential for crashes and reduced ability to provide emergency services or handle emergency evacuations in a timely manner).[61]

The Bypass is needed to provide significant congestion relief and to improve the movement of people and goods for all users in the Oregon 99W corridor, including state, regional, and local trips. It is needed to accommodate substantial volumes of recreational traffic traveling between the Portland metropolitan area and the central Oregon coast, Yamhill County wineries,[62] and Spirit Mountain Casino. It is needed to accommodate business and freight traffic currently traveling between the coast, McMinnville or the Newberg-Dundee urban area, and the Portland metropolitan area or I-5 corridor via existing Oregon 99W.[63] In addition, it is needed to facilitate and improve the safety of local traffic and pedestrian movements with the Newberg-Dundee urban area.[64] By removing approximately 25,000 anticipated year 2025 daily statewide and regional trips from existing Oregon 99W in Newberg and approximately 38,000 daily statewide and regional trips from existing Oregon 99W in Dundee, the Bypass would free up existing

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[58] ODOT's performance standard for Statewide Highways outside the Metro region that are also freight routes is 0.75 volume to capacity inside urban growth boundaries where the speed limit is less than 45 mph, and 0.70 outside urban growth boundaries. OHP, Table 6 at page 80.

[59] Newberg TSP, Technical Memorandum No. 1, Existing Conditions and Deficiencies Assessment, February 2003.

[60] Dundee TSP.

[61] These impacts are described in more detail in the LDEIS and its supporting documents, incorporated herein by this reference.

[62] Yamhill County is well known for its vineyards, wineries, and orchards. Nearly half of the wineries in Yamhill County are in the Newberg-Dundee-Dayton area. LDEIS at S-9.

[63] Oregon 99W is classified as a freight route throughout the project area. This section of Oregon 99W has statewide economic importance for the movement of freight. Truck freight movements in the project area involve shipments both to and from locations in the project area and shipments that pass through the area. Most trucks with origins or destinations in the project area have destinations in the commercial and industrial areas located along Oregon 99W. Freight movements rely in large part of Oregon 99W, since it is also a primary freight route through Yamhill County. Approximately eight percent of traffic on Oregon 99W consists of "heavy vehicles", which are commonly defined as vehicles with more than three axles. LDEIS at 3-6.

[64] Vehicle accident rates are approximately 15 percent higher on this stretch of Oregon 99W than for similar highways in Oregon. LDEIS at S-7. Reducing traffic volumes on existing Oregon 99W would enable easier access to and across the highway for motorists, pedestrians, and bicyclists. LDEIS at S-8.

Oregon 99W to serve local and remaining regional trips.[65] With this reduction in traffic volumes, the year 2025 volume to capacity (v/c) ratio on Oregon 99W in Dundee (at 5th Street) would lower to 0.73, while Oregon 99W where it intersects Oregon 219 (College Street) in Newberg would have a year 2025 v/c ratio in Newberg of 0.61 westbound and 0.42 eastbound.[66] See **Table 1**, which compares statewide, regional and local trips in the area under a No-Build scenario and with the Bypass.[67]

Table 1 – Average Daily Traffic on Oregon 99W (Year 2025)

Location	Statewide Trips	Regional Trips	Local Trips
No Build			
Downtown Newberg	19,500	19,000	17,500
Downtown Dundee	19,500	21,500	6,000
Between Newberg and Dundee	19,500	18,000	11,500
Alternative 3J			
Downtown Newberg	0	13,500	16,500
Downtown Dundee	0	3,000	10,000
Between Newberg and Dundee	0	4,500	15,500[68]

With the Bypass, ODOT can achieve consistency with its Statewide Highway performance standards as set out in the OHP and shown in **Table 2** below.[69]

[65] According to the LDEIS Alternatives Analysis – Transportation, 46 percent of the estimated year 2025 corridor traffic within Newberg and 65 percent of the estimated year 2025 corridor traffic in Dundee will use the Bypass.
[66] LDEIS Technical Memorandum, Transportation, September 2002 (Kittelson & Associates, Inc.).
[67] As used in this table, "statewide trips" are those trips along the Oregon 99W corridor with origins and destinations outside the Newberg-Dundee area; "regional trips" are those trips along the Oregon 99W corridor with one origin/destination in the study area and one outside the area, and trips along the Oregon 219 corridor with no or one origin or destination in the study area; and "local trips" are those with both the origin and destination inside the Newberg-Dundee area.
[68] The Preferred Alternative will increase local travel in Dundee and between Newberg and Dundee compared to the No-Build. This is because, absent a bypass, there is insufficient capacity to accommodate the demand on Oregon 99W in Dundee. Consequently, some local trips divert off the highway to other city roadways to travel through Dundee. With a bypass, additional capacity is freed up on Oregon 99W, which allows these local trips to use their preferred route of Oregon 99W.
[69] Consistent with TPR planning objectives, the POST adopted the OHP congestion standards as the minimum transportation performance threshold for resolving congestion on Oregon 99W. Justification for the minimum transportation performance threshold is set out below in Section 7.6.

Table 2 – Volume-to-Capacity Transportation Performance Thresholds[70]

State Highway Classification	Inside UGB	Outside UGB
Statewide Expressway	0.70	0.70
Statewide Freight Route	0.75	0.70
Regional	0.80	0.70
District	0.85	0.75

Source: 1999 Oregon Highway Plan, Table 6

In summary, existing congestion along existing Oregon 99W already is having significant adverse economic, social, mobility, and safety impacts on businesses, residents, and tourists located in or traveling through the area. In 20 years, this level of impact is expected to get much worse. Under a No-Build scenario, the anticipated level of congestion would far exceed OHP performance standards for Statewide Highways and Yamhill County, Newberg, and Dundee performance standards for Oregon 99W specifically, and/or for arterials more generally. As described below in Section 7.4.3, adequate relief from this expected level of congestion cannot reasonably be obtained using only measures such as alternative modes, transportation system management, or improvements to existing facilities. A new roadway removing through traffic from Oregon 99W also is required.

OAR 660-012-0030(2) requires that counties preparing regional TSPs rely on the analysis of state transportation needs in adopted elements of the state TSP, and that local governments preparing local TSPs rely on the analyses of state and regional transportation needs in adopted elements of the state TSP and adopted regional TSPs. The purpose of this provision is to ensure consistency between state, regional and local TSPs. As a project undergoing environmental assessment in the LDEIS, the Bypass is not yet an adopted element of the state's TSP.[71] Accordingly, OAR 660-012-0030(2) does not apply to this project. Still, it is noted that the OHP expressly recognizes the Bypass as a potential project,[72] and that in adopting this goal exception, Yamhill County is relying on ODOT's analysis of state transportation needs based on consistency with ODOT performance standards.

7.4.2 Transportation Need Consistent with OAR 660-012-0030 (East Dundee Interchange)

Although it requires its own separate goal exceptions under the TPR, the East Dundee Interchange is an essential component of the Bypass project and is needed for many of the same reasons that the Bypass is needed.[73] In particular, it is needed:

[70] The v/c ratios inside UGBs are those applicable in non-MPO areas outside of Special Transportation Areas where the non-freeway speed limit is less than 45 mph. The v/c ratios outside UGBs are those applicable in rural areas.
[71] A project of this nature becomes part of the State TSP after a local government, in cooperation with ODOT and in reliance on the state's analysis of transportation facility needs, has amended its TSP to authorize the project. At that point, ODOT staff will request that the OTC formally adopt the plan transportation facility as part of the TSP.
[72] OHP, Bypass Policy (Application of the Policy).
[73] See Section 7.4.1, incorporated herein by this reference.

- To accommodate the movement of people and goods between the Newberg-Dundee region and other regions of the state, including substantial volumes of freight, commuter, and recreational traffic traveling between McMinnville and Newberg or between Dundee and the Portland metropolitan area.
- To provide adequate highway access to the Bypass.
- To reduce regional travel movements on existing Oregon 99W and improve local travel movements on that roadway.
- To remove congestion from existing Oregon 99W within the City of Dundee and bring Oregon 99W back into compliance with state and local highway performance standards.
- To facilitate and improve the safety of local traffic and pedestrian movements in Dundee.

The East Dundee Interchange is intended to connect the Bypass with Oregon 99W east of Dundee and west of Newberg. The Interchange would enable passenger and freight traffic traveling between Newberg and locations west of Dundee to avoid downtown Dundee via the Bypass. Similarly, it would enable traffic traveling between Dundee and locations east or south of Newberg to avoid downtown Newberg via the Bypass. As such, it would enable the Bypass to function as a true bypass for both of these distinct and separate communities.

The Oregon Highway Plan refers to these travel movements as "regional through travel." According to OHP Policy 1H (the bypass policy), "[r]egional through travel is best served by limited access facilities that allow higher speeds and require infrequent stops.... As congestion increases, regional travel and local access may need to be separated." The East Dundee Interchange is consistent with and implements this policy directive. Even with the Bypass, it is needed to avoid congestion levels in Dundee that would otherwise exceed a 1.0 v/c ratio by the year 2025 if Oregon 99W remains a three-lane highway. That the East Dundee Interchange would serve primarily regional rather than statewide trips is of no consequence. As explained in OHP Policy 1H, "the goal of bypass facilities is to effectively serve state and regional traffic trips."[74]

Provision of an interchange east of Dundee primarily would improve the movement of people and goods at the regional and local levels. The benefits of this interchange apply particularly to Dundee. More regional trips would be attracted to the Bypass, and as a result Oregon 99W would experience less congestion for local and other trips, particularly within Dundee. Enough regional trips would be removed such that OHP standards could be met on Oregon 99W without having to widen Oregon 99W in and southwest of Dundee. This is consistent with Dundees' adopted TSP policies.

Without the East Dundee Interchange, there would be approximately 25,000 average daily local, regional and statewide trips on existing Oregon 99W through Dundee in 2025.[75] Of these trips, approximately 16,500 would be statewide and regional trips. Also without the East Dundee Interchange, Oregon 99W in and south of Dundee to McDougal Corner would need to expand to

[74] OHP Bypass Policy. This policy is addressed in greater detail in Section 9 of this document.
[75] LDEIS, Table S-2 at page S-15. Alternative 3K was used for this analysis.

four travel lanes (with turning lanes as needed) to meet OHP or local performance standards.[76] As described in Section 7.4.4 below, this would have very significant adverse impacts on the City.

The addition of the East Dundee Interchange would reduce the number of total trips through Dundee from 25,000 to approximately 13,000 in 2025.[77] Most of that reduction comes through redirection to the Bypass of regional trips to and from Newberg that would have more direct access to the Bypass because of the interchange and connector road. With the East Dundee Interchange, Oregon 99W can be maintained as a three-lane roadway (two travels lanes plus a center-turn lane) in compliance with OHP and local highway performance standards, and the adverse impacts to the City can be avoided.

7.4.3 Inability of Alternative Modes, Traffic Management Measures, and Improvements to Existing Transportation Facilities to Reasonably Accommodate the Identified Need (Bypass)

OAR 660-012-0070(4) requires consideration of whether the identified transportation need can be reasonably accommodated through one or a combination of measures not requiring goal exceptions, considering (1) alternative modes of transportation, (2) traffic management measures, and (3) improvements to existing transportation facilities. Each of these measures was considered during the development of the LDEIS for the NDTIP. For the reasons described below, these alternative measures cannot reasonably accommodate the identified transportation need, either alone or in combination.

7.4.3.1 Alternative Modes

Alternative modes of transportation, including bus, ride-sharing and vanpool programs, and bicycle and pedestrian facilities, can help reduce the number of vehicles traveling in the Oregon 99W corridor. Existing transit services in the area include:

- LINKS, a commuter service that connects McMinnville with Meridian Park Hospital in Tualatin and TriMet Route 12 in Sherwood, with scheduled stops in Newberg and Dundee;
- Town Flyer, which provides hourly bus service in Newberg on weekdays between 9:15 AM and 3:05 p.m.; and
- Dial-A-Ride, which provides bus service for elderly and disabled citizens of Newberg and Dundee.

In addition, Greyhound Bus Lines make daily stops in Newberg and Dundee.[78]

[76] LDEIS at 2-6.
[77] LDEIS, Table S-2 at page S-15 (Alternative 3J).
[78] LDEIS at 3-2.

Bicycle facilities throughout the project area are located within the city limits of Newberg and Dundee. Striped bicycle lanes are provided along Oregon 99W within the City of Newberg, between Main Street and Brutscher Street. The remainder of Oregon 99W has paved shoulders where bicyclists share the pavement with vehicles. Approximately 13.3 miles of bike routes exist in Newberg. Dundee has a bike lane along the north side of 5th Street from City Hall to the Dogwood Drive/Upland Drive intersection, and Oregon 99W has shoulders throughout Dundee. Good pedestrian circulation is available in downtown Newberg, although sidewalks are less continuous or non-existent toward the outlying areas of the city. Similarly, central Dundee is well covered by the sidewalk network, although north of 5th Street, sidewalks are only present along the west side of the highway. Overall, while there are pedestrian friendly areas in Dundee, there are substantial gaps in the sidewalk network.[79]

Improving the availability of alternative modes was part of the Transportation Management Alternative that ODOT studied during development of the LDEIS. In addition to transportation management measures (discussed below), this alternative included a moderate to high level of express bus service between the Newberg-Dundee urban area and the Portland metropolitan area, with commute period service every 15 minutes. It also provided transit "stations" with park-and-ride facilities located approximately every 2–4 miles along Oregon 99W and Oregon 18 in a manner compatible with the future operation of interurban rail, where feasible. Moreover, the alternative called for:

- Improving the local Yamhill County bus system to feed express bus transit "stations."
- Providing special features to reduce express bus delays (such as bypass lanes, traffic signal priority and direct ramps).
- Possible mid-day express bus service.
- Bike lanes as part of all proposed highway widening improvements within city limits.
- Bicycle and pedestrian links to express bus "stations."
- Bicycle and pedestrian improvements as identified in the local TSPs.

Notwithstanding these proposals, alternative modes, alone and in combination with transportation system management measures and improvements to existing facilities, cannot reasonably accommodate the identified transportation needs. Even with assumptions that it would reduce daily traffic by four percent and peak period traffic by 10 percent, the projected year 2025 traffic volumes still could not begin to meet OHP roadway performance standards for Statewide Highways.[80] For Oregon 99W in Newberg, the average daily traffic would still need to be reduced by an additional 9,500 vehicles (another 30 percent) to meet those standards. And in Dundee, the resulting volume to capacity ratio was 1.25, compared to an ODOT maximum v/c standard of 0.75 for Statewide Highways.[81] To meet ODOT's 0.75 Statewide Highway

[79] LDEIS at 3-5 to 3-6.
[80] The POST dropped the Transportation Management Alternative as a stand-alone alternative for this reason. POST Meeting Minutes, April 27, 2001.
[81] The 10 percent p.m. peak hour reduction was derived through an informal survey of a number of communities and organizations in Oregon, including Medford, Eugene, and the Westside Transportation Management Association

performance standard under a five-lane section in Dundee, the average daily traffic would still need to be reduced by an additional 65–70 percent.[82]

7.4.3.2 Traffic Management Measures

Traffic management measures include transportation system management measures that increase the efficiency, safety, capacity, or level of service of a transportation facility without increasing its size. Examples include traffic signal improvements, traffic control devices including installing medians and parking removal, channelization, access management, speed bumps, ramp metering, and high occupancy vehicle lanes.[83] Traffic management measures also include demand management measures, such as telecommuting and the use of alternative modes, which are designed to change travel behavior in order to improve performance of transportation facilities and reduce need for additional road capacity.

Transportation management measures were included as part of the Transportation Management Alternative identified for the NDTIP. Besides the alternative modes elements described above, they included:

- Consolidating and relocating driveways along Oregon 99W.
- Adding left and right turning lanes at key Oregon 99W intersections throughout the project area.
- Installing a raised-center median along Oregon 99W in Newberg between River Road and Newberg's eastern UGB.
- Employing traffic calming measures.
- Incorporating Intelligent Transportation System (ITS) components, including enhanced highway incident management, improved traveler information, and state of the art traffic signal systems on Oregon 99W.
- Instituting carpool matching programs, regional vanpool programs, formation of transportation management agencies, construction of park-and-ride lots, and employee telecommuting.
- Instituting TDM strategies involving dial-a-ride shuttle services, jitneys, employee shuttles to transit services, and bikes on transit.
- Encouraging compressed work weeks, guaranteed ride home programs, restricted parking at major employment centers, cashed-out parking, and high occupancy vehicle preferential parking at major employment and shopping centers.

(TMA) in the Metro area. The highest percentage of non-single occupancy vehicle (SOV) travel that any of the cities or agencies are achieving during the p.m. peak hour today is six percent on transit corridors. For this reason, ODOT determined that a 10 percent reduction in year 2025 for the Newberg-Dundee area would be a realistically high and aggressive future modal split so the design team would not be oversizing or undersizing a bypass facility. This reduction in SOV trip making was incorporated into the model.

[82] Memorandum dated September 23, 2003, from Julia Kuhn, Kittelson & Associates, Inc., to Mark Greenfield.

[83] OAR 660-012-0005(25).

- Encouraging medium density mixed use nodes coordinated with bicycle, transit, and pedestrian modes.
- Locating bus stations and associated park-and-ride lots to be compatible with rail station development.
- Locating transit stations in a manner that minimizes conflict between transit operations and other traffic on Oregon 99W.
- Encouraging mixed use development at transit station sites.
- Discouraging large scale retail development along the Oregon 99W corridor.

As noted in the discussion of alternative modes immediately above, even with these proposed measures, Oregon 99W fell far short of meeting the applicable OHP roadway performance standards. For Oregon 99W in Newberg, the average daily traffic would still need to be reduced by an additional 9,500 vehicles (another 30 percent) to meet those standards, while in Dundee, average daily traffic would result in a volume to capacity ratio of 1.25, compared to ODOT's maximum v/c standard of 0.75.[84] Even with a five-lane segment in Dundee, a reduction in traffic volume of approximately 65–70 percent would be required to achieve consistency with ODOT's v/c standard, assuming a five-lane segment at 5th Street.[85] Not surprisingly, this alternative also failed to meet five of the seven elements described in the project's purpose and need statement.[86] Nonetheless, many of these elements and measures will be included in the larger NDTIP project's final design and should improve overall transportation system performance.

7.4.3.3 Improvements to Existing Roadways

Existing Oregon 99W

Many projects have been undertaken over the past 25–30 years to address and improve traffic congestion and safety in the Newberg-Dundee segment of Oregon 99W. These projects include but are not limited to:

- Rebuilding the Oregon 99W Chehalem Creek Bridge (widened to four-lane standards) (1974–1976).
- Establishing the Oregon 99W couplet in Newberg (1974–1976).
- Installing traffic signals at 5th Street in Dundee (1983).
- Converting 1st Street in Newberg to one way eastbound between Oregon 99W and Church Street and restricting turns to right in only eastbound (1991).
- Widening Springbrook Road on the east side of Newberg and at Oregon 99W (1993).
- Improving Wynooski Street at Oregon 219 for safety and truck improvements (1993).

[84] LDEIS at 2-11.
[85] Memorandum dated September 23, 2003 from Julia Kuhn, Kittelson & Associates, Inc., to Mark Greenfield.
[86] These elements are described immediately below in the section addressing improvements to existing roadways.

- Restriping Oregon 99W in Dundee to provide a center-turn lane and eliminate on-street parking (1994).
- Restriping travel lanes, restricting turn movements and installing concrete median islands at the Oregon 99W/Oregon 18 intersection (McDougal Corner) (1995).
- Constructing a left-turn lane on Oregon 99W at Riverwood Road (1996).
- Authorizing U-turns at Newberg signalized intersections on Oregon 99W in conjunction with the Oregon 99W Brutscher Street to Main Street project (1996).
- Reducing speed on Oregon 99W between Newberg and Dundee from 55 to 45 mph (1998).
- Adding a southbound right-turn lane on Oregon 99W at 1st Street in Dundee (1998).
- Restriping travel lanes at Oregon 99W and Fox Farm Road (1998).
- Extending the center-turn lane from 1st Street in Dundee nearly to Fox Farm Road east of Dundee (1998).
- Installing flashing warning signals on Oregon 99W south of Dundee to notify motorists of congested conditions (1998).
- Widening Oregon 240 Chehalem Creek Bridge west of Newberg (1999).
- Restricting intersection movements at River Road in Newberg (2001).
- Reconstructing the Oregon 99W/Villa Road and Oregon 99W/Springbrook Road intersections (2001).
- Widening Oregon 99W to six lanes between River Street and Villa Road and realigning the connection to Hancock Street (2001).
- Widening Oregon 99W, adding striped bicycle lanes, and interconnecting traffic signals along Oregon 99W (2001).
- Adding a westbound Oregon 99W travel lane on Hancock Street (2002).
- Constructing a section of Newberg's north side arterial between Oregon 219 and Mountainview Road (2002).
- Eliminating or restricting movements at 57 percent of the 152 driveways along Oregon 99W in the project area (2001).
- Increasing LINK service between McMinnville and Sherwood (2000-2001).[87]

The Transportation Management Alternative developed for the NDTIP also identified a number of new improvements to existing roadways, including:

[87] Many of these improvements were authorized as part of the Oregon 99W Brutscher Street – Main Street Project.

- Grade separated crossings where railroad tracks cross highways and major roadways (e.g., McDougal Corner and Oregon 99W in downtown Newberg).
- Upgrading Oregon 99W to current design standards for four through-traffic lanes.
- Providing four through-traffic lanes on Oregon 99W throughout Dundee's city limits and between Dundee and Oregon 18.
- Installing a raised-center median along Oregon 99W between River Road and Newberg's eastern UGB.
- Adding additional left and right turning movements at key intersections along Oregon 99W.
- Continuing to consolidate and/or relocate private driveways along Oregon 99W.
- Constructing new and/or interconnect existing east-west local or collector roadways within and between Newberg and Dundee (e.g., Dayton Avenue).

However, these new improvements, combined with proposed improvements to alternative modes and traffic management measures, still do not come close to achieving compliance with ODOT's highway performance standards. ODOT eliminated the Transportation Management Alternative from further analysis as a stand-alone alternative in the LDEIS because, among other things:

- With a year 2025 volume to capacity ratio of approximately 0.90 in Newberg and 1.25 in Dundee, it failed to meet the minimum transportation performance threshold of 0.75 v/c for Statewide Highways within the Newberg and Dundee UGBs. As noted in the above discussions of alternative modes and transportation system management, the average daily traffic on Oregon 99W in Newberg would still need to be reduced by an additional 9,500 vehicles (another 30 percent) to meet ODOT's standard for Statewide Highways, while in Dundee, average daily traffic would result in a volume to capacity ratio of 1.25, compared to ODOT's maximum v/c standard of 0.75.[88] Even with a five-lane segment in Dundee, a reduction in traffic volume of approximately 65–70 percent would be required to achieve consistency with ODOT's v/c standard, assuming a five-lane segment at 5th Street.[89] To meet these standards in Newberg and Dundee, Oregon 99W would require widening as follows:
  - From three lanes to seven lanes in Dundee.
  - From four lanes to eight lanes between Newberg's east UGB and the downtown couplet.

[88] LDEIS at 2-11.
[89] Memorandum dated September 23, 2003 from Julia Kuhn, Kittelson & Associates, Inc., to Mark Greenfield.

- From six lanes to eight lanes within the downtown Newberg couplet[90].

- The Transportation Management Alternative failed to meet five of the seven elements described in the project's purpose and need statement, including:

  - Improve the efficiency and modal options of the transportation system for all users (not achieved due to high v/c ratios).

  - Improve the movement of through traffic (not achieved due to high v/c ratios).

  - Enhance and protect the public health and safety of travelers and of communities that transportation facilities traverse (not achieved due to the unfriendly environment that required improvements would create for pedestrians and bicyclists, increased air pollution levels, and added noise that would result from the sheer volume of traffic).

  - Contribute to the improvement of the economy, social fabric and overall livability along the Oregon 99W corridor in the Newberg-Dundee area (this alternative would erode the social fabric and overall livability of the area with its high traffic volumes and congestion which create barriers to movement within the community).

  - Satisfy applicable federal, state, and local plans, policies, and regulations (the v/c ratio would violate OHP standards and the alternative is inconsistent with Newberg's comprehensive plan).

The required widening of Oregon 99W in particular would significantly adversely impact the cities of Newberg and Dundee. Both downtowns would become unrecognizable. In the downtown Newberg couplet, an additional 12-foot travel lane in each direction would displace fourteen buildings along the north side of Hancock Street and 36 buildings along the south side of 1st Street, including City Hall. Of the approximately 50 buildings displaced, approximately 80 percent are occupied with commercial businesses. Widening Oregon 99W east of the couplet to include four more lanes would displace 14 buildings on the north side of the highway and five buildings on the south side. Such widening also would remove parking for many commercial uses.[91] Furthermore, eight-lane wide streets in Newberg would discourage bicycle travel in Newberg, make pedestrian crossings extremely difficult, discourage a compact form of redevelopment that encourages alternatives to the automobile, create a significant barrier between neighborhoods on either side of the highway, and decrease overall livability in Newberg.

As described in Section 7.4.4 below, a five-lane section in Dundee would substantially impact 10 of the 12 businesses along the southeast side of Oregon 99W. With seven lanes, impacts would be even more adverse. If located on the south side of existing Oregon 99W, the resulting block

[90] In addition to the significant impact an eight-lane roadway would have in terms of displacing existing residences and businesses in Newberg, an eight-lane roadway with as much as 150 feet of pavement width is inconsistent with a pedestrian friendly environment that Newberg and Dundee are seeking to attain.

[91] Memorandum from Dave Mayfield to Mark Greenfield regarding "Impacts of Widening Oregon 99W in Newberg" (November 17, 2003)

depth between existing Oregon 99W and the railroad right-of-way would shrink by another 24 feet, leaving even less room for redevelopment (including space for parking and circulation). This would put Dundee at an even more severe economic disadvantage (compared to five lanes) when competing for businesses with other nearby communities. If located along the north side of existing Oregon 99W, the additional lanes would displace an elementary school playground, a historic Women's Club building, a church, and even more commercial uses than are found on the south side of the highway. A seven-lane roadway in Dundee also would preclude Dundee from achieving its vision of becoming a compact, pedestrian friendly urban area with a downtown that could serve as the center of the Yamhill County wine industry.[92]

For all of these reasons, the combination of alternative modes, traffic management measures, and improvements to existing roadways as identified in the LDEIS cannot reasonably accommodate the identified transportation need.[93]

Bell Road

In comments received during the LDEIS public comment period, some citizens suggested that a bypass facility be constructed along existing Bell Road. By improving this existing road, goal exceptions would be avoided.

Bell Road is located north of Newberg and connects into Oregon 99W northeast of Rex Hill. To connect back into Oregon 99W at the southwest end, the alignment could follow Worden Hill Road to 9th Street in Dundee. Alternatively, the alignment could traverse farther west before heading south to access Oregon 99W west of MacDougal Corner. **See Figure 6.**

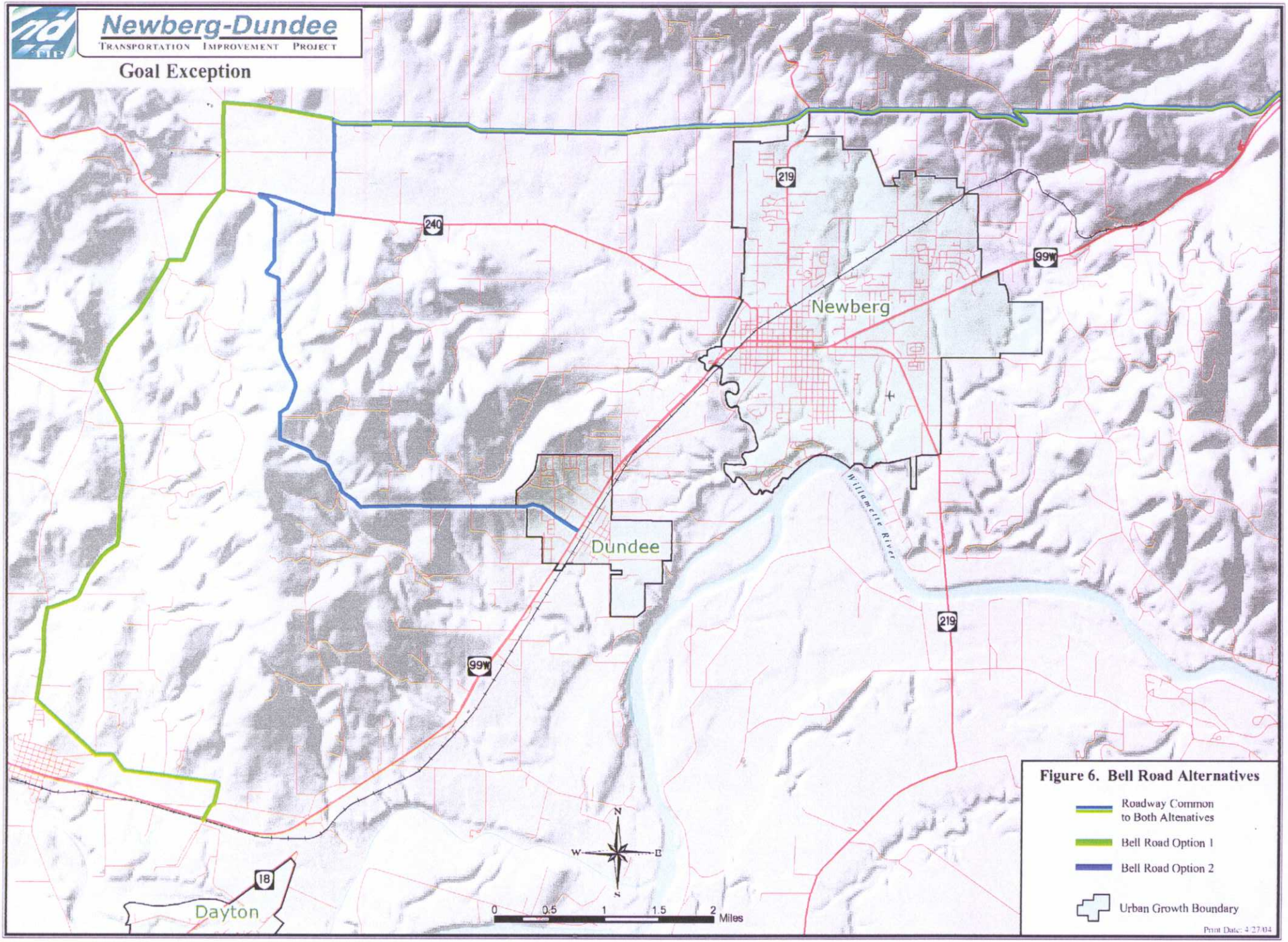
The Worden Hill Road alternative between Rex Hill and Oregon 99W in Dundee is just under 19 miles long. Approximately 18 percent of this alignment has slopes of between 6–10 percent, and approximately one-third of the alignment (approximately six miles) has slopes greater than 10 percent. The Bell Road alternative that connects to Oregon 99W west of McDougal Corner is approximately 25 miles in length. Approximately 15 percent of this alignment has slopes of between six and 10 percent, and 47 percent (over 12 miles) has slopes in excess of 10 percent. To meet the design standards for an ODOT Statewide Expressway, significant modifications to the horizontal and vertical curvature of both alignments would be required. Both alignments would require truck climbing lanes and substantial cut and fill, which would increase the costs of these alternatives.[94]

Project traffic engineers estimate the travel time along either the Worden Hill Road alignment between Rex Hill and Dayton or the other Bell Road alignment to be 35–40 minutes. This is

[92] See Memorandum from Dave Mayfield to Mark Greenfield regarding "Impacts of 5-Lane Section on Downtown Dundee" (November 11, 2003).
[93] The POST also reached this conclusion. POST Meeting Minutes, April 27, 2001.
[94] Memorandum Julia Kuhn and Gary Katsion, Kittelson & Associates, Inc., to Mark Greenfield regarding "Goal Exceptions" (September 11, 2003). See also Memorandum dated April 11, 2003, from Kittelson & Associates, Inc., to Parametrix.

comparable to the No-Build condition in year 2025, and more than twice that of the build alternatives that were studied in the LDEIS.[95]

[95] Id. See also LDEIS, Table 4-3 at page 4-4.


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Newberg
Dundee
Dayton
Willamette River
240
219
99W
18
N
W
E
S
0
0.5
1
1.5
2
Miles
Figure 6. Bell Road Alternatives
Roadway Common to Both Altenatives
Bell Road Option 1
Bell Road Option 2
Urban Growth Boundary
Print Date: 4-27-04

Given that this travel time is comparable to staying on Oregon 99W under the No Build, the potential to divert through traffic from Oregon 99W to either of the two Bell Road alternatives is minimal. For this reason, like the No-Build condition, all of the intersections that were studied as part of the LDEIS are anticipated to fail if the Bypass followed either Bell Road alignment, with the exception of 1st and College. The inability to meet the performance standard would result in the need to build five lanes along Oregon 99W in Dundee and intersection widening in Newberg. Both alignments also would require that existing Oregon 99W between Dundee and Dayton be widened to four lanes (two in each direction, separated by a median) to meet ODOT transportation performance criteria. The reconstruction of Bell Road plus the widening of existing Oregon 99W in Newberg and Dundee would result in redundant transportation infrastructure and greatly increase the overall cost of the project.[96]

Under the Worden Hill Road alternative, the segment of Oregon 99W between 9th Street in Dundee and Oregon 18 would be designated a Statewide Expressway for the purposes of route continuity. The OHP and supporting Division 51 document specifies a spacing standard of one mile for public and private approaches to a Statewide Expressway in a rural area (e.g., south of the Dundee UGB), with no spacing deviations permitted. Based on estimates from aerial mapping for the project, there are more than 30 public and private accesses located within the approximately 3.5 mile long stretch of Oregon 99W between the Dundee UGB and McDougal Corner. However, in accordance with the OHP, no more than three access locations can be permitted in this section. Given the location and frequency of existing accesses along the corridor, an extensive frontage road system essentially traversing the entire length of the bypass along Oregon 99W west of 9th Street would need to be developed. This frontage road system would be supplemented by a connecting roadway system to provide access to all of the adjacent parcels. This system would require the acquisition of right-of-way from the existing agricultural and rural residential uses adjacent to Oregon 99W.[97]

Based on a comparison of all of the transportation related issues outlined above (cost, horizontal and vertical alignment, travel time, etc.) between these Bell Road alternatives and the bypass alternatives considered in the LDEIS, project traffic engineers have concluded that Bell Road did not represent a feasible location for consideration as a bypass alternative.[98]

Edwards Road/Dayton Avenue Connection

Edwards Road is located southeast of Oregon 99W within Dundee and serves well over 100 existing residences. To access Oregon 99W from Edwards, travelers must use 5th Street, 10th Street, and/or Parks Street. No direct connection is provided between Oregon 99W and Edwards Road. The Dundee TSP classifies Edwards Road as a collector roadway. **See Figure 7.**

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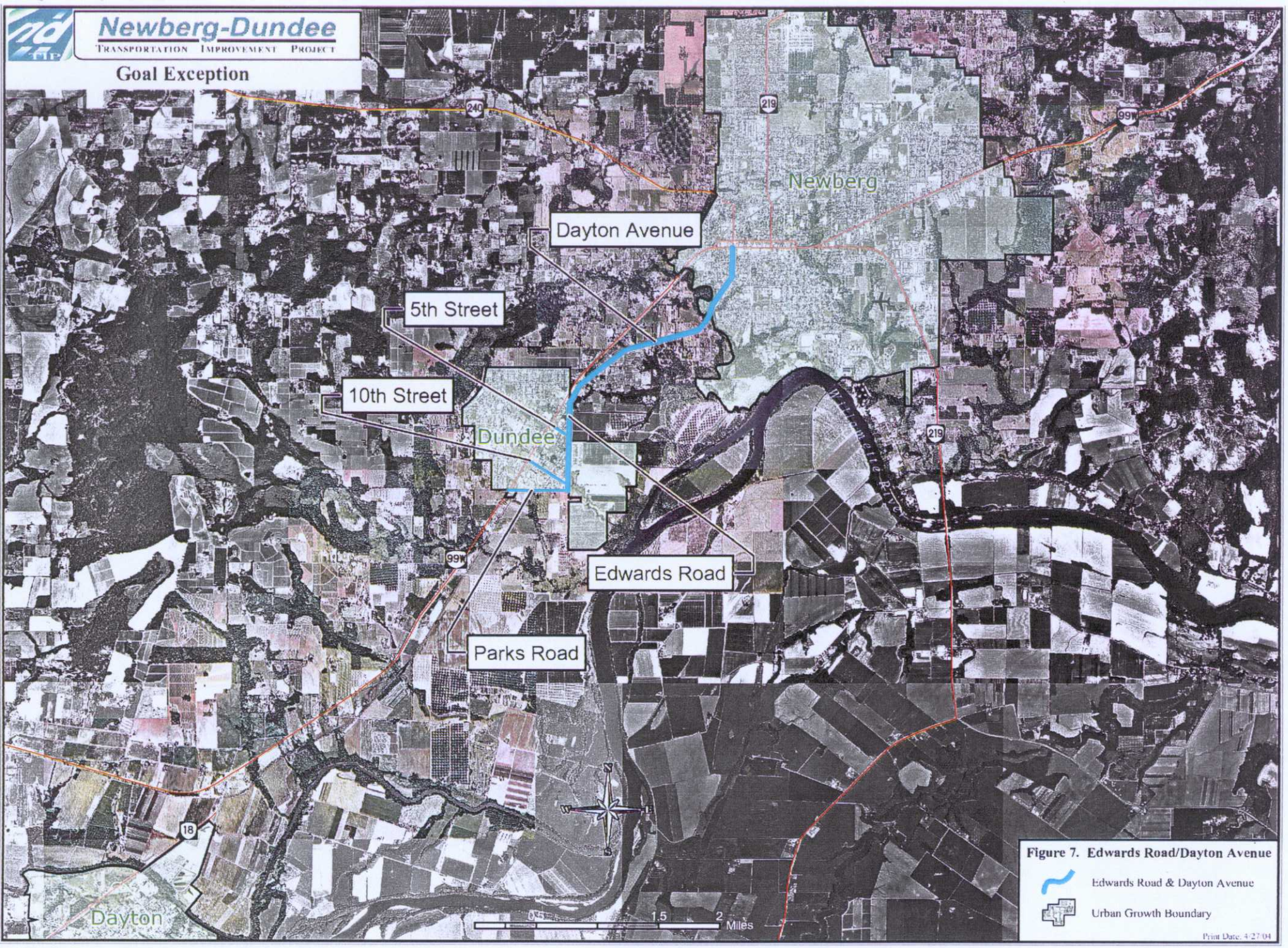
[96] Id.
[97] Id.
[98] Memorandum from Julia Kuhn and Gary Katsion, Kittelson & Associates, Inc., to Mark Greenfield regarding "Goal Exceptions" (September 11, 2003).


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Dayton Avenue
5th Street
10th Street
Edwards Road
Parks Road
Newberg
Dundee
Dayton
240
219
99W
18
0.5
1.5
2
Miles
Figure 7. Edwards Road/Dayton Avenue
Edwards Road & Dayton Avenue
Urban Growth Boundary
Print Date: 4/27/04

Edwards Road has a rural residential character, with numerous private accesses, no or intermittent sidewalks, no or intermittent shoulders, and no striping. Between Parks Road at its south end and the road closure at the railway at its north end, Edwards Road has eight (8) private accesses on its eastern side and 27 private accesses on its western side. The paved roadway varies in width from 18 feet near the railway and 20 feet near Parks Road to 31-32 feet between 10th Street and 5th Street. There is a five-foot wide sidewalk on the western side between 10th Street and 8th Street, and a five-foot wide sidewalk on the eastern side between 8th Street and 5th Street. Shoulders, where they exist, are either grass or gravel. In places there is a shallow ditch along the west side of the roadway.[99]

Dayton Avenue is a two lane roadway that connects the southwest quadrant of Newberg with Oregon 99W at Fox Farm Road. In unincorporated Yamhill County between Hagey Road and the Newberg city limits, Dayton Avenue is classified as a "resource" road.[100] Inside the City of Newberg, Dayton Avenue is classified as a collector street.[101]

Like Edwards Road, Dayton Avenue outside the City of Newberg has a rural residential character. Between Hagey Road and the Newberg city limits, Dayton Avenue has 23 private accesses on its eastern side and 21 on its western side. Paved roadway width varies from 36 feet (including 12 feet of paved shoulders) at Hagey Road to 30 feet (including six feet of paved shoulders) at the Newberg city limits. For most of this distance, the western shoulder is grassed. Also for most of this distance, the roadway is without sidewalks.[102]

Currently, Edwards Road accommodates approximately 450 vehicle trips per day.[103] In the absence of a bypass, an Edwards-Dayton connection is projected to carry approximately 11,000 to 12,000 vehicles per day, of which 60 percent would be statewide or regional through trips that neither originate nor end within Dundee. Both this volume of traffic and its characteristics (predominantly through trips) are more typical of a minor arterial and inconsistent with the functional classifications of Edwards Road as a collector street and of Dayton Avenue as a resource road (county) or collector street (city). As collector streets, the function of Edwards Road and Dayton Avenue (city) is not to serve through trips, but to connect the local street system with the arterial street system (i.e., Oregon 99W). The function of Dayton as a resource road is to connect to the collector and arterial street system.

Because most of the traffic on Edwards Road would be "regional through traffic" using Edwards Road as an alternative to Oregon 99W, and because Edwards Road does not extend beyond Dundee to the south, the majority of these 11,000 to 12,000 daily vehicles trips would be forced

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[99] See Memorandum from Julia Kuhn and Mark O'Brien, Kittelson & Associates, Inc., to Mark Greenfield regarding "Edwards Road and Dayton Avenue – Dundee," Oregon (November 13, 2003).

[100] A "resource" road is something less than a collector street. It accommodates traffic volumes of 500 or more vehicle trips per day, it primarily provides access to adjacent lands, and it accommodates travel over short distances (in contrast to collectors or arterials, which accommodate longer trips). See Yamhill County TSP at page 12 (http://www.co.yamhill.or.us/plan/planning/planning.asp?sel=11).

[101] Newberg TSP.

[102] Id.

[103] Dundee TSP, page 38, Figure 3-8.

onto other local roads in Dundee in order to access Edwards Road (if traveling northbound) or to re-access Oregon 99W (if traveling southbound). Introducing an arterial level of traffic onto these streets also is not consistent with the function of these local roads (e.g., 5th Street, 10th Street, Parks Street) as identified in the adopted Dundee TSP or with the collector function of Edwards Roads.[104] Moreover, it would compound intersection operational problems along Oregon 99W by introducing much higher intersecting volumes at each intersection than currently exists.

In the absence of a bypass and with the Edwards Road/Dayton Avenue connection in place, Oregon 99W near 5th Street in Dundee is anticipated to carry approximately 35,000 to 36,000 vehicles per day. Traffic analysis of year 2025 p.m. peak hour conditions with this connection in place reveals that the 5th Street/Oregon 99W intersection is forecast to operate at a volume-to-capacity ratio of 0.83, assuming Oregon 99W is a five-lane section, and over 1.0 if Oregon 99W were a three-lane section.[105] In both cases (three lanes or five lanes on Oregon 99W), this intersection would not meet ODOT volume-to-capacity performance standards for Oregon 99W as a Statewide Expressway. Like the 5th Street intersection, the Parks/Oregon 99W and 10th Street/Oregon 99W intersections are anticipated to fail, given the projected volume of traffic on Oregon 99W. This would require widening of Oregon 99W as well as intersection widening through all of Dundee and south to McDougal Corner.[106]

For both Edwards Road and Dayton Avenue, such large traffic volumes also would detrimentally impact adjacent residential properties and would not function safely without both roadways being significantly widened with a high degree of access management and traffic control.

While Dundee does not have an arterial street standard (Oregon 99W is the only roadway in Dundee that is expected to have traffic approaching arterial volumes), ODOT's lowest level highway classification, the district highway, is generally a minor arterial with minimum access spacing of 400 feet and a typical cross-section of 74 feet with on-street parallel parking and 58 feet without on-street parking.[107] A cross-section of 58 feet is double or more the existing roadway width. Approximately 35 homes east and west of Edwards Road currently have driveways that directly access Edwards Road. These homes are built on typical medium density subdivision-sized lots that typically have frontages of 50–100 feet. Reconstructing Edwards Road to a standard that would safely serve an arterial level of traffic volume would require that access to these residences either be consolidated and relocated or that some form of an alley/backage road be developed to provide these residences with access. Given the lot size and

[104] The Dundee TSP states that the primary function of local streets is to provide direct access to adjacent land uses. These streets are characterized by short street distances, slow speeds, and low volumes; they offer a high level of accessibility; and they serve passenger cars, pedestrians and bicycles, but not through trucks. TSP at 100-101. The primary function of collector streets is to serve local traffic between neighborhoods and community facilities. They provide a degree of access to adjacent properties while maintaining circulation and mobility for all users. TSP at 101.
[105] LDEIS Technical Memorandum, Transportation (September 2002).
[106] Id.
[107] As noted, Edwards Road's existing cross-section ranges between 18 to 32 feet. If improved to a cross-section that is appropriate for a roadway handling 11,000 to 12,000 vehicle trips per day (e.g., minor arterial), then at a minimum Edwards Road would include two 12-foot wide travel lanes, a 14-foot center lane, two four-foot wide shoulders, and two six-foot wide sidewalks, for a total of 58 feet of cross-section, assuming no on-street parking.

orientation of these properties and the local development and circulation patterns, neither of these options is practical or feasible. See Figure 7.

It would be possible to reclassify Edwards Road and Dayton Avenue as arterials for consistency with the anticipated traffic volumes if a bypass were not constructed. However, according to project traffic consultants, this designation is not compatible with the existing residential character of this area and the type of traffic utilizing the road system in this part of Dundee. In accordance with the Dundee TSP, arterials are "intended to serve higher volumes of traffic, particularly through traffic at higher speeds. They also serve truck movements and should emphasize traffic movement over local land access." The existing residential character and direct accesses onto Edwards Road and Dayton Avenue would create inherent operational and safety conflicts with the mobility requirement of an arterial facility serving through traffic. For this reason, the existing classifications of the facilities are appropriate.[108]

7.4.3.4 Conclusions

The identified need for the Bypass cannot be satisfied through alternative modes, traffic management measures, or improvements to existing facilities, alone or in combination. While alternative modes and traffic management measures can play important roles in Newberg and Dundee's multimodal transportation programs, they do little to eliminate the severe congestion that the region would experience by 2025. Bell Road cannot meet the identified need, as it is out of direction and saves little time over the Bypass. Bell Road also is located in a very steep area and would be very expensive to construct. Edwards Road and Dayton Avenue serve predominantly local traffic and will be needed for that purpose in the future. They would not function well as a Bypass substitute from either an operationally or a safety standpoint, given functional conflicts between arterials/freight routes and local/collector roads passing through residential neighborhoods.

7.4.4 Inability of Alternative Modes, Traffic Management Measures, and Improvements to Existing Transportation Facilities to Reasonably Accommodate the Identified Need (East Dundee Interchange)

As with the Bypass, OAR 660-012-0070(4) requires consideration as to whether the identified transportation need for the East Dundee Interchange can be reasonably accommodated through alternatives not requiring goal exceptions. In particular, can the transportation need reasonably be accommodated through improvements to Oregon 99W in Dundee and/or through improvements to other roadways in Dundee.

In addressing this question, it is recognized that the volume of traffic on Oregon 99W in Dundee and Newberg already will be lowered in comparison to the No-Build Alternative due to the presence of the Bypass. See Table 1. For example, persons traveling between Portland and Lincoln City no longer would be traveling on existing Oregon 99W inside Newberg and Dundee. However, without the East Dundee Interchange, much of the "regional through" traffic that would otherwise use the Bypass to avoid downtown Newberg or Dundee would choose to use

[108] Id.

Oregon 99W as the shortest route to their destination. For example, in the absence of an East Dundee Interchange, most regional trips between McMinnville, Lafayette, Dayton, and downtown Newberg would remain on Oregon 99W through Dundee, and most regional trips linking Portland and Dundee would remain on Oregon 99W through Newberg.[109]

The issue of whether non-exception alternatives reasonably could accommodate the transportation need provided by the East Dundee Interchange received substantial attention during the process leading to development of the LDEIS and the selection of a preferred alternative. In particular, DLCD contended that the following might constitute reasonable alternatives to an East Dundee Interchange:

- Keeping Oregon 99W as a three-lane road and designating Dundee as a Special Transportation Area (STA) as authorized by the Oregon Highway Plan.
- Keeping Oregon 99W as a three-lane road and improving other roads in the area as provided in the draft City of Dundee TSP.
- Widening Oregon 99W in Dundee to four travel lanes or providing a couplet through Dundee.

However, both ODOT and the POST found these alternatives to be unreasonable to accommodate the transportation need for the reasons identified below. Subsequently, DLCD articulated additional grounds in support of its contention that non-exception alternatives might reasonably accommodate the identified transportation need in lieu of the East Dundee Interchange.[110] Those additional grounds also are addressed below.[111]

7.4.4.1 Special Transportation Area

A "Special Transportation Area" is a designation that may be applied to a state highway segment "to foster compact development patterns" when a downtown, business district or community center straddles the highway within an urban growth boundary.[112] Within the STA, convenience of movement is focused more on pedestrian, bicycle, and transit modes than on automobile movement. STAs are places where people who arrive by car or transit find it convenient to walk from place to place within the area. Under Action 1F.6, the maximum permissible v/c ratio in an STA may drop to as low as 0.95.[113]

An STA is not a reasonable alternative to the East Dundee Interchange for two reasons. First, without an East Dundee Interchange, an STA in Dundee cannot meet ODOT's maximum v/c

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[109] See LDEIS Technical Memorandum: Transportation, September, 2002, Kittelson & Associates, Inc.
[110] The "reasonably accommodate" test applicable to goal exceptions under the TPR is different from the reasonable alternatives standard that applies to a NEPA analysis. Still, the POST, ODOT and ODOT's consultants were well aware of the TPR standard when they engaged in this process, and they were aware that NEPA requires consistency with local land use requirements.
[111] Alternative modes and transportation management measures also fail reasonably to accommodate the need for the reasons set out in Section 7.4.3, incorporated herein by reference.
[112] 1999 OHP, Action 1B.7.
[113] 1999 OHP, page 80, Table 6.

ratio of 0.95 for STAs unless Oregon 99W were widened to four travel lanes. As demonstrated later in this subsection, the impacts associated with four travel lanes in Dundee are unreasonably adverse. Second, Dundee does not exhibit the attributes of an STA as required by the 1999 OHP.

Without the East Dundee Interchange, Oregon 99W as a three-lane highway through Dundee would operate at a volume to capacity ratio in excess of 1.0. As such, it would not meet the maximum permissible volume to capacity ratio of 0.95 or better established for STAs in Action 1F.6 of the OHP.[114] A four-lane facility would be required, but as explained later in this subsection, such a facility would have severe adverse impacts on the City of Dundee.

Furthermore, Dundee does not exhibit the attributes of an STA. As explained in OHP Action 1B.9, in addition to being a compact district with interconnected local streets and a focus on pedestrian, bicycle, and transit travel, an STA also will exhibit most if not all of the following attributes:

- Mixed uses.
- Buildings spaced close together and located adjacent to the street with little or no setback.
- Sidewalks with ample width located adjacent to the highway and the buildings.
- Interconnected local street networks that facilitate local automobile and pedestrian travel.
- On street parking and shared or general purpose parking lots, which are located behind or to the side of buildings.
- Convenient automobile and pedestrian circulation within the center and off the state highway.[115]

Whether Dundee exhibits these attributes is important because Action 1B.10 of the OHP addresses when an STA should be considered. It states: "Consider a proposal to establish a Special Transportation Area where compact development did not exist at the adoption of this Highway Plan only if the proposed STA is already planned in the local or regional adopted comprehensive plan." (Emphasis added.) As described below, compact development did not exist in Dundee when the OHP was adopted in 1999. Neither was an STA then planned for in Dundee's acknowledged comprehensive plan. Indeed, an STA still is not a part of that plan or of Dundee's TSP. Accordingly, the circumstances under which Action 1B.10 allows for consideration of an STA are not present in Dundee.[116]

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[114] LDEIS Technical Memorandum: Transportation, September 2002. The Dundee TSP neither provides any STA designations nor establishes any STA highway mobility standards.

[115] 1999 OHP, Action 1B.9(b).

[116] To support community development and livability in the future, Dundee would like to reduce traffic and congestion along Oregon 99W so that it can function as a more pedestrian-friendly "Main Street." According to Dundee's adopted TSP, "a key feature of this objective is to retain the existing three-lane cross-section (two lanes with center-turn lane pockets). Dundee TSP at 70. However, the existing three-lane cross-section can be retained only with construction of the East Dundee Interchange. As explained later in this subsection, without the East Dundee Interchange, Oregon 99W as a three-lane section through Dundee would exceed both ODOT and Dundee highway mobility standards."

Comparing existing Dundee to the attributes associated with an STA under Action 1B.9, one finds that these attributes did not exist in Dundee in 1999 when the OHP was adopted, and they do not exist there today. While the character of Dundee's land uses adjacent to and along Oregon 99W is mixed, it is more appropriately described as "rural strip development" than as "compact." Although there are a number of commercial businesses between 5th Street and 10th Street, there is no clearly discernible city center. The existing commercial businesses generally are set back from Oregon 99W, with off-street parking located between the businesses and the highway. Until recently, access to local businesses had not been controlled through techniques liked shared driveways or access to existing local streets. Instead, each property accessed Oregon 99W directly.

Besides existing commercial uses, a few residences and the Dundee Elementary School front Oregon 99W. One significant industrial use, Westnut (a hazelnut producing plant), is located at the south end of Dundee, east of Oregon 99W adjacent to the railroad tracks. Much of the land adjacent to Oregon 99W in Dundee is still undeveloped, leaving numerous vacant lots interspersed among the developed properties. With the exception of the School Gym, the industrial development and some of the older homes (a few of which have been converted to restaurants), most of the development along Oregon 99W is single story. Although they are not directly adjacent to Oregon 99W, the Willamette Pacific railroad tracks are also a prominent land use feature throughout Dundee. These tracks parallel Oregon 99W through Dundee and are separated from the highway to the east by approximately 120 to 170 feet.[117]

In summary, the downtown is not a compact area either in its existing development pattern or in its plan designation. The downtown is not characterized by mixed-use developments of a type commonly found in STAs. Buildings are not spaced closely together and are not adjacent to the street with little or no setback. There are substantial gaps in the sidewalk network, and where sidewalks exist, they are of standard width as opposed to a wider width geared more towards pedestrians. Parking lots are not shared or located behind buildings. And although the City wants to improve pedestrian movement on Oregon 99W, its TSP does not emphasize or elevate pedestrian and bicycle movement over automobile mobility. Rather, it supports a roadway network that better serves pedestrian, bicycle, and local automobile movements by relocating statewide and regional through trips to the Bypass. **See Figure 8.**

For these reasons, an STA is not appropriate for Dundee. Accordingly, it is not a reasonable alternative to meet Dundee's identified transportation need.[118]

[117] As discussed elsewhere, this narrow strip already poses significant redevelopment challenges to Dundee due to its restricted lot depth. Redevelopment challenges would be even greater if a portion of this narrow strip was used to widen Oregon 99W.

[118] ODOT also questions whether the TPR requires consideration of an STA option. OAR 660-012-0070(4) requires a demonstration that the identified transportation need cannot reasonably be accommodated "through one or a combination of" three specifically identified measures not requiring an exception. Because OAR 660-012-0070(4) expressly limits itself to the three measures listed in the rule, those measures would appear to comprise an exclusive list of alternatives that must be considered to satisfy the TPR. An STA is not included among those alternatives.


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Dundee
Commercial Buildings Adjacent to ROW
Dundee Elementary Playground Facility
Womens Club
Railroad Right-of-Way
Barriers to Commercial Uses Created
Railroad Crossing Gates Required
Walnut
2nd
1st
Alder
Birch
Viewmont
Dogwood
Fryer Hill
Logger
Elevenith
Niederberger
Charles
13th
Myrtle
11th
10th
9th
8th
1st
99W
Edwards
Dayton
Alpine
Fox Farm
Maple
Cedar
Parks
Hagey
Meters
0
250
500
Figure 8. Development Constraints in Dundee
Urban Growth Boundary
Railroad Right of Way

7.4.4.2 *Keeping Oregon 99W as a Three-Lane Highway and Improving Other Roads as Provided in the Dundee TSP*

DLCD suggests that a three-lane section on Oregon 99W, combined with improvements to both Oregon 99W and the surrounding street system, could improve local access and circulation off the highway. According to DLCD, with the traffic relief the Bypass would bring, widening to five lanes will not be needed for 10–15 years, and even then, the level of congestion in Dundee will be lower than it is today.[119]

DLCD adds that communities around the state and elsewhere have adopted three-lane highway designs that can handle up to 20,000 vehicles per day. By providing alternate access routes, including an Edwards Road/Dayton Avenue connection as provided in Dundee's TSP, Oregon 99W's capacity can be further enhanced. With these improvements, DLCD believes that traffic volumes on Oregon 99W can be further reduced to fewer than 25,000 vehicles by 2025, with greater opportunities for local access and circulation off of Oregon 99W and safer and more convenient access on the highway.

There are several problems with this approach. First, while Oregon 99W would have adequate capacity for 10–15 years, the TPR requires Dundee to base its transportation system on population and employment forecasts covering a 20-year period.[120] Dundee and Yamhill County cannot and should not ignore 20-year projections and the conclusions drawn from them simply because the identified transportation need does not arise until later in the planning period, particularly when sufficient analysis exists to demonstrate that there is no reasonable alternative (to that being proposed) that will address the identified problem.

Second, the assertion that communities around the state have adopted three-lane highway designs that can handle up to 20,000 vehicles per day is not supported, at least on state highways, by ODOT traffic volume records. An ODOT search of these records shows that the highest volumes on three-lane cross-sections other than Dundee are found on US 101 in Seaside (16,000 average daily trips) and parts of Lincoln City (approximately 20,000 ADT). Even with these volumes, which are significantly lower than Dundee's approximately 30,000 ADT, US 101 does not meet OHP performance standards in these areas and projects are underway to relieve the congestion on US 101 in these much larger communities. In Seaside, a couplet is being planned and in Lincoln City planning is underway to add to the two- and three-lane "gaps" in what is otherwise a five-lane cross-section on most of US 101 in Lincoln City.

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[119] ODOT studied improvements to Oregon 99W and the surrounding street system in conjunction with a Bypass as part of the NDTIP. See LDEIS Technical Memorandum: Transportation.

[120] OAR 660-012-0030(3). See also OAR 660-012-0070(4), providing that the transportation need used as the basis for an exception be identified "consistent with the requirements of OAR 660-012-0030."

Third, even with the Bypass, the Edwards Road/Dayton Avenue connection does not eliminate the need for the East Dundee Interchange. [121]

Traffic modeling conducted by project team traffic engineers forecasts that if the Edwards Road/Dayton Avenue connection was made and the Bypass was constructed without also building the East Dundee Interchange, the connection would still carry approximately 7,000 vehicles per day.[122] The forecast found that more than 90 percent of the vehicles that would end up on Edwards Road would be diverted from Oregon 99W via the Fox Farm Road/Dayton Avenue/Oregon 99W intersection. Only 10 percent of these additional vehicles on Edwards Road would be coming to or from Dayton Avenue directly.[123] Without the East Dundee Interchange, surrounding established residential areas would experience not only a major increase in traffic volumes above current volumes on Edwards Road,[124] but more significantly, traffic infiltration on the local connecting streets traversing these developed residential areas between Edwards and Oregon 99W as diverted regional through traffic sought to find its way back to Oregon 99W further south in Dundee, and increased intersection operation problems on Oregon 99W.[125]

With the Edwards Road/Dayton Avenue connection in place, Oregon 99W near 5th Street in Dundee is anticipated to carry approximately 18,000 vehicles per day. An analysis of 2025 p.m. peak hour conditions with this connection in place forecasts that the intersection would operate at a volume to capacity ratio of 0.63 only if Oregon 99W is a five-lane highway but over 1.0 if Oregon 99W is a three-lane section.[126] A five-lane section of Oregon 99W through Dundee is unreasonable for reasons stated later in this subsection. A v/c ratio over 1.0 violates both OHP standards for any category of state highway (including ODOT's 0.95 v/c performance standard for STAs) and local highway performance standards for arterials, and thus is not adequate for that reason.

Finally, it is noted that construction of a connector between Edwards Road and Dayton Avenue likely would lead to the taking of historic farm property that is on the National Register of Historic Places. Since historic properties on the National Register are protected under Section 4(f) of the Transportation Act of 1966, federal funds cannot be used to construct that road without first proving that there are no feasible and prudent alternatives that avoid the taking (such as construction of the East Dundee Interchange).

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[121] Edwards Road is the only viable option that offers relief for traffic along Oregon 99W heading east. There are no viable alternatives offering relief for traffic heading west along Oregon 99W due to the existing locations of the school, park, senior housing and other neighborhood development, and also due to the general circuitry of available local routes. Local drivers may be able to circulate off-highway fairly readily on the local roads. However, local roads are not and cannot be a good alternative for through travelers.

[122] LDEIS Alternative 3K was applied in modeling this connection. See LDEIS Technical Memorandum: Transportation.

[123] See LDEIS Technical Memorandum: Transportation.

[124] Currently, Edwards Road carries approximately 450 vehicle trips per day. Dundee TSP.

[125] This volume of traffic is consistent with Dundee collector standards, which provide for a 48-foot wide cross-section. Dundee TSP, page 106, Figure 6-2.

[126] Id.

7.4.4.3 Expanding Oregon 99W in Dundee to Five Lanes or a Couplet

Among the LDEIS alternatives considered was Alternative 3K, which does not provide an intermediate interchange between Newberg and Dundee. Instead, Alternative 3K would widen existing Oregon 99W in and southwest of Dundee from two to four travel lanes with continuous left turn lane With that widening, Alternative 3K would meet OHP mobility standards and the minimum transportation performance threshold established for this project.

Without an intermediate interchange between Newberg and Dundee, year 2025 traffic volumes on Oregon 99W through Dundee would average approximately 25,000 daily vehicle trips. These volumes are substantially higher than the average daily traffic volumes on Oregon 99W associated with those bypass alternatives that included an East Dundee Interchange.[127] More significantly, with those traffic volumes, but with no new travel lanes in Dundee, the p.m. peak hour volume to capacity ratio on Oregon 99W within the Dundee UGB, would greatly exceed 1.0. This is well in excess of the highway mobility performance standards in the OHP. Consequently, it would be necessary to widen Oregon 99W to a five-lane urban section (four travel lanes plus a median turn lane) or build a couplet in Dundee to meet acceptable OHP performance standards.[128] In addition, the rural section of Oregon 99W between the Dundee city limits and the Oregon 18 junction would require widening to a four-lane section to meet OHP standards.[129]

A five-lane highway or couplet through an urban area is not inherently "unreasonable" to accommodate an identified transportation need for greater roadway capacity. Many Oregon communities have five-lane roadways or couplets passing through them. The issue here is whether a five-lane roadway or couplet would be unreasonable to accommodate statewide, regional and local trips under the specific circumstances present in Dundee. Stated another way, do existing development patterns, comprehensive plan policies, specific physical constraints that are unique to Dundee, and other relevant factors, considered as a whole, render a five-lane roadway or couplet in Dundee unreasonable?

7.4.4.4 Widening Oregon 99W to 5 Lanes

Oregon 99W in Dundee is the city's "Main Street." It is the center of the City's commercial district. It is what people notice when they travel through Dundee, and it is what formulates their

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[127] See LDEIS Supplemental Land Use Technical Memorandum, Table 2. Traffic volumes in Dundee under the other LDEIS alternatives range from 13,000 to 16,000 daily vehicle trips. The difference is not nearly as dramatic in downtown Newberg because the net effect of Newberg's westbound regional trips having to go through Dundee is greater than Dundee's eastbound regional trips having to go through Newberg due to the fact that Newberg is and will continue to be six to seven times larger than Dundee.

[128] As noted above, an Edwards Road/Dayton Avenue connection does not eliminate the need for additional roadway widening on Oregon 99W.

[129] Widening to four lanes also would be required if Alternative 3K were expanded to include an interchange at Oregon 219 in Newberg. Under this scenario, year 2025 daily traffic volumes on Oregon 99W at 5th Street in Dundee would average 19,000 vehicles per day, and the intersection would operate at a volume to capacity ratio of 0.98, which is well above both ODOT's v/c standard of 0.85 for a district highway and a LOS "D" standard. See Memorandum dated August 30, 2002, from Kittelson & Associates, Inc., to David Mayfield and Donna Robinson.

impression of Dundee, for better or for worse. If that impression is positive, people are likely to return to Dundee. If it is negative, then people will be less inclined to return to Dundee.

The adopted Dundee Transportation System Plan states that one of the City's community development and livability objectives is "to reduce traffic and congestion along Oregon 99W in Dundee to the maximum extent possible and enable Oregon 99W to function as a more pedestrian friendly 'Main Street.'" The TSP then adds: "A key feature of this objective is to retain the existing three-lane cross section (two lanes with center-turn lane pockets). The City Council is opposed to any alternative that would necessitate expanding Oregon 99W capacity along its current alignment or as a couplet in Dundee."[130]

Dundee's community development and livability objectives are addressed in the City's adopted "Vision Statement 2022." As described therein, Dundee's downtown would become a destination for visitors based on its reputation for fine shops and restaurants. Dundee adopted this vision statement after a public process was conducted by the City Council over the winter of 2002/2003 to determine (1) where Dundee should focus its efforts to develop a downtown core and (2) what the focus of future development should be. The City determined that it should try to develop its future "downtown" around the existing Oregon 99W alignment as opposed to trying to create a future downtown on undeveloped land closer to the Willamette River. It also determined that the focus of future "downtown" development efforts should be to capitalize on Dundee's asset of being located in the "Center of the Oregon Wine Industry" by encouraging retail activities like fine shops and restaurants that would complement the wine industry theme.

Over the last ten years, a number of businesses that contribute to Dundee fulfilling its vision have, in fact, made some significant investments in and around Dundee. Several fine restaurants with regional and statewide reputations are thriving in Dundee, including Tina's, the Red Hills Restaurant, and the Ponzi Dundee Bistro. All of these establishments are complemented by renowned wineries located within or just outside Dundee, including the Argyle, Sokol Blosser, Torii Mor, Dundee Springs, Duck Pond, Lange, Erath, Daedalus, Archery Summit, Cameron, Domaine Drouhin, Domaine Serene, and Wine Country Farms wineries. Dundee also is home to the Wine, etc., Argyle, and Ponzi wine-tasting rooms.

Dundee's vision is fully in keeping with the "Main Street" focus envisioned for Oregon 99W in Dundee's TSP after the Bypass is built.[131] The "Oregon 99W Main Street Improvements" section of the adopted Dundee TSP envisions a downtown that is both accessible to visitors and friendly to bicyclists and pedestrians. Among the key assumptions for this "Main Street" vision and the overall City vision are that future traffic volumes on Oregon 99W have been cut in half by removing all statewide trips and most regional trips not originating or ending in Dundee, and that Oregon 99W will be able to remain a three-lane roadway. The City believes that these assumptions are critical to creating the less hurried, pedestrian friendly, small urban enclave that will best suit the City's economic development focus of making Dundee a wine industry tourist destination. The "Main Street" section of the adopted Dundee TSP also calls for the

[130] Dundee TSP at 70. According to the TSP, a five-lane cross-section in Dundee would "undermine the City's objective to restore its small town livability." TSP at 70. Editor' comment: at 70?
[131] See Dundee TSP at pages 70, 115-116.

development of a refinement plan to develop a short- and long-term plan for evolving Oregon 99W from its current form and function, described above, to the future "Main Street" that it can become after construction of the Bypass and the East Dundee Interchange.[132]

With the Bypass and the East Dundee Interchange, Oregon 99W can become a local main street, with visually attractive landscaping, space for leisurely pedestrian movement, and accessible parking areas. This is because the East Dundee Interchange enables traffic destined to or from Newberg to the south to "bypass" Dundee. However, a five-lane roadway through Dundee would preclude realization of the City's adopted vision.

In most circumstances, a five-lane highway through an urban area is not inherently unreasonable to accommodate an identified transportation need for greater roadway capacity. Hence, the fact that Dundee does not want Oregon 99W to be widened to five lanes within its city limits is not, in itself, sufficient justification to reject this alternative. To reach this result, it is necessary to demonstrate why existing development patterns, comprehensive plan policies, specific physical constraints that are unique to Dundee, or other relevant factors, considered as a whole, render a five-lane roadway in Dundee unreasonable.

A five-lane roadway would be out of scale with Dundee's vision and would fail to "preserve and enhance the charm and rural character of" Dundee due particularly to the very close proximity of the railroad right-of-way to Oregon 99W. As with the couplet alternative described below, a five-lane roadway would require land to be taken from the blocks that lie between existing Oregon 99W and the railroad right-of-way. Those blocks are approximately 180 to 200 feet deep at their deepest point (at 7th Street) and much narrower just northeast of 1st Street. A reduction in block depth by approximately 30 additional feet (to accommodate additional lanes under a typical ODOT Statewide Highway five-lane cross-section of approximately 92 feet) would impede development and associated off-street parking and circulation within these blocks. Moreover, the small depth of buildings located in these blocks between Oregon 99W and the railroad tracks would create an appearance that looks out of scale and unusual, with the overall visual effect being one where the transportation facilities (i.e. the roadway and railroad right-of-ways) dominate over the town itself.

Existing Oregon 99W trends in a relatively straight line through Dundee from the northeast (east) to the southwest (west). Its right-of-way varies from approximately 60 feet wide in central Dundee to approximately 100 feet wide near the edges of the City. Blocks of 300-foot length line Oregon 99W through the center of the City, although several of the rights-of-ways for intersecting streets are undeveloped and function as driveways for adjacent businesses. See Figure 8.

[132] OAR 660-012-0025 authorizes refinement plans such as that called for in Dundee's adopted TSP. Since completion of the TSP, funds have become available to undertake this planning effort as part of the NDTIP. Because the purpose of the refinement plan is to determine how to develop and manage Oregon 99W after the Bypass is constructed, it is in keeping with the AMLU portion of the NDTIP. This effort began in the fall of 2003 and is expected to take approximately 12 months to complete.

Should Oregon 99W be widened to five lanes, the widening would need to occur primarily on the south side (towards the railroad) to avoid impacts to the historic Dundee Elementary School and Dundee Women's Club, both of which are protected by federal regulations.[133] There are also potentially eligible historic buildings that should be avoided near the southeast side of Oregon 99W (291 and 691 Highway 99W). Impacts to these buildings have been minimized in this analysis by aligning the roadway approximately 10 feet farther northeast in these locations.

With southward expansion, only two of the twelve businesses along the south side of Oregon 99W would not be substantially affected. These include the Westnut processing and distribution building (which would lose landscaping) and a planned gas station/convenience store.

Widening would displace 10 buildings on commercially-zoned properties. Argyle Winery (691 Highway 99W), one of the "anchor" businesses for downtown Dundee, would be substantially affected by widening Oregon 99W. Although attempts to preserve the potentially eligible historic retail store have been made in the analysis by shifting the right-of-way alignment slightly northeast in this area, the associated gardens would likely be displaced and over 70% of the parking available at the winery would be lost. Additionally, even if displacement is avoided by shifting the right-of-way alignment, the resulting proximity to the right-of-way of both the potentially eligible historic retail store and businesses directly across the street may create unacceptable setbacks. Ultimately, these impacts could lead to relocation of the entire winery. If the winery were to remain, it would probably need to either restrict public access or acquire adjacent parcels for redevelopment.

Widening Oregon 99W might also impact a potentially eligible historic residence/auto repair business at 291 Highway 99. Although attempts have been made to avoid displacement in the analysis by shifting the right-of-way alignment northeast approximately 10 feet, the shoulders of Oregon 99W slope upward on both sides at this location and widening the right-of-way would exacerbate the grade differences between the highway and adjacent properties. In addition, another potentially eligible historic building is directly across on the northeast side of Oregon 99W. This former residence is now occupied by Red Hills Restaurant, a destination business in downtown Dundee. The proximity to the right-of-way of both potentially eligible historic resources, along with the grade changes existing at this location, may make it difficult to ensure that neither building would suffer significant impacts resulting from the widening.

Other businesses displaced by the roadway include three restaurant/drink establishments and two service-related businesses. The Dundee Fire and Rescue building, which also serves as a community meeting space, also would be displaced.

Three other businesses not directly displaced would lose substantial parking. These include two restaurants that would lose 35 and 50 percent of their parking and a specialty food outlet that would lose 74 percent of its parking. Due to the amount of parking lost and the difficulty in finding replacement parking, the use of the buildings housing these businesses could change.

[133] See Memorandum regarding "Impacts of 5-Lane Section on Downtown Dundee" (March 8, 2004).

Development/redevelopment of properties within the strip of land between Oregon 99W and the railroad tracks would be limited by the proximity of the railroad right-of-way. With a five-lane section on Oregon 99W that assumes no on-street parking (because it would cause additional displacements), the depth of the lots shrinks down to approximately 150 to 160 feet. Provision of automobile circulation and parking between the railroad right-of-way and the commercial property south of Oregon 99W further reduces the amount of land available for development to approximately 130 to 150 feet. For many uses, this resulting lot depth would provide insufficient land to meet off-street parking requirements. For example, Calamity Jane's Restaurant currently has 46 parking spaces (based on City requirements) and would lose 35 percent of those spaces as a result of road widening. It is unlikely that this parking could be replaced on site. More likely, the building would convert to some other use with less parking requirements, such as a service or repair use.[134]

Land with a block depth of just 130 to 160 feet is substantially narrower than standard commercial blocks elsewhere. By comparison, block sizes in downtown McMinnville are 240 feet long by 200 feet deep, with automobile access and on-street parking on all sides of the block. In Newberg, block dimensions are 200 feet by 250 feet; while in Lafayette and Dayton, they are 200 feet by 240 feet; and 300 feet by 260 feet respectively.[135] With substantially narrower lot depths, Dundee would be at a competitive disadvantage to compete commercially with nearby communities that offer more appropriate block sizes for development.[136]

With a five-lane roadway running through the city, one reasonably could compare Dundee with the City of Scappoose, where a rail line adjoins Highway 30 through that city's downtown.[137] The combination of the railroad right-of-way and five-lane highway in Scappoose provides a very strong visual impression in which the transportation system dominates and dwarfs the town's character. That is not the future that Dundee wants for itself or is planning to achieve.[138]

It is for these reasons that Dundee's adopted TSP, vision, and Resolution 02-45 all deem unacceptable the widening of Oregon 99W to five lanes in Dundee. With a five-lane roadway, most of the affected businesses on the south side of Oregon 99W could not be relocated on the existing properties without being combined with adjacent properties or businesses. With no on-street parking available along Oregon 99W, reuse and redevelopment along the south side of the highway would result in isolated businesses with needed parking in between the buildings. Most remaining uses would be of a type (e.g., service and repair) not geared toward the visiting public or a downtown. This would not represent a compact, pedestrian-friendly urban design or the kind of downtown that Dundee envisions for itself as a center of the Yamhill County wine

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[134] Id.

[135] A standard block in downtown Portland is 200 feet by 200 feet.

[136] Id.

[137] See POST Meeting Minutes, January 22, 2003, at page 8.

[138] Dundee Resolution 02-45 states that because of the close proximity of the railroad right-of-way to Oregon 99W, further widening of the highway to five lanes "would create a transportation corridor out of proportion to the desired scale of Dundee as reflected in the adopted vision. The remaining depth of lots fronting Oregon 99W Oregon 99W would not be sufficient to develop the commercial property and Dundee's core commercial area would be built-out on one side only. The sense of place described in the adopted vision would be destroyed. Whereas, in some cities a five-lane section is appropriate, it is not appropriate for a small city that has a railroad track paralleling the main highway so closely through its core commercial area."

industry. Combined with the site restrictions imposed by the railroad right-of-way and parking and access issues, as well as the availability of more suitable commercial sites in nearby cities, the widening of Oregon 99W is expected to cause a net decrease in business development along Oregon 99W in Dundee.[139]

Without the East Dundee Interchange, the additional traffic traveling between Newberg and locations to the south, including approximately 725 additional truck freight trips per day,[140] also would subject Dundee, a community currently of less than 3,000 people, to a level of traffic commensurate with its much larger neighbor to the east, Newberg, which currently has approximately 20,000 residents. This proportional difference carries into the future, when Dundee is projected to have approximately 6,000 people in 2020, compared to a projected population for Newberg approaching 35,000.[141] Widening Oregon 99W to five lanes would come with a significant cost both in terms of dollars and displacement of businesses and homes. The monetary cost alone is greater than the cost of building the East Dundee Interchange, questioning why the State should spend more money to incur greater community disruptions and displacements in order to meet the transportation need in a way that is not consistent with the City of Dundee's adopted vision and goals.[142]

Finally, besides the economic displacements and relocations it would impose on Dundee, a five-lane Oregon 99W through Dundee would impede or preclude the type of development needed to establish and maintain a multi-modal "Main Street". As described in much greater detail in Section 7.6 below, Dundee's TSP and comprehensive plan include numerous goals and policies directed at:

- Retaining, preserving and enhancing existing businesses along Oregon 99W
- Protecting areas suitable for economic development from encroachment by other uses
- Supporting future economic growth and vitality along Oregon 99W
- Minimizing adverse impacts on existing land uses associated with through traffic
- Fostering a small city appearance that emphasizes pedestrian movement among shops along Dundee's "Main Street"
- Providing adequate off-street parking and circulation

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[139] Memorandum from Dave Mayfield regarding "Impacts of 5-Lane Section on Downtown Dundee" (November 11, 2003).

[140] LDEIS, Table 4-5 at page 4-6. This is an approximately 140 percent increase in freight traffic through Dundee more than it would experience with the East Dundee Interchange.

[141] State of Oregon Department of Administrative Services forecasts. See Section 4.2.2, above.

[142] Additionally, the East Dundee Interchange will have a favorable impact on pedestrian and bicycle travel in Dundee because less traffic provides walking and bicycling conditions in the form of fewer lanes to cross and less waiting time between signals. An East Dundee Interchange with its associated traffic volume reduction also lessens safety concerns regarding students crossing Oregon 99W to attend Dundee Elementary School (which is located at the corner of 5th Street and Oregon 99W), and it eliminates the need to displace existing businesses along Oregon 99W.

- Minimizing pedestrian/motor vehicle conflicts
- Avoiding unsightly strip commercial development

These goals and policies, together with TSP "Main Street" policies, cannot be achieved with a 92 foot wide, five-lane facility traversing Dundee's downtown business district. Among other impacts, such a facility would:

- Substantially reduce (by 25-35%) the developable site area available for maintaining small lot development potential between Oregon 99W and the railroad right of way
- Significantly constrain the ability to maintain large lot infill potential (due primarily to constraints posed by the railroad right-of-way)
- Impede establishment of an interconnected service and/or parking access lane serving the lots between Oregon 99W and the railroad right of way (again due to lot depth constraints). The proximity of the railroad to Oregon 99W precludes the ability to create a deeper local street grid to effectively support circulation around Oregon 99W as it evolves as Dundee's main street.
- Impede development of a "human-scale" streetscape
- Impede the functionality of Oregon 99W as Dundee's "main street"
- Preclude the efficient, flexible and joint use of surface parking in a manner appropriate for a "main street"
- Discourage commercial core development viability as a result of creating shallower lots with longer frontages
- Overemphasize automobile traffic on Oregon 99W at the expense of other modes
- Exacerbate conflicts between operational efficiency (as a through-put facility with regional through trips constituting approximately 70 percent of the total average dialing traffic volume) and locally serving, multi-modal connections[143]

In short, with a five lane facility, Dundee would not be able to achieve the goals, objectives and policies set out in its TSP, comprehensive plan and 2022 Vision Statement. According to a matrix prepared on this issue by an expert in urban design, both a five lane facility and a couplet through downtown Dundee, constructed without an East Dundee Interchange, achieve a score that is less than half the score achieved by a three lane facility combined with an East Dundee

[143] See Memorandum dated 3/1/04 from Jeff Mitchem, Parametrix, to Donna Robinson, Parametrix, entitled "Urban Design Evaluation of Dundee Transportation Options (hereinafter "Mitchem Memorandum").

Interchange in promoting and facilitating the kind of development called for in Dundee's TSP and 2022 Vision Statement.[144]

7.4.4.5 A five-lane facility in Dundee would be much more likely than not to encourage and foster an automobile oriented, strip commercial development pattern that the city clearly does not want. To a large extent, this is a result of the close proximity of the railroad right of way to Oregon 99W. Consequently, a five-lane facility in Dundee is not a reasonable alternative to meet the identified transportation need.

Couplet Options

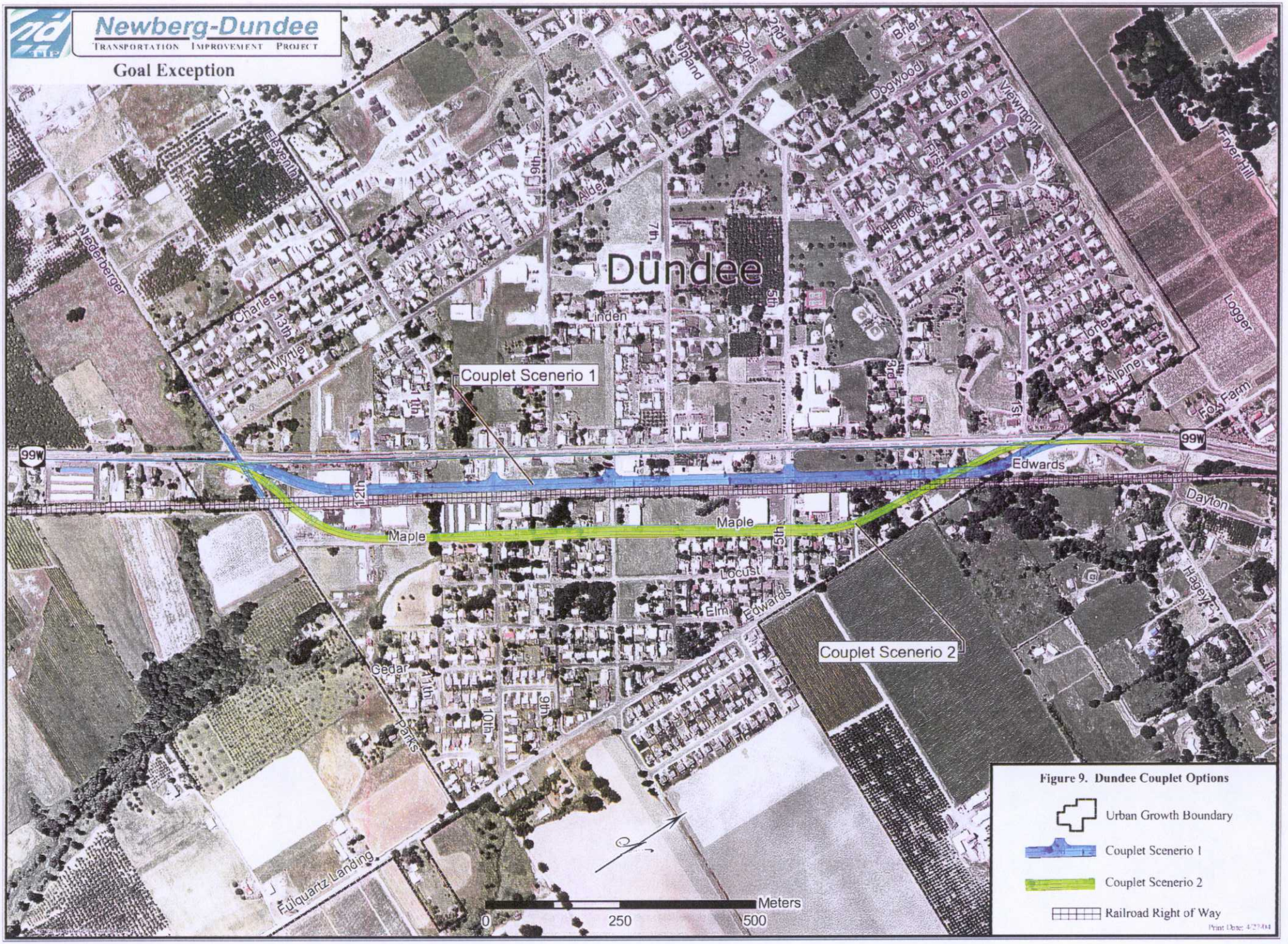
Two couplet options were considered as part of the Bypass project. **See Figure 9.** Under the first option, both links of the couplet would be located on the same side of the railroad tracks. Under the second option, the links would be on opposite sides of those tracks.

Couplet Option 1. With couplet option 1, the existing section of Oregon 99W in Dundee would be reconstructed as a westbound, one-way street, and a new, eastbound road would be constructed north of, but adjacent to, the active railroad right-of-way paralleling the existing highway approximately 180–200 feet to its south.

The railroad right-of-way and the existing highway are separated by a distance ranging between 180 to 200 feet.[145] Because the new eastbound couplet road would require approximately 65 feet of right-of-way to accommodate two 12-foot travel lanes, parking, sidewalks, and a bike lane, construction of this couplet would reduce the distance separating the couplet links to approximately 115–135 feet. Land with a block depth of just 115–135 feet is substantially narrower than standard commercial blocks elsewhere. By comparison, block sizes in downtown McMinnville.

[144] Mitchem Memorandum, Attachment 1. Applying urban design principles, a five lane roadway achieves a score that is 40 percent of the score achieved by a three lane option with an East Dundee Interchange in terms of likelihood to achieve "smart development" conditions. A couplet scores even worse (only 34 percent of the score achieved by the three lane option). Indeed, the scores for both the five lane option and the couplet option indicate that these options would undermine, impede and preclude Dundee's ability to implement the policies in its TSP, comprehensive plan and vision.

[145] Memorandum from Dave Mayfield to Mark Greenfield regarding "Impacts of Couplet Options in Dundee" (November 11, 2003).


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Dundee
Couplet Scenerio 1
Couplet Scenerio 2
99W
Maple
Edwards
Linden
Alder
Hemlock
Laurel
Dogwood
Viewmont
Fieldstone
Alpine
Fox Farm
Logger
Dayton
Hagen
Locust
Elm
Cedar
Parks
Fulquartz Landing
Niederberger
Charles
Myrtle
Eleventh
Meters
0
250
500
Figure 9. Dundee Couplet Options
Urban Growth Boundary
Couplet Scenerio 1
Couplet Scenerio 2
Railroad Right of Way

are 240 feet long by 200 feet deep, with automobile access and on-street parking on all sides of the block. In Newberg, block dimensions are 200 feet by 250 feet; while in Lafayette and Dayton, they are 200 feet by 240 feet and 300 feet by 260 feet, respectively. Because the resulting strip of land between the couplet links would be much narrower than commercial blocks elsewhere, there would be considerably less room in Dundee to accommodate commercial development, including commercial buildings, associated off-street parking, and space for cars to maneuver within off-street parking areas. As a result, Dundee would be at a significant competitive disadvantage to compete commercially with nearby communities that offer more appropriate block sizes for downtown/commercial development.[146]

This first option also would have significant adverse impacts to existing businesses. With this option, most if not all of the businesses located between the couplets would be either directly displaced or indirectly affected due to loss of parking and access. Impacts would be more severe than with the widening of the existing road to five lanes (discussed above). Displacements would include the Argyle Winery and the Grapevine Café, which are the largest commercial businesses along the southeast side of Oregon 99W. They would include as well one of the Westnut industrial buildings, two historic buildings, a planned service station/convenience store, three houses, and a city maintenance facility.[147] In total, more than half of the existing buildings on this side of Oregon 99W would be displaced. Because the resulting strip of land between the couplets would have a depth of only 115-135 feet, redevelopment would likely take the form of isolated businesses with needed parking in between the buildings. This would not represent a compact, pedestrian-friendly urban design. Re-use might focus on business types that require minimal off-street parking, for example, service and repair businesses. Combined with the site restrictions imposed by the railroad right-of-way and parking and access issues, plus the availability of more suitable building sites in nearby cities, this first option likely would cause a net decrease in business development along Oregon 99W in Dundee.[148]

Also with this option, the eastbound leg of the couplet would be bordered by a railroad right-of-way. A highway adjacent to the railroad right-of-way would sever the direct ties between Dundee's rail-linked industries and the railroad tracks, effectively eliminating those industries. Figure 8 illustrates existing constraints along Oregon 99W in Dundee.

Like the five-lane option, this first couplet option would impede or preclude Dundee from developing Oregon 99W as a Main Street. When measured against standards developed to gauge the ability of a proposed street design to promote and facilitate a multi-modal, pedestrian friendly and business friendly "Main Street" environment, this couplet option performs even worse than the five-lane option, again due primarily to constraints resulting from the close proximity of the railroad right of way to Oregon 99W. As such, it is not a reasonable alternative to meet the identified transportation need.[149]

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[146] Memorandum from Dave Mayfield to Mark Greenfield regarding "Impacts of Couplet Options in Dundee" (November 11, 2003).
[147] Id.
[148] Id.
[149] See Mitchem Memorandum.

Couplet Option 2. The second couplet option would place the railroad tracks in between the couplet segments (westbound on existing Oregon 99W and eastbound on Maple Street). Two separated grades would be needed to move eastbound traffic across the railroad tracks. City blocks between existing Oregon 99W and the railroad would remain approximately as wide as their current condition (i.e., 180 to 200 feet). Maple Street serves as a border between "light industrial" and "residential" zones in Dundee. Maple Street is not currently a through street. It terminates between 7th and 8th Streets and provides local access to property owners. City blocks between the Maple Street couplet link and the railroad would be narrower (approximately 175 feet) in order to minimize impacts to residences located south of Maple Street. Most of the property that would be directly impacted is zoned light industrial.

Under this second option, direct displacements would include one of the Westnut buildings (which could be replaced nearby), a self-storage facility, a warehouse, approximately 10 residences, and a service station/convenience store that has been permitted for construction. The Westnut property also would lose much of its yard and outdoor storage area. Impacts along existing Oregon 99W would be relatively limited.

Approximately 30 houses would remain directly adjacent to the Maple Street link of the couplet. Noise impacts for all of these houses would be likely. Visual impacts would result from the wider roadway and from construction of new overpasses over the railroad tracks. This couplet also would facilitate greater neighborhood infiltration of traffic onto local streets in an established residential area.

With this second option, proximity to eastbound Oregon 99W could result in pressures to rezone the property between Maple Street and the railroad from light industrial to commercial use. However, because of the reduced width of the block (approximately 175 feet) and the lack of adequate space to meet Dundee off-street parking requirements, redevelopment would likely lead to separate buildings with parking placed between them.

Existing businesses along Oregon 99W, which currently front a two-way street, would be exposed only to west/south-bound travelers. Pedestrian use of the couplet would be limited because of the relatively long distance between couplets (approximately 450 feet) compared to other downtown areas. The resulting urban design pattern would likely be an automobile-oriented, scattered commercial development pattern that would not support the compact, pedestrian friendly downtown that Dundee envisions.

The second couplet option also would be more expensive to build because it would impact additional residential and business structures and require construction of two railroad overpasses. The planning cost estimate for Couplet 1 is $42.77 million as compared to $44.80 million for Couplet 2.

Couplet Option 2 is not a reasonable alternative for the reasons stated above. It also is unreasonable from the standpoint of safety. This second couplet alternative would require area residents and visitors to cross the railroad tracks to access Dundee's central business district. Either they would drive, walk or bike a block or two out of direction to access a local street that crosses the railroad tracks, or they would "jaywalk" across the tracks to shorten the connection.

With each crossing, they would encounter a potential hazard to their safety. Because a railroad crossing poses a hazard to public safety, an alternative that mandates its crossing in multiple locations is deemed unacceptable.

OHP Policy 2G provides that "it is the policy of the State of Oregon to increase safety and transportation efficiency through the reduction and prevention of conflicts between railroad and highway users." (Emphasis added.) Action 2G.1 directs ODOT to eliminate crossings at grade wherever possible, while Action 2G.2 directs ODOT to "design highway projects to avoid or reduce rail crossings at grade." Couplet Option 2 runs contrary to these policies and action items. As such, particularly given that these crossings can be avoided, Couplet Option 2 is not a reasonable alternative.

7.4.4.6 Narrower Five-Lane Roadway

In response to concerns raised by the City of Dundee and the POST, DLCD also has suggested that a narrower than normal five-lane design be employed in Dundee. According to DLCD, a "carefully designed five-lane 'Main Street' for Dundee" could include narrower travel lanes, a narrower center median, either no on-street parking or on-street parking limited to certain locations, and perhaps the relocation of bike lanes onto other streets.

DLCD cites other communities that allow five-lane highways using right-of-ways that range between 80–95 feet. It identifies Metro's Regional Street Design Guidelines for Regional Boulevards and Regional Streets as examples. Key features could include a narrow cross section based on a 25 mph operating speed (which allows narrower travel lanes and eliminates the need for separate bicycle lanes), wider sidewalks to improve pedestrian travel, varying right-of-way widths to minimize community impacts, redevelopment plans for acquired properties, and local street improvements provided for in Dundee's TSP. DLCD also proposes the elimination of a center-turn lane or turn refuges for left hand turns (discussed below).[150]

DLCD's reference to Metro Regional Street Design Guidelines for Regional Boulevards and Regional Streets is misplaced because the intent of such boulevards and streets is to serve primarily local traffic traveling in or between regional or town centers rather than statewide or "regional through" traffic that either is passing "through" the area or has just one trip end within the region.[151] As described in the analysis of 1000 Friends of Oregon's alternative in Section 7.7

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[150] According to ODOT engineers, a five-lane roadway with a posted speed of 25 or 35 mph, two bike lanes, a center-turn lane, sidewalks sized for downtown areas, and no on-street parking still would require 92–94 feet of right-of-way. Memorandum dated July 15, 2003 from Kent R. Belleque, ODOT, to Project Management Team.

[151] Metro's 2000 Regional Transportation Plan (RTP) http://www.metro-region.org/article.cfm?articleid=236 states that boulevards "serve the region's most intensely developed activity centers, including the central city, regional centers, station communities, town centers and some main streets." Boulevards are designed with special amenities that promote pedestrian, bicycle, and public transportation travel in the districts they serve. They also are divided in regional and community-scale designs, with regional boulevards "designed to be transit-oriented with high quality service and substantial transit amenities at stops and station areas." RTP at 1-23. However, Metro does not rely on boulevards to serve an arterial function. Instead, the RTP provides for throughways, freeways, and highways to serve that purpose. The purpose of throughways "is to connect major activity centers within the region... and to points outside the region." Both freeways and highways "are designed to provide high-speed travel for longer motor

below, Metro's Regional Transportation Plan utilizes limited access highways (e.g., Oregon 217, US 26 and Interstates 5, 84, and 205), rather than boulevards or regional streets, to accommodate statewide and "regional through" traffic that is traveling longer distances.[152] Moreover, as reflected in Metro's 2000 RTP, these kinds of streets are more typical of more densely developed communities within much larger urban areas where transit service is well established and where there are alternative routes to accommodate through traffic. These kinds of streets would be inappropriate in communities the size of Dundee, where residential areas are located no more than one or two blocks from the main highway.

The American Association of State Highway and Transportation Officials (AASHTO) publication "A Policy on Geometric Design of Highways and Streets -- 2001" provides guidance on appropriate street widths. Important factors to consider are safety and the comfort of driving. The urban arterial chapter indicates that lane widths of 10 feet should be used in highly restricted areas that have little or no truck traffic. Lane widths of 11 feet are common for urban arterial street design, but 12-foot lane widths are most desirable for higher speed principal arterials or where substantial truck traffic is anticipated. In ODOT's view, 1250 truck trips per day would be substantial.[153] Large trucks require greater lateral separation from other vehicles than cars. This is due to the width and size of trucks. With the width of trucks and narrowing lane widths, there is a higher probability that the trucks will encroach into adjacent lanes. This not only applies to vehicles going in the same direction as the truck, but also to vehicles going in the opposite direction.[154]

Moreover, "Main Streets" are supposed to be pedestrian friendly. Use of narrower lanes puts trucks and other vehicles closer to pedestrians, especially when there is no on-street parking area to provide separation. Having pedestrians adjacent to travel lanes results in the pedestrians being exposed to loud noises and vehicles that are close to their walking space. This is inconsistent with the notion of a Main Street.

Having no separate bicycle lane would create an uncomfortable and potentially hazardous experience for bicyclists. Although ODOT's designs call for a separate bike lane, AASHTO's "Guide for the development of bicycle facilities – 1999" provides guidance on proper widths in case a shared roadway is used. Even if it was agreed to use a wide curb lane in this section, AASHTO recommends a 14-foot wide curb lane. If the wide curb lane is against parking, 15 feet is recommended.[155]

Finally, "skinnier" streets do not mean there are fewer adverse impacts. Skinnier streets would have most of the same adverse physical impacts associated with the widening of Oregon 99W to

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vehicle trips throughout the region, are primary freight routes and serve all 2040 Growth Concept land-use components." RTP at 1-22.

[152] In the Portland region, limited-access highways are used to connect cities like Portland to other cities in the region, such as Beaverton and Hillsboro (via US 26), Tigard and Wilsonville (via I-5), and Troutdale and Gresham (via I-84). However, boulevards could be used to connect, for example, the Hillsboro downtown with Hillsboro's Orenco area or to connect Beaverton to Washington Square.

[153] Correspondence from Kent Belleque, ODOT to Mark Greenfield dated November 20, 2003.

[154] Id.

[155] Id.

five lanes that are identified immediately above. The difference in width between a "skinny" design and a "standard" design is approximately 20 feet. In addition, there is still the near doubling of traffic (from 13,000 to 25,000 average daily trips) that would occur in Dundee in the absence of the East Dundee Interchange. Additionally, noise and vibration impacts could be greater due to the closer proximity of the roadway to buildings; the large volume of trucks traveling to or from Newberg through Dundee would create greater safety concerns because the travel lanes are narrower and there would be no buffer area separating sidewalks from the travel lanes; and the elimination of bike lanes means that bicycles would be sharing travel lanes with heavy truck traffic, which as noted above creates still another safety hazard.[156]

7.4.4.7 Four-Lane Roadway Without Left Turn Refuges

DLCD has further suggested that a four-lane facility for Oregon 99W through Dundee might be feasible. Under this alternative, Oregon 99W would have two lanes in each direction but would not include a center-turn lane or left-turn lanes at key intersections. DLCD proposed this alternative to reduce the amount of right-of-way ODOT would need to acquire as part of the required widening of Oregon 99W. In fact, DLCD suggested that the four-lane section could be built within the 60-foot right-of-way section between 4th and 11th Streets. However, this limited right-of-way would only allow for bike lanes or sidewalks, not both, and no on-street parking.[157]

A four-lane section raises operational and safety issues. The absence of a center-turn lane or left-turn lanes at key intersections significantly reduces the capacity of the roadway. Long queues can form in the interior through lanes behind vehicles waiting to turn left. In addition, the incidence of crashes increases on a four-lane section without left-turn lanes. This is due in part to driver frustrations as drivers turning left from an interior lane create an impediment to through traffic and wait for a gap in the opposing lanes of traffic to open. It also is due to speed differential problems created when vehicles desiring to make a through movement in the interior lane become stopped behind a left-turning vehicle and then attempt to exit that queue into the right lane, where vehicles are continuing to travel at faster speeds.[158] Because of these operational and safety problems, this type of cross-section can hinder economic development as

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[156] A bike route through Dundee cannot easily be relocated to either the north or the south of Oregon 99W because of a lack of an available continuous route that is not highly circuitous. To the north, even if connecting facilities were provided where none currently exist, bicyclists would, at a minimum, need to be rerouted around the Dundee Elementary School, forcing them to travel at least five or six blocks out of direction, thereby rendering that alternative less attractive than a more direct route along Oregon 99W and diminishing its effectiveness. To the south, bicyclists also would be rerouted five or six blocks out of direction, and they would be required to cross railroad tracks at least two times because the only continuous route to the south is south of the railroad tracks. ODOT attempts to avoid bicycle railroad crossings because it is a recognized safety hazard. The adopted Oregon Bicycle and Pedestrian Plan clearly establishes that it is the desire of most bicyclists traveling through a community to take the shortest path between two points, which is generally the state highway. It is in recognition of this fact that it is standing ODOT policy to provide bike lanes to any new highway construction whenever feasible in order to accommodate this likely event. See ORS 366.514. Omitting bike lanes from a reconstruction project in an urban area would require a design exception that would not be easily or likely granted.

[157] See Memorandum from Julia Kuhn, Kittelson & Associates, to Mark Greenfield regarding "Four-lane Alternative in Dundee" (November 17, 2003).

[158] Additionally, a safety problem arises when a driver in an opposing lane stops and waives through a driver wishing to turn left, but the driver in the opposing right hand lane is unaware and does not also stop to let the left-turning driver through.

drivers often attempt to avoid getting on and off the highway where these conditions prevail. For these reasons, many jurisdictions are converting four-lane roadways to three-lane roadways.[159]

From a performance threshold criteria standpoint, this alternative offers no advantages over a three-lane section during peak travel periods, even though it may provide some additional capacity during off-peak hours.

7.4.4.8 Conclusions

For all of the reasons set out in this subsection, alternatives not requiring goal exceptions cannot reasonably accommodate the identified transportation need for the East Dundee Interchange. Absent that interchange, an STA is not consistent with ODOT performance standards except in conjunction with a four-lane facility. However, four travel lanes through Dundee, whether joined together or separated through a couplet, would destroy the charm and character of the community and its vision for the future and seriously undermine its economic vitality and future. This approach also would be significantly more expensive than constructing the East Dundee Interchange.

7.4.5 Compliance with ORS 197.732(1)(c)(A), Goal 2 Part II(c)(1), OAR 660-004-0020(2)(a) and OAR 660-004-0022

ORS 197.732(1)(c)(A), Goal 2 Part II(c)(1), and OAR 660-004-0020(2)(a) and -0022 parallel OAR 660-012-0070(4). ORS 197.732(1)(c)(A) and Goal 2 Part II(c)(1) require an exception to include reasons that justify why the state policy embodied in the applicable goals should not apply. OAR 660-004-0020(2)(a) interprets these requirements by explaining that the exception should set forth the facts and assumptions used as the basis for determining that a state policy embodied in a goal should not apply to a specific property or situation, including the amount of land for the use being planned and why the use requires a location on resource land. OAR 660-004-0022 expands on OAR 660-004-0020(2)(a) by giving examples of the types of reasons that may justify exceptions, including demonstrated need for the activity based on one or more requirements of Goals 3 to 19 and special features of the proposed use or activity that necessitate its location on the proposed exception site.

For this matter, the applicable goals are Goals 3 (Agricultural Lands), 11 (Public Facilities and Services), and 14 (Urbanization). The state policies embodied in these goals are, respectively, the protection and preservation of agricultural land for farm use; the establishment of a timely, orderly, and efficient arrangement of public facilities and services that serves as a framework for urban and rural development; and the provision of an orderly and efficient transition from rural to urban land use. Generally, locating urban uses in agricultural areas is not consistent with Goal 3's policy objectives. Similarly, placing urban scale facilities on rural lands is not consistent with objective in Goal 11 to limit facilities in rural areas to those which are "appropriate for but limited to the requirements of" the rural area, or with the objective in Goal 14 to separate urban and urbanizable lands from rural lands and restrict urban development to lands inside urban growth boundaries.

[159] Id.

The reasons why these policies should not apply to the Bypass and to the East Dundee Interchange are set out above in the sections addressing the transportation need for these facilities and why alternatives not requiring goal exceptions cannot reasonably accommodate the use. These reasons relate to Goal 12, the need to serve the large numbers of through trips that pass through this area, impacts to Dundee's adopted economic and community development objectives, and the fact that highways, unlike other land uses, are linear and must travel through rural lands to connect cities and regions of the state. These reasons reflect statewide and local transportation policies and reflect statewide, regional and local transportation needs. They are consistent with the more specific reasons required under OAR 660-012-0070(4).

The approximately 208 acres of rural land needed for the proposed Bypass, and the approximately 27 acres of rural land needed for the proposed East Dundee Interchange, including its connecting road to existing Oregon 99W, reflect the amount of rural land needed for right-of-way to meet ODOT Statewide Highway design standards for a four-lane limited access facility. Because the acreage need reflects adopted state standards for highway design, the amount of rural land included in the exception is justified.

7.5 OAR 660-012-0070(5), ORS 197.732(1)(c)(B), Goal 2 Part II(c)(2), and OAR 660-004-0020(2)(b)

OAR 660-012-0070(5) provides that to address Goal 2 Part II(c)(2), the exception must demonstrate that non-exception locations cannot reasonably accommodate the proposed transportation improvement or facility. Similarly, OAR 660-004-0020(2)(b) requires justification why "areas which do not require a new exception cannot reasonably accommodate the use."

For both the Bypass and the East Dundee Interchange, no non-exception locations beyond those associated with improvements to existing roads (which are addressed under OAR 660-012-0070(4) above) have been identified. Both physically and from an operational standpoint, the identified transportation needs for these facilities cannot reasonably be accommodated entirely within the urban growth boundaries of Newberg and/or Dundee. They cannot reasonably avoid rural lands where exceptions are required.

7.6 OAR 660-012-0070(6)

OAR 660-012-0070(6) requires goal exceptions to justify the thresholds chosen to judge whether an alternative method or location identified under OAR 660-012-0070(4) or (5) cannot reasonably accommodate the proposed transportation need or facility. These thresholds include cost, operational feasibility, economic dislocation, and "other relevant factors."

The thresholds selected here to judge the ability of non-exception locations or methods to "reasonably accommodate" the identified transportation needs for (1) the Bypass and (2) the East Dundee Interchange, including its road connecting the Bypass to Oregon 99W, include operational feasibility; consistency with Oregon Highway Plan requirements;economic displacements/community livability and consistency with Dundee's adopted Transportation System Plan and its 2022 Dundee Vision Statement; cost; safety; and other "relevant factors"

such as travel time, hours of congestion and delay, and overall transportation facility performance.

7.6.1 Operational Feasibility and Minimum Transportation Performance Threshold

The identified transportation need is primarily a mobility need to move statewide and "regional through" traffic around or to/from the Newberg-Dundee urban area safely, efficiently and expeditiously.[160] As noted, Oregon 99W is a Statewide Highway that serves as a primary route connecting the Portland metropolitan region and the northern Willamette Valley with the coast and recreational areas such as the Yamhill County wineries and Spirit Mountain Casino. It also is an OHP-designated freight route.

Because the Oregon 99W/Oregon 18 corridor will continue to serve the function of a Statewide Highway and freight route, the transportation improvements selected must comply with ODOT mobility standards for this type of highway. ODOT's Mobility Standards, at OHP Policy 1F, provide that it is the policy of the State of Oregon to use highway mobility standards to maintain acceptable and reliable levels of mobility on the state highway system. Action 1F.1 provides that the highway mobility standards in Table 6 of the OHP be applied to all state highway sections located outside the Portland metropolitan area urban growth boundary. Accordingly, the maximum volume to capacity standards set out in Table 6 of the 1999 OHP are identified as minimum transportation performance thresholds for this project.[161] From an operational standpoint, alternatives that fall within these standards will be deemed reasonable to accommodate the identified transportation need.

According to the OHP Bypass policy, "regional through travel is best served by limited access facilities that allow high speeds and require infrequent stops." While OAR 660-012-0070(4) does not require selection of the "best" option if other alternatives are available that can "reasonably accommodate" the identified transportation need, the threshold of a facility that facilitates travel at higher speeds and requires infrequent stops remains valid and is deemed appropriate for this project. Stated another way, a reasonable threshold for this project is one that is consistent with ODOT's management objective for Statewide Highways and Bypasses, which is "to provide safe and efficient, high-speed, continuous-flow operation."

These thresholds are relevant to consideration of alternatives to the East Dundee Interchange as well as the Bypass, because that interchange primarily would be serving "regional through travel." Again, the OHP indicates that this type of travel "is best served by limited access facilities that allow higher speeds and require infrequent stops."[162] The OHP also states that as congestion moves closer to a volume to capacity ratio of 1.0, traffic flow becomes very unstable, and small disruptions can cause traffic flow to break down and long traffic queues to form. These results are not consistent with a facility primarily serving regional through travel.[163]

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[160] See OHP Policy 1H and discussion in Section 7.4.2 above.
[161] See OHP Policy 1F, Action 1F.1.
[162] OHP Bypass Policy.
[163] The POST also determined that the standards in Table 6 of the OHP, on page 80, should be used as minimum performance standards by which alternatives should be judged. POST Meeting Minutes, April 27, 2001. However,

In the event a Bypass is approved, existing Oregon 99W would likely become either a state District Highway or a city or county arterial.[164] If it becomes a state District Highway, then the District Highway standards in Table 6 of the OHP must apply as thresholds, because the OTC has determined that these are the appropriate standards for a facility serving a District Highway function. If it becomes a county or city arterial, then the Level of Service standard for Oregon 99W specifically (if there is one) or for arterials generally set out in the Yamhill County or City of Dundee and Newberg TSPs should apply. If the County or City has adopted the OHP District Highway standard for Oregon 99W, then that standard would reasonably serve as a performance threshold, given that Oregon 99W would function like a state District Highway, even if not stated owned.[165]

On this last point, OHP Action 1A.1 defines district highways as "facilities of county-wide significance [that] function largely as county and city arterials and collectors. They provide connections and links between small urbanized areas, rural centers and urban hubs, and also serve local access and traffic." With a bypass, existing Oregon 99W would retain county-wide and regional significance by connecting Newberg with Dundee and by connecting the Newberg-Dundee area with other urban hubs such as McMinnville and the greater Portland metropolitan area.

Traffic data generated for this project supports this conclusion. See Table 1, which shows that even with the Bypass and the East Dundee Interchange, Newberg and Dundee would experience, respectively, 13,500 and 3,000 daily regional trips on Oregon 99W in the year 2025.[166] Because this represents a high volume of "regional" traffic remaining on existing Oregon 99W, the existing highway will continue to function as a county or city arterial, moving large volumes of traffic (including truck traffic) within, between, and through Newberg and/or Dundee. See Table 4-1 of the LDEIS. With the Bypass, existing Oregon 99W would continue to handle over 1000 average daily freight trips, as shown in Table 4-5 of the LDEIS.[167]

OHP Action 1F.3 provides for consideration of alternative highway mobility standards "where it would be infeasible to meet the standards in [ODOT's mobility] policy." Consistent with this

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the fact that the POST took this action is not sufficient justification in itself for using OHP Table 6 as a threshold for goal exception purposes. Under OAR 660-012-0070(6), the use of this standard must be independently justified.

[164] At this time, it is difficult to predict whether the OTC would approve transferring jurisdiction over Oregon 99W to the County or a city. While certain OHP policies favor such a transfer, the OTC will consider issues such as the volume of regional trips and the costs of maintaining the facility in any decision on jurisdictional transfer. In short, this is a complicated question with no foregone conclusion.

[165] The City of Dundee and Yamhill County TSPs currently apply a Level of Service "D" performance standard to arterials. As noted earlier, LOS "D" generally corresponds to a volume to capacity ratio ranging between 0.80 and 0.90. However, both the City and County have adopted resolutions stating that if operational control of Oregon 99W in Dundee is transferred from ODOT to either the City or the County, then they intend to support maintaining the OHP operational standard for district highways (v/c of 0.85) as the operational mobility standard for Oregon 99W as a city or county road. See Dundee Resolution 02-45 (adopted January 6, 2003) and Yamhill County Resolution 02-12-19-2 (adopted December 19, 2002).

[166] These numbers reflect average daily traffic on Oregon 99W (year 2025) under Alternative 3J.

[167] With a bypass, daily freight trips traveling through downtown Newberg would range between 700 and 975, while daily freight trips traveling through downtown Dundee would range between 525 and 1250. LDEIS, Table 4-5. The 1250 freight trips in Dundee under Alternative 3K reflects the absence of an East Dundee Interchange that allows freight trips headed for Newberg to bypass Dundee.

policy, the standards in Table 6 should apply as thresholds unless compliance with those standards is "infeasible."

7.6.2 Economic Displacements/Community Livability/Consistency with Local Adopted TSP and Community Vision Statement

Economic viability and community livability, including consistency with adopted local plan policies addressing these issues, comprise a second threshold for determining the reasonableness of non-exception alternatives to meet the identified transportation need. In particular as applied to alternatives to the East Dundee Interchange, this threshold considers whether an alternative not requiring exceptions would have unduly adverse impacts on the City of Dundee in terms of economic dislocations; Dundee's existing and future economic viability, vitality and attractiveness; the city's outward appearance; development of a pedestrian friendly city environment; and the city's ability to achieve a reasonable vision for future growth and development. As part of this analysis, the threshold examines whether non-exception alternatives would violate standards in Dundee's acknowledged Comprehensive Plan or Transportation System Plan (TSP)

The particular focus of this threshold is the possible widening of Oregon 99W in Dundee to five lanes or construction of a couplet in Dundee. One or the other of these alternatives would be necessary to accommodate the forecasted levels of traffic in Dundee in the absence of an East Dundee Interchange. The City of Dundee has expressed strong opposition to the widening of Oregon 99W through Dundee, and Dundee Resolution 02-45 expressly states that constructing five lanes on Oregon 99W through Dundee is in conflict with the City's adopted Vision Statement 2022. Still, it is noted that there is nothing inherently unreasonable about a five-lane highway traversing through a city and that five-lane highways are common in urban areas throughout Oregon. For this reason, in applying this threshold, the fact that Dundee desires to look or develop in a certain way is not enough by itself to deem these alternatives unreasonable. To eliminate non-exception alternatives as unreasonable, this threshold requires a very strong factual base and/or strong policy reasons why an alternative that otherwise works from an operational standpoint would have such significant detrimental effects on the community's future economic health and livability as to render the alternative unreasonable.

In justifying the use of economic viability, livability and community vision concerns as thresholds, this exception document relies on adopted and acknowledged City of Dundee comprehensive plan and TSP goals and policies and the City's 2022 Vision Statement. These goals and policies establish the policy basis for this threshold. Then, as practicable, this document seeks to develop reasonable, objective standards for measuring consistency with these thresholds and determining if non-exception alternatives reasonably can accommodate the identified transportation need.

Both the Dundee Comprehensive Plan and Dundee's recently acknowledged TSP include policies relating to economic health and vitality and community livability. Indeed, these concerns, which encompass a multi-modal transportation network, form the policy foundation

for the TSP.[168] For instance, TSP goals direct Dundee to provide and maintain a transportation system that (1) minimizes the adverse impact of through travelers on Dundee (Goal 1); (2) fosters a pleasant, small city and preserves and enhances existing neighborhoods and businesses (Goal 2); (3) supports the goals, objectives and visions of the Dundee community (Goal 3); and (4) supports the economic vitality of the Dundee community (Goal 9).[169]

Both TSP Goal 2 (Livability) and Goal 4 (Travel Options) include action items directing the city to develop parking and circulation strategies that minimize pedestrian and vehicle conflicts and support downtown business retention and development. TSP policies provide that transportation facility siting and design shall be done in a manner that minimizes adverse effects on existing land uses.[170] Moreover, Dundee's Comprehensive Plan contains statements and policies to (1) protect areas well suited for business use from encroachment by other uses; (2) preserve and upgrade businesses along Oregon 99W by supporting highway improvements that alleviate congestion and by requiring off street parking and high design standards in new development; (3) avoid unsightly strip commercial development along Oregon 99W; and (4) site transportation facilities in a manner that minimizes adverse effects on existing land uses.[171]

As noted, TSP Goal 3 calls for supporting the vision of the Dundee community. On March 4, 2002, Dundee adopted its 2022 Vision Statement, entitled "A Vision for our Future" that describes the city's sense of purpose and place. As relevant to the Bypass, the "vision" describes the business district as expanded and redesigned to encourage leisurely pedestrian movement throughout the shopping area. As envisioned, Dundee would be a destination location for visitors drawn by its shops and restaurants and its reputation as the center of Oregon's wine industry. Also, with the Bypass, Dundee would now have "its own local main street. The redesigned traffic patterns enhance and support the local economy with its visually attractive landscaping and accessible parking areas. The City has assisted in redevelopment efforts throughout the community."[172]

In summary, the following key goals and objectives can be gleaned from Dundee's Comprehensive Plan, TSP and 2022 Vision Statement: (1) retaining, preserving and enhancing existing businesses along Oregon 99W; (2) protecting areas suitable for economic development from encroachment by other uses; (3) supporting future economic growth and vitality along Oregon 99W; (4) minimizing adverse impacts on existing land uses associated with through traffic; (5) fostering a small city appearance that emphasizes pedestrian movement among shops along Dundee's "Main Street"; (6) providing adequate off-street parking and circulation; (7) minimizing pedestrian/motor vehicle conflicts; and (8) avoiding unsightly strip commercial

[168] As stated in the introduction to the TSP, "This transportation system plan (TSP) that resulted from the study will guide the management and development of appropriate transportation facilities within Dundee, *incorporating the community's vision*, while remaining consistent with state, regional and other local plans." (Emphasis added.)

[169] TSP at 5-10, 94-96.
[170] TSP at 7, 97.
[171] Dundee Comprehensive Plan at 25, 51, 53-55, 71.
[172] See also TSP at 115-116 (discussion of Oregon 99W Main Street Improvements)

development. These goals and policy objectives justify and provide the foundation for this threshold.

At issue next is how to measure and compare alternatives under this threshold. While the goals and policies in Dundee's Comprehensive Plan and TSP do not utilize "urban design" terminology, the concepts described above nevertheless are reflective of urban design concepts that can be measured in accordance with principles set out in the Smart Development Code Handbook.[173] More particularly, the following concerns, which reflect these concepts, can be measured in terms of the likelihood of their occurring under scenarios involving (1) a three lane highway through Dundee combined with the East Dundee Interchange; (2) widening Oregon 99W to five lanes through Dundee; or (3) providing a couplet through Dundee.

- Does the alternative encourage and support small lot infill development in the Dundee Central Business District (CBD)?
- Does the alternative encourage and support infill development on large lots in the CBD?
- Does the alternative encourage lot consolidation within the CBD?
- Does the alternative encourage efficient use of deep lots in the CBD, including establishment of interconnected service and/or parking access lanes serving lots between Oregon 99W and the railroad right of way?
- Does the alternative allow for achievement of a balanced relationship between paved space (streets) and built space (floor space, sidewalks, plazas, etc.) in downtown Dundee?
- Does the alternative allow for efficient use of parking areas in the CBD?
- Does the alternative maintain and enhance commercial core development viability?
- Does the alternative support a local main street by ensuring the health of the community's broader street system?
- Does the alternative foster a healthy, multi-faceted street-space appropriately designed for many users (automobile, pedestrian, bicycle, transit)?
- Does the alternative foster a well-connected system of local streets and pedestrian access points?

These measurements, in turn, can be accorded relative numeric rankings and placed in a matrix for comparison. The numeric rankings would indicate how likely each alternative might be to induce these conditions in downtown Dundee (i.e., very likely, likely, no significant impact, unlikely, very unlikely). Findings and reasons would be provided to support the conclusions reached.

If the matrix indicates that the impacts of alternatives not requiring goal exceptions are such that the underlying policies still can be achieved, although perhaps not in the optimum fashion, then this threshold would not support a new East Dundee Interchange. However, if the matrix reveals that the impacts associated with alternatives not requiring goal exceptions would significantly impede, undermine or preclude Dundee's ability to achieve these goals and objectives and thus,

[173] DLCD and LCDC, Smart Development Code Handbook, August 1997.

its ability to implement its acknowledged comprehensive plan and TSP policies, then a determination can be reached that these alternatives cannot reasonably accommodate the identified transportation need and that an East Dundee Interchange is justified. For purposes of this threshold, an overall score for the five lane roadway or couplet that is just 50 percent or less of the score assigned to the East Dundee Interchange would be deemed inadequate to achieve the policies in Dundee's comprehensive plan, TSP and vision statement.Cost.

Cost must always be taken into consideration in determining the reasonableness of a project alternative because of the limitations on and the competition for available federal and state dollars for transportation improvements. When the cost of one alternative is significantly higher than the cost of another alternative, cost becomes a more important factor to consider.

7.6.3 Safety

Safety is a broad category that encompasses automobile, truck, bicycle and pedestrian. and transit safety. There are commonly three methods for improving safety, known as the "3 Es": education, enforcement, and engineering. While education and enforcement remain constant within broader objectives of most state Departments of Transportation and units of local government, it is in the area of engineering where the greatest effect can be employed in construction or reconstruction of highways. Specifically, all design standards are based upon physical principles that seek to ensure the safety of all highway users. Factors such as lane widths, shoulder widths, medians, intersection design, and parking design all can contribute to traveler safety.

One of the key goals of highway engineering is to eliminate or reduce conflicts between different travel modes that either use or interface with the highway network. For example, at-grade railroad crossings create potentially hazardous situations not only for automobiles but also for bicyclists and pedestrians. Similarly, interchanges are safer than intersections because they separate high and lower speed traffic movements that could potentially conflict with each other. In Dundee, a railroad traverses the city approximately 150-200 feet south and east of its central business district and parallel to Oregon 99W. Because of the potential safety hazards to automobiles, pedestrians and bicyclists associated with railroad crossings, a threshold is established providing that any non-exception alternative that would locate Oregon 99W travel lanes on both sides of the railroad tracks through the downtown is unreasonable to accommodate the identified transportation need.

Another important principle of safe highway design is the principle of functional classification. Through functional classification, transportation planners and engineers strive to ensure that appropriate types and levels of traffic are distributed to the state and local highway network in such a way as to promote efficiency and minimize conflicts such as the conflicts that naturally exist between through travelers and travelers within a local community. By ensuring that adequate capacity exists on facilities that are appropriately designed and managed to support the various different functions that need to be served by a comprehensive transportation network, safety is enhanced. This concept is reflected in the first threshold

Finally, a number of acknowledged Dundee TSP and Comprehensive Plan policies address safety concerns that provide an additional basis for safety-related thresholds that are particularly relevant to the proposed East Dundee Interchange. For instance, TSP goals and objectives direct Dundee to provide and maintain a transportation system that (1) encourages and supports a variety of multi-modal options, including improved bicycle and pedestrian facilities (Goal 4; see also Goal 2, Objectives 6 and 7); (2) fosters safe and efficient travel by bicycle, pedestrian and public transportation and minimizes pedestrian and vehicle conflicts (Goal 4, Actions 3 and 4); and (3) protects the health and safety of transportation system users (Goal 8).[174] TSP Objective C directs Dundee to construct "a safe, continuous and direct network of streets, accessways, and other improvements, including bikeways, sidewalks, and safe street crossings to promote safe and convenient bicycle and pedestrian circulation within Dundee.[175] Also, Dundee's acknowledged comprehensive plan includes Transportation Objective 4 to "ensure pedestrian safety along Highway 99."[176]

As with the economic viability and livability policies identified above, these policies can be measured against principles set out in the Smart Development Code Handbook. For instance:

- Does the alternative foster a healthy, multi-faceted streetspace appropriately designed for many users?
- Does the alternative provide a pedestrian-friendly streetscape?
- Does the alternative allow for placement and design of parking areas that are sensitive to pedestrian safety?
- Does the alternative create a barrier to north/south pedestrian travel?

These measurements can also be included in a matrix comparing the overall impacts of alternatives measured against achievement of acknowledged TSP and comprehensive plan policies. Compliance with Oregon Highway Plan

The Oregon Highway Plan is the state's transportation system plan for highways. As an adopted TSP, compliance with the OHP must be demonstrated. Hence, it is appropriate to take OHP compliance into account in determining the reasonableness of alternatives.

7.6.4 Other Relevant Factors

Other relevant factors include travel time, hours of congestion and delay, and overall facility performance. These considerations are relevant based on the reasons justifying the transportation improvement and the expectations of that improvement's function. If the justification for the transportation improvement is to relieve congestion of existing facilities, as it is for the NDTIP, then its attractiveness as an alternative must be ensured by higher performance and lower travel times. Otherwise, it will not be able to perform its intended function.

[174] Dundee TSP, pages 6-9, 95-96, 98-99.
[175] Dundee TSP at 97.
[176] Dundee Comprehensive Plan, page 71.

The level to which "regional through" and freight trips are removed from Oregon 99W to the Bypass is another threshold. This threshold is justified as a measure of Dundee's ability to achieve compliance with its TSP policies and its adopted Vision Statement 2022 because higher traffic volumes and large numbers of semis using the City's "main street" would detract substantially from the City's sense of place in terms of noise, safety, and appearance.

7.7 OAR 660-012-0070(7), ORS 197.732(1)(c)(C), Goal 2 Part II(c)(3), and OAR 660-004-0020(2)(c)

OAR 660-012-0070(7) provides that to comply with Goal 2 Part II(c)(3), the exception must compare the economic, social, environmental and energy (ESEE) consequences of the proposed location with other locations requiring exceptions. The exception must discuss "whether the net adverse impacts associated with the proposed exception site are significantly more adverse than the net impacts from other locations which would also require an exception." The proposed exception would fail only if the impacts associated with it are "significantly more adverse" than the other identified exception sites. Under OAR 660-012-0070(c), the evaluation of consequences may be generalized.

OAR 660-004-0020(2)(c) is very similar to OAR 660-012-0070(7). It requires a general description of the character of each alternative area and discussion of the advantages and disadvantages of the various alternatives, including positive and negative consequences. Like OAR 660-012-0070(7), the exception must explain why the use at the chosen site, with measures designed to reduce adverse impacts, is not "significantly more adverse" than would typically result from the same proposal being located at one of the other exception sites. Considerations include the facts used to determine which resource land is least productive, the ability to sustain resource uses near the proposed use, and the long-term economic impact on the general area resulting from irreversible removal of land from the resource base.

7.7.1 Bypass Alternatives

The LDEIS evaluated three general bypass corridor alternatives passing through rural lands: (1) the Recommended Southern Alternative, which is the selected alternative for which goal exceptions are being taken; (2) a Southern Alternative with a Rural Residential Option; and (3) a Northern Alternative.[177] In comparing those alternatives, the LDEIS evaluated their combined impacts on both rural and urban lands. While this was necessary and appropriate to satisfy federal requirements of the National Environmental Policy Act, it is not what the TPR requires for goal exceptions. As stated above, OAR 660-012-0070(7) requires a comparison of ESEE consequences for "locations requiring exceptions." In other words, the comparisons must focus on the rural lands for which exceptions are required.

[177] The ESEE impacts identified and examined herein are described in greater detail in a technical memorandum entitled "Bypass Corridor Alternatives ESEE Analysis" (November 21, 2003).

Figure 10 illustrates the rural segments of the three bypass corridor alternatives that were studied in the LDEIS and are compared in this ESEE analysis. Figure 5 above displays the Yamhill County Comprehensive Plan designations that apply to these rural segments.

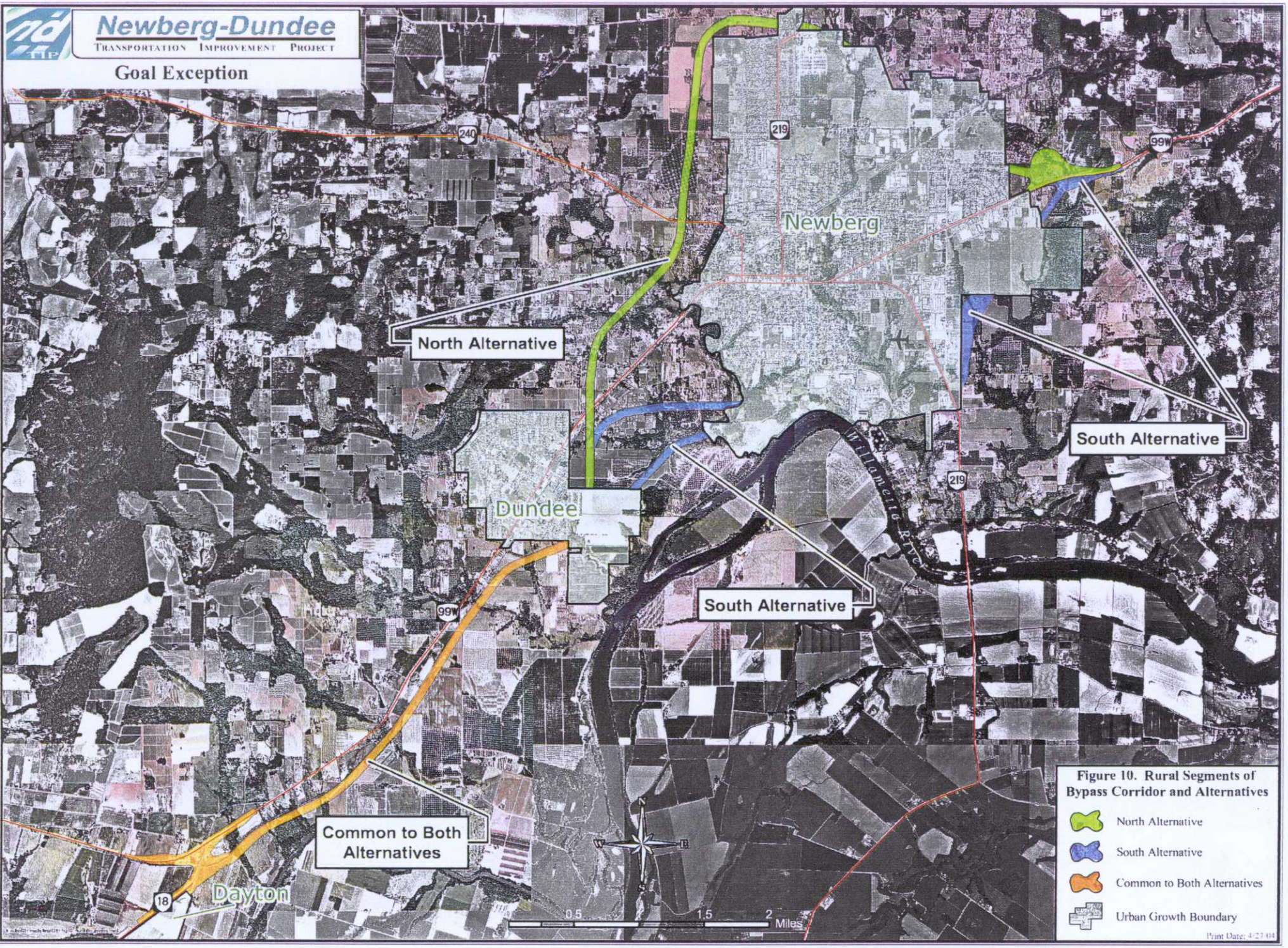
The three corridor alternatives are described here.

7.7.1.1 Recommended Southern Alternative ("the Bypass")

East Segment

All three corridor alternatives begin at the East Newberg Interchange with Oregon 99W in the Rex Hill area east of Newberg. The Bypass in this east segment extends south of Oregon 99W to Oregon 219 through both urban and rural land within and outside the Newberg UGB. As shown in Figure 5, Yamhill County Comprehensive Plan designations for the affected rural lands in this east segment are Agriculture/EFU (approximately 26 acres) and Very Low Density Residential (approximately 17 acres). Existing land uses in the rural area include small farms and rural residential dwellings.

From Oregon 219 west to Chehalem Creek, the Bypass is located within the Newberg UGB on land zoned for industrial and residential uses.


Newberg-Dundee
Transportation Improvement Project
Goal Exception
240
219
99W
Newberg
North Alternative
South Alternative
Dundee
South Alternative
Common to Both Alternatives
18
Dayton
0.5
1.5
2
Miles
Figure 10. Rural Segments of Bypass Corridor and Alternatives
North Alternative
South Alternative
Common to Both Alternatives
Urban Growth Boundary
Print Date: 4/27/04

Central Segment

The Bypass crosses a second rural area in the central segment between the UGBs of Newberg and Dundee. There is a distance between 0.5 to 1 mile separating the two UGBs in this central segment. As shown in Figure 5, Yamhill County Comprehensive Plan designations for the affected rural lands in this central segment are predominantly Agriculture/EFU (approximately 11 acres), with a smaller area of Very Low Density Residential (less than 1 acre). A productive farm (Dundee Farm) is the predominant land use in this central segment, and existing crops include 60 acres of berries and 140 acres of filbert orchards. The farm extends down to the Willamette River and includes areas in the 100-year floodplain. Outside the boundaries of the Dundee Farm, rural residential land uses predominate in the rural corridor along Oregon 99W between the Newberg and Dundee UGBs.

After crossing the rural area between Newberg and Dundee, the Bypass is located within the Dundee UGB on land that is currently in an "agricultural holding" zone that is planned for future urban development.

West Segment

The longest rural portion of the Bypass is located in the west segment between the Dundee and Dayton UGBs and is the same for all corridor alternatives. As shown in Figure 5, Yamhill County Comprehensive Plan designations for the affected rural lands in this west segment are predominantly Agriculture/EFU (138 acres). Productive farms are the dominant land use in this west segment south of Oregon 99W to the Willamette and South Yamhill Rivers. Existing crops grown in the area include filbert orchards, perennial ryegrass, berries, wheat, Christmas trees, row crops, and annual grass seeds. Wine grape vineyards are generally located north of Oregon 99W on the south facing hillsides.

7.7.1.2 Southern Alternative – Rural Residential Option

The bypass corridor for this alternative only varies from the Recommended Southern Alternative described above in the central segment between the Newberg and Dundee UGBs. The alignment for the east and west segments is the same and the description is not repeated here.

Central Segment

Under this corridor alternative, the bypass in the central segment between Newberg and Dundee is located closer to Oregon 99W and largely affects a rural residential area rather than an agricultural area. As shown in Figure 5, Yamhill County Comprehensive Plan designations for the affected rural lands under this corridor alternative include Very Low Density Residential (approximately 30 acres), with a smaller amount designated Agriculture/EFU (approximately 5.5 acres). Existing land uses in the rural area include numerous residences on parcels ranging from two to five acres interspersed with small farm parcels.

This alternative largely avoids the Dundee Farm. However, the bypass corridor does cross the farm and EFU zone where the alignment turns south and enters the Dundee UGB. As noted above, the bypass displaces approximately 5.5 acres designated for Agriculture in this segment.

7.7.1.3 Northern Alternative

The bypass corridor for this alternative varies from the two alternatives described above in the east and central segments. The alignment for the west segment is the same for all corridor alternatives and is not repeated here.

East Segment

This corridor alternative also begins at the East Newberg Interchange with Oregon 99W in the Rex Hill area east of Newberg. However, the bypass extends north of Oregon 99W before turning west to enter the Newberg UGB. As shown in Figure 5, Yamhill County Comprehensive Plan designations for the affected rural lands in this east segment are Agriculture/EFU (approximately 11 acres) and Very Low Density Residential (approximately 9 acres). Existing land uses in the rural area include filbert orchards, a farm stand and small winery, rural residential dwellings, and a building that is on the National Historic Register.

After entering the Newberg UGB, the bypass then extends north and west along the northern edge of Newberg across designated but largely undeveloped residential areas.

Central Segment

The bypass corridor crosses a second rural area in the central segment between the UGBs of Newberg and Dundee. After exiting the northwestern edge of the Newberg UGB, the bypass turns south and generally parallels Chehalem Drive, crossing Oregon 240 and continuing further southwest to a new intersection and crossing of Oregon 99W near Fox Farm Road. The bypass continues south of Oregon 99W before crossing into the Dundee UGB east of Edwards Avenue.

As shown in Figure 5, Yamhill County Comprehensive Plan designations for the affected rural lands in this central segment are Agriculture/EFU (approximately 33 acres) and Very Low Density Residential (approximately 46 acres). Existing land uses in the rural area include agricultural crops such as filbert orchards, wine grape vineyards, and grains, and numerous rural residential dwellings on parcels that range in size from 2.5 to 10 acres.

7.7.1.4 Economic Consequences

Economic impacts relevant to these corridor alternatives include business displacements, the loss of agricultural land zoned for exclusive farm use, and the fragmentation of agricultural operations on EFU-zoned lands.

Business Displacements

The three bypass corridor alternatives could potentially displace three businesses located near the existing intersection of Oregon 99W and Oregon 18 at McDougal Corner. **See Table 3.** Businesses displacement impacts would be associated with replacement of the dangerous intersection and railroad crossing with a directional interchange. No additional businesses would be displaced in the rural segments of the Recommended Southern Alternative or the Southern Alternative with the Rural Residential Option. By comparison, the Northern Alternative could potentially displace seven businesses, including the three mentioned above.

Displacement of EFU Land & Fragmentation of Agricultural Operations

As shown in Table 3, the bypass corridor alternatives are not substantially different relative to the total amount of displaced exclusive farm use (EFU) land. The Southern Alternative with the Rural Residential Option would displace the least EFU land at 169 acres, while the Northern Alternative would displace the most EFU land at 182 acres.

More than 75 percent of the total EFU displacement impacts are concentrated in the west segment between Dundee and Dayton. As noted above, the bypass alignment in this segment is the same for the three bypass corridor alternatives. The bypass corridor would parallel the south side of the railroad corridor and would displace a total of 138 acres of EFU land between Dundee and Dayton. The railroad right-of-way generally functions as the boundary separating larger farm operations to the south of the railroad toward the river from smaller farm operations located in the area between Oregon 99W and the railroad.

Agricultural land in this west segment is classified as "high value farmland" based primarily on soil classifications. The EFU-80 zoning establishes a minimum parcel size of 80 acres for new parcels to maintain the commercial agricultural enterprise of the area. Existing crops grown in the west segment from Oregon 99W to the Willamette and South Yamhill Rivers include filbert orchards, perennial ryegrass, berries, wheat, Christmas trees, row crops, and annual grass seeds.

Table 3 – ESEE Comparison Of Bypass Corridor Alternatives

ESEE Consequences	Recommended Southern Alternative	Southern Alternative – Rural Residential Option	Northern Alternative
Economic			
Businesses displaced (number)	3	3	7
EFU land displaced (acres)	175	169	182
Fragmentation of EFU land (yes/no)	Yes	Yes	Yes
Social			
Residences displaced (number)	6	17	40
Rural Residential land displaced (acres)	18	47	55
Residences potentially affected by increased noise (number)	43	56	60
Neighborhood or community cohesion impacts (high/medium/low)	Low	Medium	High
Impacts on historic sites (number)	4	4	6
Visual impacts (high/medium/low)	Medium	Medium	Medium
Environmental			
Threatened and Endangered (T & E) fish habitat (acres/stream length)	27 ac/1929 ft	28 ac/2732 ft	38 ac/2027 ft
Wildlife habitat affected (acres)	207	228	293
Wildlife corridors crossed (number)	1	1	1
Wetlands affected (acres)	7	5	18
Riparian areas affected (acres)	17	18	21
Energy			
Total length of bypass (miles)	10.2	10.7	12.3
P.M. Peak Period Travel Time on Bypass in 2025 (in minutes)	12	12	14

Note: These analyses were run using the Geographic Information System (GIS) data from the LDEIS. Numbers have been rounded to the next whole number. GIS data on wildlife habitat and wetland value (high, medium, and low) has been aggregated for the purpose of this table.

While displacement of 138 acres of EFU land in this west segment is not a minor amount of agricultural land, the impacts will not disproportionately affect a single farm operation. Additionally, because the bypass corridor parallels the rail corridor, it largely avoids fragmentation of farm operations. While the direct loss of EFU land is significant, the overall adverse impacts of fragmentation on farming practices and production can be more far-reaching. Fragmentation can result in irregular field shapes that aversely affect a farmer's ability to efficiently plant, irrigate, and harvest crops or maintain pasture and can result in the following adverse consequences to farm operations:

- More difficult to move farm equipment, machinery, and irrigation pipes onto and between fragmented pieces;

- Increased difficulty, time, and cost associated with planting, irrigating, and harvesting fragmented pieces;
- Increased difficulty, time, and cost associated with application of fertilizers and pesticides (by ground or aerial spraying); and
- Increased urbanization pressures on fragmented EFU parcels, particularly when the parcels are small and isolated.

Fragmentation impacts are largely avoided in this west segment because the bypass will parallel the existing railroad corridor and generally be located at the edge of farm operations. Because the bypass will have full access control in this segment, it will be important to identify and retain key local road connections over or under the bypass to provide connectivity to Oregon 99W and farm-to-market access. In particular, Riverwood Road and Fulquartz Landing Road provide important access and circulation to the productive agricultural area southeast of Oregon 99W and the railroad to the Willamette and South Yamhill Rivers, and some sort of crossing should be maintained for these two local roads.

In terms of EFU impacts, the differences between the three bypass corridor alternatives are most distinct in the central segment between Newberg and Dundee. All three alternatives have some degree of impact on the approximately 300-acre Dundee Farm located southeast of Oregon 99W between Newberg and Dundee. The Northern Alternative affects additional EFU lands located north of Oregon 99W and Oregon 240.

The Dundee Farm is owned and operated by Columbia Empire Farms as part of a larger farm production, processing, marketing, and sales operation. Columbia Empire Farms grows, picks, and processes filbert, honey, and berry products and markets them wholesale or through its *Your Northwest* stores, one of which is located in the City of Dundee. The company employs over 350 persons full- and part-time, most in Yamhill County. It is one of the largest commercial farming operations in the County.

The Dundee Farm is identified as high-value farmland based on soil classifications. Portions of the farm are tiled and irrigated. Farm fields consist of 60 acres of berries, 140 acres of filbert orchards, and additional agricultural lands. The farm also includes a barn, an office, 25 units of farm worker housing, and a small production facility.[178] None of the bypass corridor alternatives would directly displace any of the existing farm facilities on the Dundee Farm.

As shown in Figure 10, the Northern Alternative and the Southern Alternative with the Rural Residential Option each would directly displace approximately 5.5 acres of the Dundee Farm where the bypass alignment turns south and enters the Dundee UGB parallel with Edwards Avenue. Further, these two corridor alternatives would separate and cut off from the remainder of Dundee Farm another approximately 19 acres located between the bypass and the extension of Edwards Avenue. Urbanization pressures on this fragmented "remainder" property would be very high with the small size and location abutting the Dundee UGB on two sides. The

[178] Miller Nash LLP Comment Letter on the Newberg-Dundee LDEIS, December 13, 2002. http://www.odot.stat.or.us/region2public/newbergdundee/chapters.pdf

Recommended Southern Alternative would displace a little more than 11 acres of the Dundee Farm, but the area of impact on the farm would be farther east toward the Willamette River and would not result in a small "remainder" property.

While the Recommended Southern Alternative would directly displace more of the Dundee Farm relative to the other two Alternatives (11 acres vs. 5.5 acres), the nature of these displacements is different. The Recommended Southern Alternative would divide the Dundee Farm into two pieces, with approximately 80 acres located west of the Bypass toward Oregon 99W, and more than 200 acres located east of the Bypass in the floodplain area next to the Willamette River. The majority of the filbert orchards are concentrated in the lower terrace by the river, while the majority of the berry fields are concentrated in the upland areas. The Dundee Farm is zoned EFU-80, which establishes a minimum parcel size of 80 acres to maintain the commercial agricultural enterprise in the area. Therefore, even though the Recommended Southern Alternative would divide the Dundee Farm into two pieces, the size of each piece would meet or exceed the minimum parcel size of 80 acres established by the EFU-80 zoning to maintain the commercial viability of farm enterprises in the area.

With mitigation to assure adequate farm access, it would be feasible to move farm vehicles, equipment, and machinery (including irrigation pipes) over or under the Bypass to access both portions of the Dundee Farm and to avoid urbanization pressures that would be associated with fragmentation and isolation of smaller parcels. Therefore, the economic impacts associated with the Recommended Southern Alternative on the Dundee Farm are not significantly more adverse than the economic impacts associated with the two other Corridor Alternatives.

As noted earlier, the Northern Alternative would displace 33 acres of EFU lands to the north of Oregon 99W in the central segment that would not be displaced by the Southern Alternatives. The Northern Alternative would directly affect existing filbert orchards and wine grape vineyards.

7.7.1.5 Social Consequences

Social consequences relevant to the bypass corridor alternatives include displacement of residences, loss of rural residential land, noise impacts, impacts to neighborhood or community cohesion, impacts on historic sites, and visual impacts.

Residential Displacements

As shown in Table 3, the residential displacement impacts associated with the Northern Alternative are substantially higher than the two Southern Alternatives. The Northern Alternative could displace up to 40 dwellings, with most of the displacement impacts concentrated in the rural residential area north of Oregon 99W between Newberg and Dundee. By comparison, the Southern Alternatives would displace from 6 to 17 dwellings. The Recommended Southern Alternative has the lowest residential displacement impacts because it avoids crossing the rural residential area between Newberg and Dundee.

Loss of Rural Residential Land

The Northern Alternative would directly displace up to 55 acres of designated rural residential land, substantially more than the 18 acres of rural residential land displaced by the Recommended Southern Alternative. The Southern Alternative with the Rural Residential option would displace approximately 48 acres of rural residential land.

Similar to the residential displacement impacts, most of the rural residential land displaced by the corridor alternatives is concentrated in the central segment between Newberg and Dundee. As shown in Figure 5, the Yamhill County Comprehensive Plan designates a large geographic area between the cities of Newberg and Dundee for rural residential development, with lot sizes ranging from 2.5 to 10 acres. Based on county planning department data, the two exception areas between Newberg and Dundee (Areas 1.5 and 1.8) encompassed 503 developed rural residential lots in 2000, with the potential to develop up to 351 additional lots based on existing zoning.

Yamhill County's inventory of land available for rural residential development is diminishing. While it is extremely difficult to obtain goal exceptions for new rural residential development areas under the county and statewide planning framework, the displacement of rural residential lands by the bypass corridor could result in pressures to look for replacement rural residential areas. Because the Recommended Southern Alternative displaces less rural residential land overall, pressures to convert agricultural land to rural residential use should be reduced.

Noise Impacts

As shown in Table 3, adverse traffic noise impacts are highest for the Northern Alternative, reflecting the longer bypass corridor through designated rural residential areas. The Northern Alternative could result in adverse traffic noise impacts to 60 dwellings, with the impacts about evenly divided between the east and central segments. The noise impacts associated with the Northern Alternative are slightly higher than the noise impacts for the Southern Alternatives, which range from a low of 43 traffic noise impacts for the Recommended Southern Alternative to 56 traffic noise impacts for the Southern Alternative with the Rural Residential Option. The majority of the traffic noise impacts associated with the Southern Alternatives occur in the east segment where the bypass alignment is located close to existing housing along Springbrook Road.

Neighborhood/Community Cohesion

In the rural area, adverse impacts on community cohesion are associated with relative numbers of residential displacements. As noted earlier, the Northern Alternative displaces substantially more dwellings than the Southern Alternatives. Where the bypass alignment is located at the edge or boundary of a developed residential area, it is also perceived to have less overall impact on neighborhood or community cohesion than when it extends through the middle of a developed area. For example, where the bypass corridor extends through the middle of the large rural residential area between Newberg and Dundee, overall impacts on community cohesion are assumed to be higher or more adverse. In the absence of improvements to local circulation, the

bypass could represent a substantial barrier to neighborhood circulation and community cohesion under the Northern Alternative and the Southern Alternative with the Rural Residential Option.

Because the Recommended Southern Alternative is largely located at the edge of rural neighborhoods, its overall impacts on rural community cohesion are slightly lower compared with the other Bypass Alternatives.

Historic and Visual Impacts

As shown in Table 3, the Southern Bypass Corridor Alternatives through the rural areas could affect four properties that are potentially eligible for listing in the National Register of Historic Places. The Northern Alternative could affect a total of six properties, including one site east of Newberg to the north side of Oregon 99W that is already listed in the National Register. The Northern Alternative would also be located closer to a concentration of historic properties along Chehalem Drive in Newberg that would not be affected by the Southern Bypass Alternatives.

Depending on the actual location of the bypass within the corridor alternatives, historical properties could be subject to increased noise, vibration, and visual impacts. It is important to emphasize that projects with a federal involvement (funding, permitting, or licensing) must comply with Section 106 of the National Historic Preservation Act. These regulations are intended to protect prehistoric and historic archaeological resources, traditional cultural properties, historic structures, buildings, and objects that are important to maintaining cultural identity.

Potential impacts to historic properties will be avoided to the degree possible through alignment shifts as the project moves into design. However, in comparing the rural portions of the corridor alternatives, the two Southern Alternatives have lower adverse impacts on historic resources than the Northern Alternative because they affect fewer historic sites and specifically avoid the National Register site.

Each of the Bypass Corridor Alternatives would result in direct impacts on the visual environment. Each alternative would include structures such as walls, bridges or fill slopes with culverts at creek crossings. Although the number, size, and type of structures vary among the alternatives, they would introduce new, large visual elements into the landscape that would be seen by stationary and mobile viewers.

The agricultural landscape dominates in the west segment between Dundee and Dayton and three alternatives share the same corridor in this segment. Because this area is sparsely populated, mobile viewers would experience the greatest visual impacts in this segment. New traffic lanes will be added south of the railroad tracks under all Bypass Alternatives. Therefore, travelers would have expanded views of pavement in the foreground, but regional views of rolling hills and croplands would still be visible from the roadway.

In the central segment between Newberg and Dundee, the Northern Alternative and the Southern Alternative with the Rural Residential Option would have a larger visual impact on rural residential areas because the bypass corridor would traverse the rural community. The

Recommended Southern Alternative would have lower visual impacts on the rural residential area because the alignment is farther away from the developed area.

Portions of each bypass alternative would affect productive agricultural areas in the central and east segments and would represent a significant change in agricultural, pastoral views. Because the Northern Alternative would be located at a higher elevation than the Southern Alternatives and would require a notch in the hillside, the visual impacts of the construction could be more significant.

Overall, there is not a substantial difference between the three bypass corridor alternatives in terms of visual impacts. Each alternative will result in visual impacts to rural and agricultural areas to varying degrees. However, all will result in similar overall visual impacts associated with introducing a major new transportation facility into an existing rural, pastoral setting outside of the urban areas.

7.7.1.6 Environmental Consequences

Environmental consequences include impacts to fish and wildlife habitat and wildlife corridor crossings, wetlands, and riparian areas.

Fish & Wildlife Habitat and Wildlife Corridors

The Southern Alternatives affect less fish habitat (by acres and stream length) than the Northern Alternative. As shown in Table 3, the Recommended Southern Alternative has lower impacts on fish habitat than the Southern Alternative with the Rural Residential Option, although the differences between the two bypass corridors are not substantial. The Northern Alternative would impact an additional 10 acres of fish habitat when compared with the Southern Alternatives. This greater impact reflects that the Northern Alternative is almost two miles longer overall than the Southern Alternatives and it crosses a greater number of streams and wooded areas in the central segment between Newberg and Dundee.

The Southern Alternatives also impact less wildlife habitat than the Northern Alternative. As shown in Table 3, the Northern Alternative affects approximately 293 acres of wildlife habitat (33 acres high value), the Southern Alternative with the Rural Residential Option affects 228 acres of wildlife habitat (28 acres high value), and the Recommended Southern Alternative affects the least amount of wildlife habitat at 207 acres (19 acres high value).

Wildlife species use wildlife corridors to move within and through a habitat. Corridors provide important connectivity between significant habitats, such as streams and patches of forest. Wildlife use these areas to find breeding partners, for seasonal migration and to find habitat requirements such as food and cover. Wildlife corridors were mapped in the LDEIS to include streams, riparian, and upland corridors utilized by large mammals. Six important wildlife corridors were identified.

All bypass corridor alternatives "cross" Wildlife Corridor 2 in the west segment between Dundee and Dayton. This wildlife corridor provides nearly contiguous forested habitat from Oregon 99W northwest to the designated big game peripheral winter range.[179] A narrow corridor continues toward the Willamette River. Roadways (particularly Oregon 99W) and agricultural land fragment the corridor. Big game and a variety of other wildlife could utilize this corridor.

Wetlands

The wetland impacts of the two Southern Alternatives are about the same, but significantly less than the wetland impacts of the Northern Alternative. As shown in Table 3, the Recommended Southern Alternative affects seven acres of wetlands, slightly more than the five acres affected by the Southern Alternative with the Rural Residential Option. The Northern Alternative, however, affects a substantially higher 18 acres of wetland in the rural segments. The three corridor alternatives primarily affect "low value wetlands." Each alternative generally impacts approximately 0.5 acres of "medium value wetlands."

Riparian Areas

Riparian buffers are vegetated corridors along streams. High-quality riparian buffers have dense vegetation that shades the associated waterway, stabilizes the banks, and reduces soil erosion and sedimentation. The ultimate value of a riparian area depends on several factors, including fish presence, connectivity to other riparian and wildlife corridors as well as other bodies of water, and potential wildlife usage.

While the difference between the bypass corridor alternatives in terms of riparian impacts is not as substantial compared with the differences for wetland and fish and wildlife habitat impacts, the Recommended Southern Alternative affects the smallest riparian area at 17 acres, compared with 21 acres affected by the Northern Alternative.Viewed overall, environmental consequences are significantly more adverse for the Northern Alternative primarily because of the greater length of the bypass through the rural area and more numerous crossings and impacts on stream, wetland, and fish and wildlife habitat areas. While there is not a substantial difference between the two Southern Alternatives, the Recommended Southern Alternative has slightly lower environmental impacts in each of the identified categories. This reflects that the bypass corridor is approximately 0.5 miles shorter through the central segment and affects proportionately more cultivated agricultural land.

In considering environmental impacts, it is important to recognize that Federal and State laws require that certain environmental impacts be avoided, minimized, or mitigated. This helps reduce the scale of differences between alternatives. In particular, stringent Federal and State laws and permitting requirements apply to wetlands and threatened and endangered species. The overlay of the Federal and State laws and permitting requirements on top of the local land use decision provides assurance that environmental consequences will be avoided, minimized, and/or mitigated at the design phase of the Bypass project.

[179] Oregon Department of Fish and Wildlife (ODFW)

7.7.1.7 Energy Consequences

As shown in Table 3, the total length of the Recommended Southern Bypass is approximately 0.5 miles shorter than the Southern Alternative with the Rural Residential Option, and approximately 2 miles shorter than the Northern Alternative. Associated with the variation in the total length of the bypass, projected p.m. peak travel times on the Bypass in 2025 are expected to be approximately 2 minutes longer on the Northern Alternative when compared with the Southern Alternatives (14 minutes vs. 12 minutes).

The shorter travel distance associated with the recommended alternative, combined with higher, more consistent travel speed, is expected to result in neutral or positive energy consequences for the Recommended Southern Alternative relative to the Northern Alternative.

Also, because travel speeds affect the rate at which fuel is consumed, it is estimated that total fuel consumption in gallons per day would be greater for the No-Build Alternative because of congestion, slower travel speeds, and longer travel times. There are no detectable differences among the three bypass corridor alternatives in the system-wide average number of passenger hours traveled or freight hours traveled. The greater distance on the bypass relative to Oregon 99W would be offset by generally higher speeds of travel, and more travelers would use the less congested bypass rather than more congested alternative routes.

7.7.1.8 Overall Assessment of ESEE Consequences

Across the board, the Northern Alternative has more adverse economic, social, environmental, and energy consequences in the rural areas when compared with the Southern Alternatives. The Northern Alternative displaces the most businesses, displaces the largest amount of EFU land, displaces the most dwellings and rural residential land, affects the greatest number of dwellings with increased traffic noise, and has the most impact on wetlands, fish and wildlife habitat, and riparian areas.

The distinctions between the two Southern Alternatives are not as dramatic. While the Recommended Southern Alternative displaces seven acres more EFU land than the Southern Alternative with the Rural Residential Option, the social and environmental consequences associated with the Recommended Alternative are generally less adverse. The Recommended Alternative displaces substantially fewer residences (6 vs. 17), less rural residential land (18 vs. 48 acres), has fewer adverse noise impacts (43 vs. 56), and affects less wildlife habitat (207 acres vs. 228 acres).

While the displacement of a larger portion of the Dundee Farm is not insignificant, the Recommended Alternative will maintain the farm in two commercially viable pieces with one parcel of 80 acres and the second of more than 200 acres. With assumed mitigation to assure adequate access across the bypass to both sides of the Dundee Farm, the overall ESEE impacts of the Recommended Alternative are not significantly more adverse than the ESEE impacts associated with the Rural Residential Option. They likely are less adverse by comparison.

7.7.2 Regional Bypass Through Marion County

Two "regional bypass" alternatives were initially considered but later dropped from further study due to their excessive adverse impacts compared to the alternatives that were carried forward to the LDEIS.[180] **See Figure 11.** Each involved a new highway connecting Oregon 99W with I-5 near Donald in Marion County. One alternative would have linked the bypass with Oregon 99W at a new interchange south of Dundee. The other would have connected the bypass to Oregon 99W and Oregon 18 at the Oregon 18/Oregon 99W junction.

These alternatives were dropped from further study for a variety of reasons, including:

- Adverse wetland impacts (30–50 percent higher than other alternatives);
- Much higher farmland impacts (displacement of approximately 500–563 acres, compared to 175 acres for the Recommended Southern Alternative;
- Greater indirect impacts on farm operations;
- Resource impacts that made these alternatives unlikely to meet Clean Water Act requirements;
- Higher remaining traffic volumes and congestion on Oregon 99W, resulting in a need to widen Oregon 99W in Dundee;
- A much higher level of growth-inducing impacts in northern Marion County;
- Higher costs than any other alternative; and
- Tremendous indirect impacts on Interstate 5 resulting from shifting approximately 30,000 average daily vehicle trips away from the Oregon 99W corridor and onto the I-5 corridor.[181]

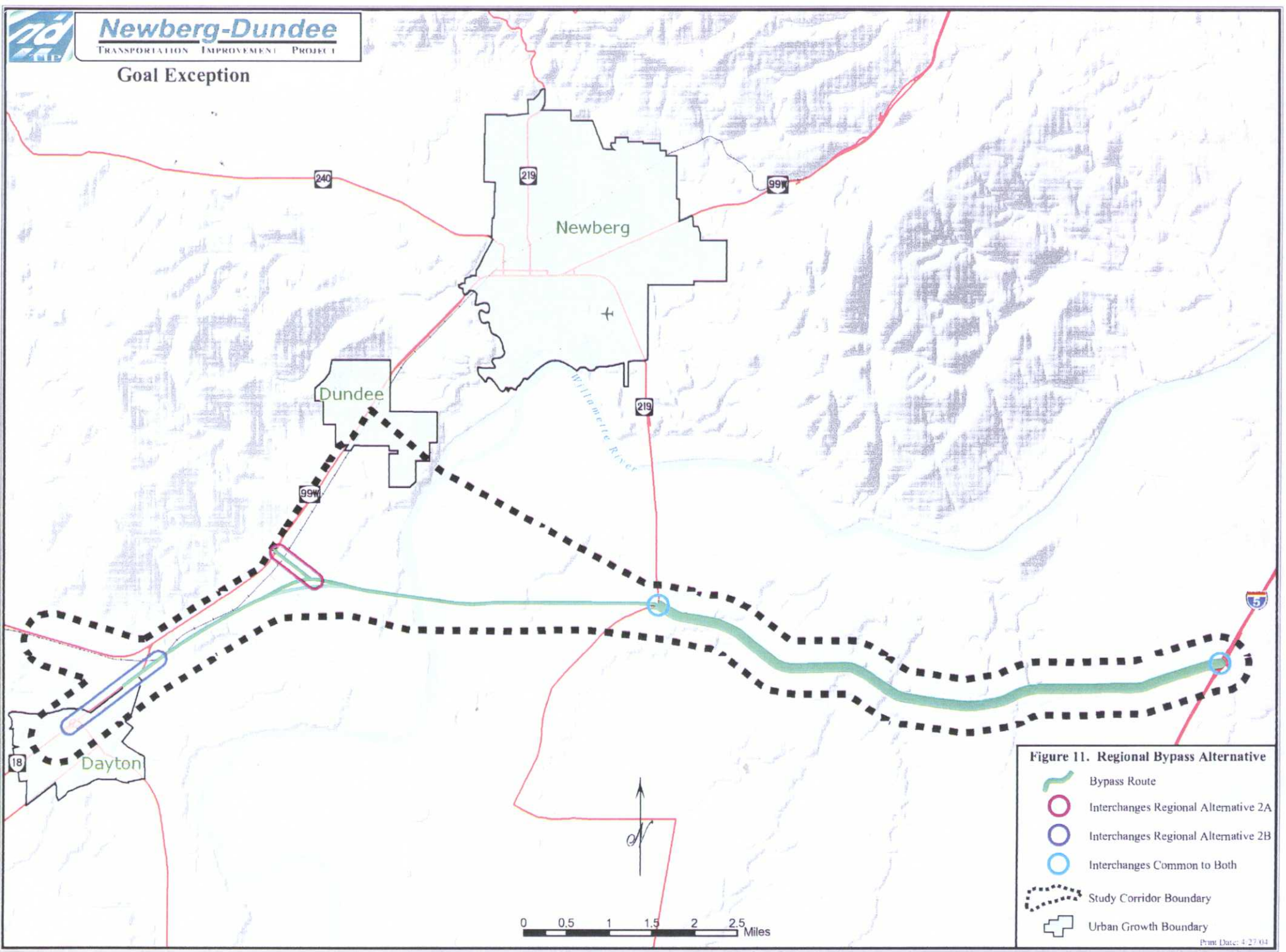
Overall, the net impacts associated with these alternatives would be significantly more adverse than the net impacts associated with the Recommended Southern Alternative.

[180] These alternatives, called 2A and 2B, are illustrated in the LDEIS at Figures 2-1 and 2-2.

[181] According to ODOT projections, I-5 from Salem north into Portland will experience high to extreme levels of congestion over the next 20 years, with multiple hours of the day exceeding ODOT performance standards. See State of the Interstate Report 2000 (ODOT, June, 2000). To keep pace with the level of congestion already predicted for I-5, an additional 30,000 daily vehicle trips would require two new travel lanes in each direction (four total) from the Highway 217/I-5 Interchange to the Aurora exit, a distance of nearly 15 miles. The addition of two new travel lanes in each direction on I-5 would necessitate widening every bridge and interchange structure and likely require modification to every set of interchange ramps within this 15 mile segment. The likely cost of making this level of improvement to I-5 to handle this new traffic volume alone would well exceed the total cost of the regional bypass or any of the other Newberg-Dundee bypass options being considered.

Newberg-Dundee
Transportation Improvement Project

Goal Exception



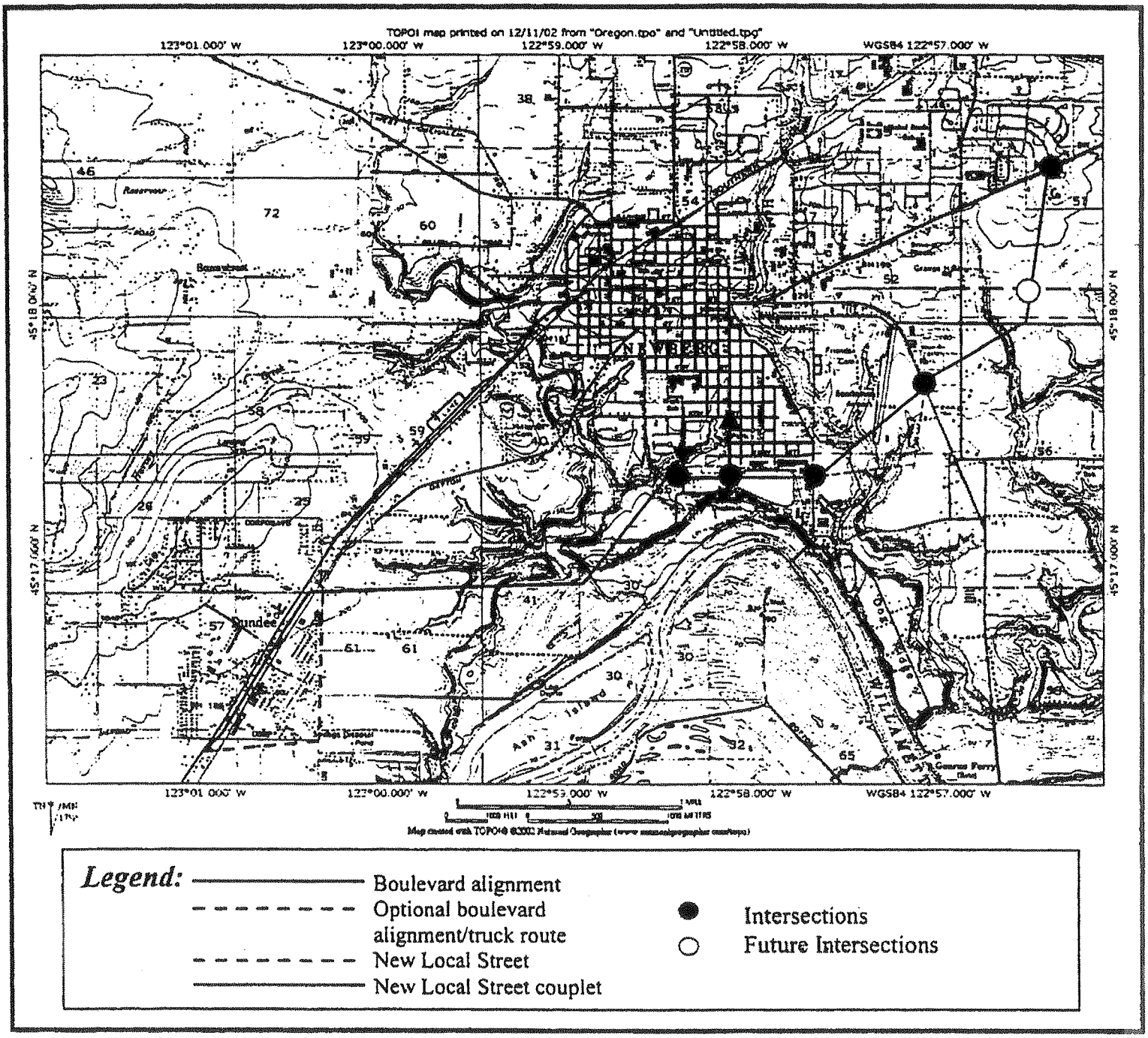
7.7.3 1000 Friends of Oregon Alternative

1000 Friends of Oregon has proposed a bypass alternative that it states would not require goal exceptions. However, as shown on the illustration accompanying the 1000 Friends alternative, this proposal crosses rural lands west of Newberg in places where there are no existing roadways. **See Figure 12.** Accordingly, goal exceptions would be required.

The 1000 Friends of Oregon alternative consists of proposed local street improvements, land use measures, expansion of public transit, and a 35 mph (in some places, 25 mph) boulevard to facilitate through trips around downtown Newberg. In essence, it takes the Newberg portion of the Bypass and turns it into a four-lane, 35 mph limited access boulevard with 10–12 foot wide travel lanes, 10.5 foot wide sidewalks, five foot wide bike lanes, a six foot wide landscaped median, seven foot wide parking and landscaped areas separating the bike lane from the sidewalk, and other features. The boulevard would employ the use of roundabouts, with local street and highway access provided at four existing at-grade intersections and a possible fifth location. The roundabouts are intended to slow traffic speeds of vehicles entering the boulevard from either end from 55–35 mph on the north end and from 55–25 mph on the south end.

The proposed boulevard would pass through Newberg on its south side, intersecting at grade with Oregon 219. Farther west, it would intersect, at grade, with Wynooski Street, then parallel the railroad tracks to the south. At the Riverfront District there would be two half-intersections with a new local street couplet to the north into town. The new street couplet would be made up of College and River Streets to allow access to the Riverfront District and the boulevard. The boulevard would then traverse the exception area south of Dayton Avenue, passing just south of or over the southern section of Glen Hollow Drive, then continue west through the exception area north of the area zoned EFU, where it would enter existing Oregon 99W east of Dundee. In Dundee, there would either be a couplet north of the existing railroad tracks with a truck route along Edwards and Park Roads, or there would be a new boulevard parallel to or along Edwards and Park Roads. The couplet would be designed and posted at 25 mph. The new arterial would be designed to accommodate traffic at 35 mph.

This proposal also provides for transit in the form of high quality express bus or commuter rail service from McMinnville, Newberg, and Dundee to the Portland metropolitan area; "high quality" bus or rail service between the Portland metropolitan area and the Spirit Mountain Casino in Grand Ronde; and demand responsive shuttle service for local trips and regional transit connections.



Boulevard/Couplet Alignment

Figure 12. 1000 Friends of Oregon Alternative

In many ways, the 1000 Friends alternative is similar to LDEIS Alternative 3I in its provision of at-grade intersections in Newberg. However, this alternative would include several more intersections and operate at even slower speeds. As a result, the facility would attract more local and regional traffic than Alternative 3I and would be even less attractive to statewide through trips, resulting in higher traffic volumes and congestion on existing Oregon 99W.

Because of its emphasis on slower speeds and at-grade intersections, the 1000 Friends alternative does not fully conform with the management objectives of a Statewide highway as described in Policy 1A of the OHP, which is to provide safe and efficient, high speed, continuous-flow operation, with minimal interruptions to the flow. Moreover, it violates requirements in the OHP Bypass Policy.[182] As defined therein, bypasses are highways designed to maintain or increase mobility for through traffic. Generally, they relocate a highway alignment around a downtown or an urban area to provide an alternative route for through traffic using that highway. The 1000 Friends alternative meets this definition. However, it does not comply with the mobility standards of the bypass policy, which require that new bypasses be constructed as high-speed, limited access facilities (i.e., freeways or expressways).[183] This standard is consistent with bypass policy findings that regional through travel is best served by such limited access facilities.[184]

Because this alternative requires a new roadway in an exception area, it would require goal exceptions. Accordingly, the issue arises whether the net impacts associated with the Recommended Southern Alternative would be significantly more adverse than the net impacts associated with the 1000 Friends alternative. But before that issue is reached, it first must be determined whether the 1000 Friends alternative could reasonably accommodate the identified transportation need. Because the answer is "no", a comparison of ESEE consequences is not required.

During the course of this NDTIP project, the project team modeled Alternative 3I, a potential bypass alignment that included three at-grade interchanges.[185] This alignment did not meet the project need. The traffic delay reduced the value of the bypass to through traffic to a point where through traffic was remaining on Oregon 99W. Accordingly, from a transportation standpoint, the 1000 Friends alternative would not perform nearly as well in achieving the goals and objectives of this project.

It is noted that a "boulevard design" is one of the design concepts developed by Metro for the Portland metropolitan region. However, Metro does not use "boulevards" to accommodate statewide or regional through traffic. Rather, these design concepts are meant to accommodate more local traffic within the region. Furthermore, they are intended to serve larger urban areas

[182] OHP Policy 1H.
[183] See OHP Action 1H.2, discussed in more detail in Section 9 below.
[184] Because the 1000 Friends alternative is not consistent with applicable OHP requirements, it can be rejected on this basis alone.
[185] The three at-grade interchanges were located east of Newberg, at Oregon 219 and in the Riverside area.

like central cities (e.g., Portland) and regional centers like Beaverton, Hillsboro, Clackamas Town Center, and Washington Square.

To move statewide and regional through traffic with a trip end outside the region, Metro relies on throughways, freeways, and highways, including roadways such as Oregon 217 and Oregon 26.[186] Because the primary need in the Newberg-Dundee area is to remove statewide and regional through traffic from Oregon 99W, a limited access highway is appropriate and necessary, and a boulevard is inadequate to serve that purpose.

7.7.4 East Dundee Interchange Alternatives[187]

Three alternatives requiring exceptions have been identified for the East Dundee Interchange. These include a North Option, which is the preferred interchange alternative, a Middle Option, and a South Option. The three alternatives are illustrated in **Figure 13**.

The three alternatives share some common features. All include an interchange at the Bypass; a two-lane connector road with no intermediate accesses that links the Bypass with Oregon 99W, and an intersection where the connector road joins Oregon 99W. In all instances, the Oregon 99W/connector road intersection is located on land zoned for rural residential development. Also, all alternatives provide for a grade separated crossing of the railroad tracks south of Oregon 99W.

7.7.4.1 North Option

Under the North Option, which is the East Dundee Interchange option for which land use approval is being requested, the interchange ramps, the connector road, and the intersection of the connector road with Oregon 99W are all located northeast of the Dundee UGB. The connector road, approximately 0.72 miles long, is located on land designated "Very Low Density Residential" (VLDR) in the Yamhill County Comprehensive Plan. The VLDR zone permits rural residential development on lots ranging from 2.5 to 5 acres.[188] **See Figure 14**. The North Option also affects some EFU-zoned land with construction of the interchange ramps to the Bypass.[189] However, because this option shifts the connector road to the north, the Dundee Farm owned by Columbia Empire Farms is not fragmented by the connector road alignment.

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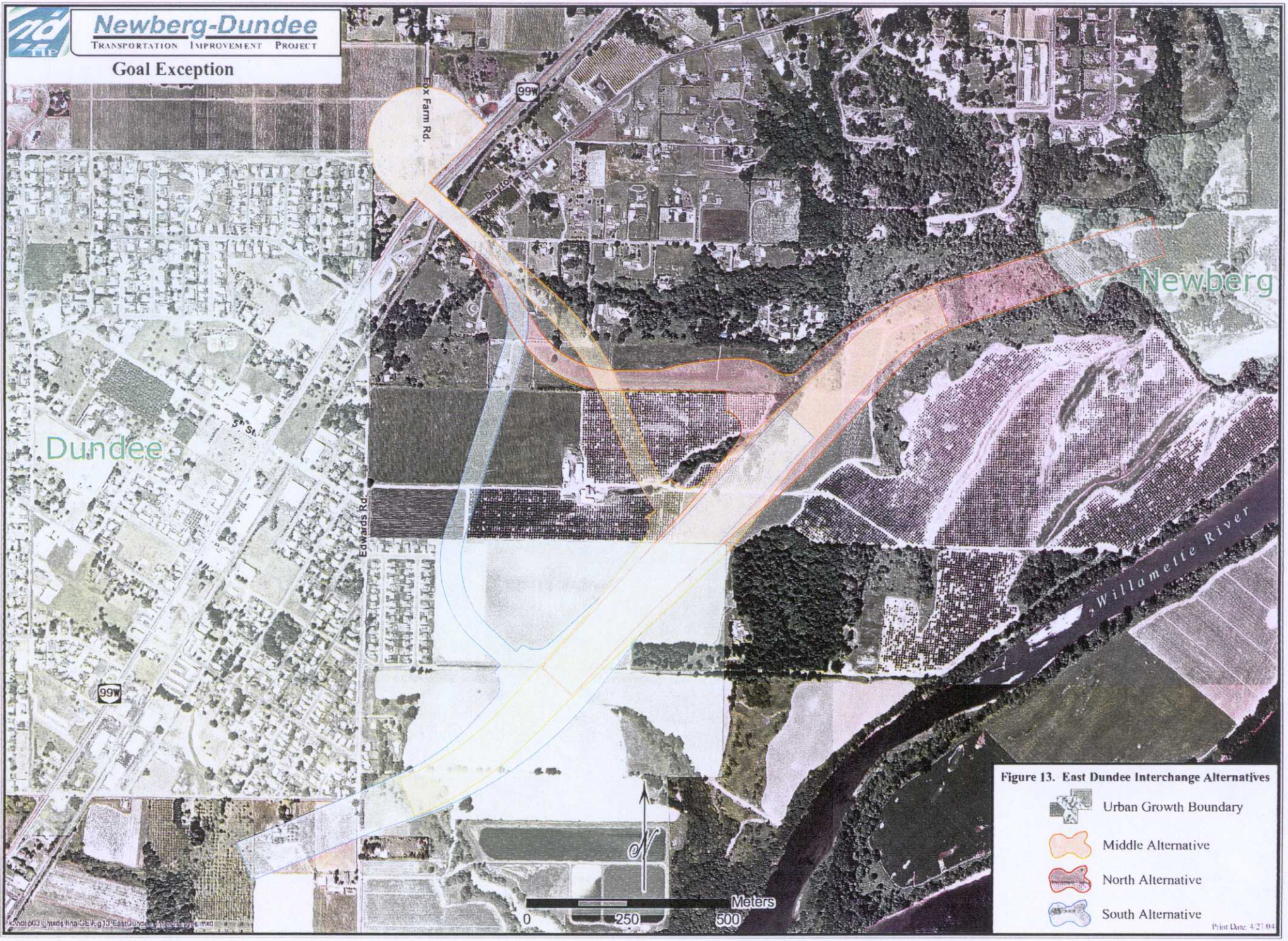
[186] Metro's Regional Transportation Plan also provides for new limited access highways to serve the region, including a road connecting Interstate 5 with Oregon 99W and the "Sunrise Corridor" highway in Clackamas County.
[187] The ESEE impacts identified and examined herein are described in greater detail in a technical memorandum entitled East Dundee Interchange Options ESEE Analysis (November 14, 2003).
[188] There are three VLDR zones implementing the VLDR plan designation.
[189] In the East Dundee area, the EFU-zoned lands are plan designated Agriculture/Forestry Large Holding (AFLH). The implementing zone is EFU-80 (80 acre minimum lot size).


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Fox Farm Rd.
99W
Dayton
Newberg
Dundee
5th St.
Edwards Rd.
Willamette River
99W
N
0
250
500
Meters
Figure 13. East Dundee Interchange Alternatives
Urban Growth Boundary
Middle Alternative
North Alternative
South Alternative
Print Date: 4/27/04

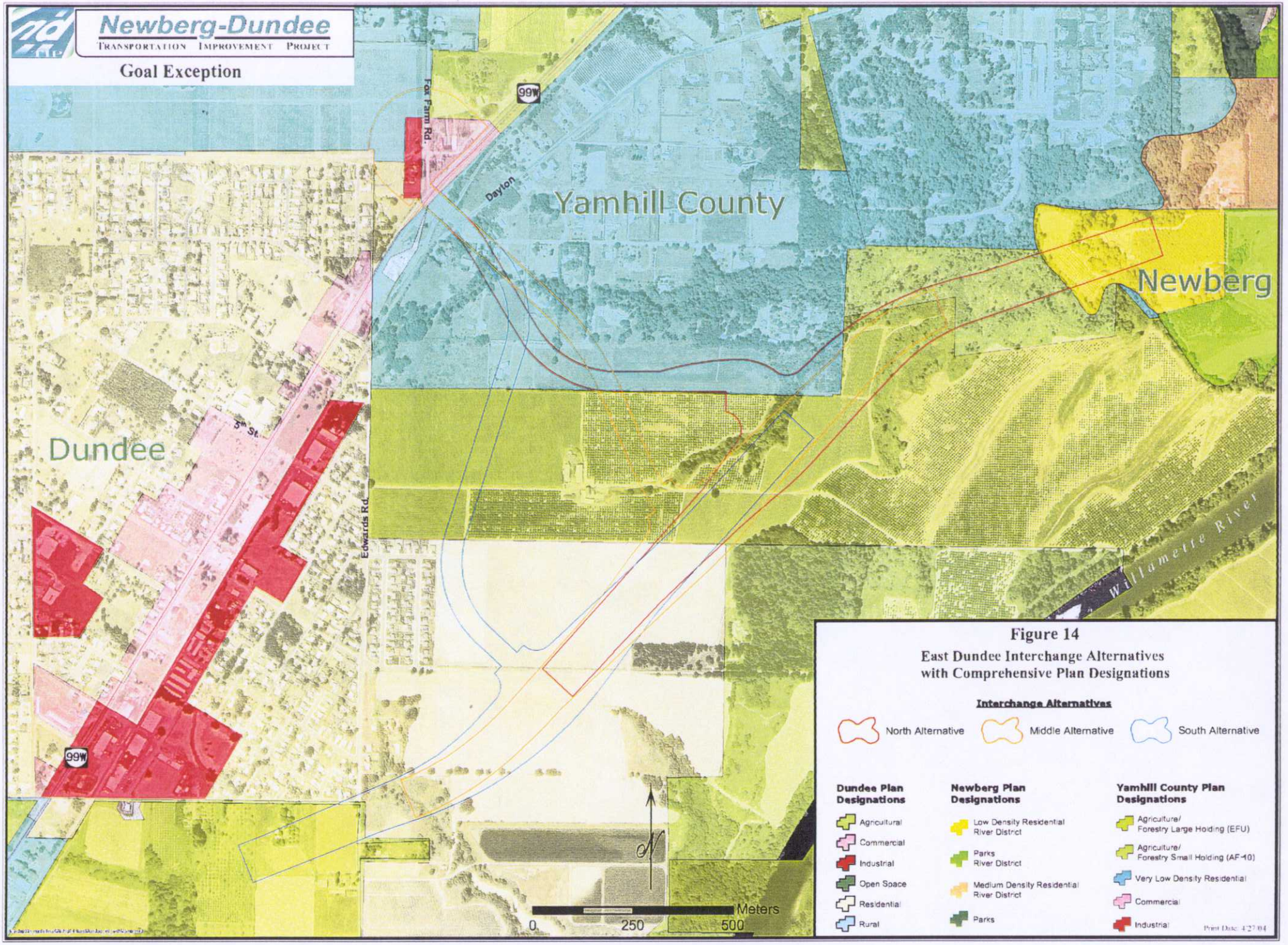
7.7.4.2 Middle Option

Under the Middle Option, the connector road and the interchange ramps are located closer to the Dundee UGB. The connector road, approximately 0.70 miles long, is located both on lands designated VLDR and on lands zoned EFU, with approximately one-third of the length of the connector road located on designated EFU land and the remaining two-thirds located on VLDR land. Compared with the North Option, the interchange ramps to the Bypass for the Middle Option are located closer to the Dundee UGB. The connector road would displace a portion of a productive filbert orchard under the Middle Option and would fragment Columbia Empire Farms' Dundee Farm.

7.7.4.3 South Option

The South Option shifts the Bypass ramps and a portion of the connector road to a location inside the Dundee UGB. The length of the connector road is longest for the South Option at 0.91 mile. Compared with the Middle and North Options, the South Option would displace more land planned for urban residential development.

Under the South Option, approximately one third of the connector road would be located inside the Dundee UGB on land planned for future residential development. The remainder of the connector road is located outside of the UGB, with approximately 0.33 miles of the length zoned Exclusive Farm Use and approximately 0.33 miles designated VLDR. The alignment of the connector road in the South Option would fragment both the urban residential area (currently undeveloped) and the Dundee Farm.


Newberg-Dundee
Transportation Improvement Project
Goal Exception
Yamhill County
Dundee
Newberg
Dayton
Fox Farm Rd.
Edwards Rd.
3rd St.
99W
Willamette River
Figure 14
East Dundee Interchange Alternatives
with Comprehensive Plan Designations
Interchange Alternatives
North Alternative
Middle Alternative
South Alternative
Dundee Plan Designations
Agricultural
Commercial
Industrial
Open Space
Residential
Rural
Newberg Plan Designations
Low Density Residential River District
Parks River District
Medium Density Residential River District
Parks
Yamhill County Plan Designations
Agriculture/ Forestry Large Holding (EFU)
Agriculture/ Forestry Small Holding (AF-10)
Very Low Density Residential
Commercial
Industrial
Print Date: 4/27/04
N
0
250
500
Meters

7.7.4.4 Economic Impacts

Economic impacts relevant to these options include business displacements, the loss of Exclusive Farm Use land, and the fragmentation of agricultural operations on EFU lands.

The North, Middle, and South Options all could potentially displace two existing businesses (a motorcycle shop and a winery) located to the north side of Oregon 99W near Fox Farm Road, depending on the footprint and final design of the new connector road intersection to Oregon 99W. Business displacement impacts would be the same for all interchange options because the location of the connector road intersection does not vary between the three options.

Agricultural impacts relate to economic consequences associated with the Dundee Farm, owned by Columbia Empire Farms. Columbia Empire Farms raises filberts, berries, and bees on three major properties in Yamhill County, totaling approximately 1,100 acres, which includes the approximately 300-acre Dundee Farm that is located north and east of the Dundee UGB. Columbia Empire Farms grows, picks, and processes filbert, honey, and berry products and markets them wholesale or through its *Your Northwest* stores, one of which is located in the City of Dundee. The company employs over 350 persons full- and part-time, mostly in Yamhill County. It is one of the largest commercial farming operations in the County.

The Dundee Farm fields consist of 60 acres of berries, 140 acres of filbert orchards, and additional agricultural lands. The farm also includes a barn, an office, twenty-five units of farm worker housing, and a small production facility (all located west of the recommended bypass).[190] None of the three options would directly displace any of these existing farm facilities.

The North Option would directly displace approximately 7.64 acres zoned EFU that are part of the Dundee Farm. In comparison, the Middle Option would directly displace 7.15 acres of the Dundee Farm, while the South Option would directly displace 3.8 acres of that farm. **See Table 4**. However, the nature of these displacements is different.

For the North Option, the EFU displacement impacts are associated with the interchange ramps to the Bypass as opposed to the connecting road. The North Option avoids further division of the Dundee Farm beyond that resulting from the Bypass alignment. In contrast, for the Middle Option, the EFU displacement impacts are associated with both the interchange ramps to the Bypass and the easterly one-third of the connector road. Unlike the North Option, the Middle Option would fragment an 80-acre portion of the Dundee Farm and would divide a productive filbert orchard on the farm. The South Option also would fragment the 80-acre portion of the Dundee Farm, although it would not directly affect the filbert orchard.

[190] Miller Nash LLP Comment Letter on the Newberg-Dundee LDEIS, December 13, 2002. http://www.odot.stat.or.us/region2public/newbergdundee/chapters.pdf

Table 4 – ESEE Comparison of East Dundee Interchange Options

ESEE Consequences	North Option	Middle Option	South Option
Economic			
Businesses displaced (number)	2	2	2
EFU land displaced (acres)	7.64	7.15	3.8
Fragmentation of EFU land (yes/no)	No	Yes	Yes
Social			
Residences displaced (number)	3	6	5
Urban Residential land displaced (acres)	1.4	3.8	10.8
Rural Residential land displaced (acres)	13.5	8.14	7.3
Residences potentially affected by increased noise (number)	8	6	23
Neighborhood or community cohesion impacts (high/medium/low)	Medium	Medium	Medium
Impacts on historic sites (number)	0	0	0
Visual impacts (high/medium/low)	Medium	Medium	Medium
Environmental			
T & E fish habitat (acres/stream length)	7.5 ac/542 ft	9 ac/647 ft	3 ac/218 ft
Riparian areas affected (acres)	1.93	1.54	0.98
Wildlife habitat affected (acres)	29.73	24.03	26.92
Wildlife corridors crossed (number)	0	0	0
Wetlands affected (acres)	1.04	2.22	1.68
Energy			
Length of connector road (miles)	0.72	0.70	0.91

Note: These analyses were run using the GIS data from the LDEIS. GIS data on wildlife habitat and wetland value (high, medium, and low) has been aggregated for the purpose of this table.

While the direct loss of agricultural acreage is significant, the overall adverse impacts of fragmentation on farming practices and production can be more far-reaching. Fragmentation can result in irregular field shapes that adversely affect a farmer's ability to efficiently plant, irrigate, and harvest crops or maintain pasture. Fragmentation can complicate field access. Fragmentation also can result in the following adverse consequences to farm operations:

- More difficult to move farm equipment, machinery, and irrigation pipes onto and between fragmented pieces;
- Increased difficulty, time, and cost associated with planting, irrigating, and harvesting fragmented pieces;
- Increased difficulty, time, and cost associated with application of fertilizers and pesticides (by ground or aerial spraying); and
- Increased urbanization pressures on fragmented EFU parcels, particularly when the parcels are small and isolated.

For Dundee Farm, fragmentation is likely to have all of these impacts to some degree. Perhaps most significantly, fragmentation likely would increase pressures to urbanize the smaller portion of Dundee Farm located immediately north and east of the existing Dundee UGB. By retaining Dundee Farm in larger, more easily farmable parcels, pressures to convert portions of that land to non-farm uses are reduced.

7.7.4.5 Social Impacts

Social impacts relevant to these options include loss of rural residential land, rural residential displacements, noise, impacts to neighborhood or community cohesion, impacts on potential historical sites, and visual impacts. Some urban land also would be displaced by these options.

As shown in Table 4, the North Option displaces the largest amount of Rural Residential land at 13.5 acres, compared to 8.14 acres for the Middle Option and 7.3 for the South Option. In contrast, the South Option displaces the most Urban Residential land at 10.8 acres, compared to 1.4 acres for the North Option and 3.8 acres for the Middle Option. The distinction between the three options primarily reflects their location in relation to the Dundee UGB and the fact that by shifting the alignment of the connector road to the north to avoid fragmenting Columbia Empire Farms, the North Option impacts a larger amount of designated Rural Residential land.

The North Option could potentially displace up to three dwellings, compared to six dwellings for the Middle Option and five dwellings for the South Option. For all three options, two of the dwellings are located to the north side of Oregon 99W and would be displaced by the new connector road intersection to the highway.

As illustrated in Figure 14, the alignment for the connector road in the North Option largely follows the zone boundary line separating the VLDR and EFU zoned areas. This helps to minimize fragmentation of the existing rural residential neighborhood along Dayton Avenue and Hagey Road. The connector road, with its full access control, will isolate a small area of VLDR

zoning and rural homes from the larger rural residential area located north of the connector road. However, this isolation occurs with all three of the East Dundee Interchange options.[191]

The North Option could result in adverse traffic noise impacts to eight dwellings (not including the three dwellings that are assumed to be displaced). This is slightly higher than the noise impacts associated with the Middle Option (six dwellings), but substantially lower than noise impacts for the South Option (23 dwellings). For the South Option, the higher number primarily reflects that the connector road significantly impacts an urban residential area with higher residential densities. And while noise impacts are lowest for the Middle Option, this should be balanced with the fact that the Middle Option displaces the highest number of dwellings. Higher residential displacements are typically considered a more serious social consequence to be avoided than increased traffic noise.

None of the three options impacts designated or potentially eligible historic sites.

The visual impacts of the East Dundee Interchange are expected to be similar for the three interchange options. The visual character of the area between Newberg and Dundee to the south of Oregon 99W is characterized by open, agricultural fields and orchards and low-density rural residential areas with parcel sizes ranging from 2 to 5 acres. For all three options, the most significant visual impacts would be associated with the interchange ramps to the Bypass and the new connector road intersection with Oregon 99W, particularly if it is an overpass structure. There are no existing bridges or structures over Oregon 99W between Newberg and McMinnville. An overpass at the approximate location of Fox Farm Road would change the visual environment for the immediate area and the larger community and traveling public and could function as an important gateway to Dundee.

The interchange ramps to the Bypass also would represent a significant change in the visual context when viewed against the background agricultural setting. The alignment of the connector road is expected to have less visual impact than the interchange and intersection elements because it will largely be located at existing grade. For the North Option, the connector road generally parallels the zoning boundary between the EFU and VLDR zones and consequently does not intrude into the visual character of the EFU area as much as the Middle and South Options. With the Middle and South Options, a portion of the connector road extends across the EFU area and fragments Columbia Empire Farms, resulting in a greater impact on the visual character of the farm compared with the North Option. However, for the South Option compared to the Middle Option, the adverse visual impacts of the connector road and interchange ramps to the Bypass may be less significant in the long term because more of the facility would be located within the Dundee UGB and ultimately be surrounded by urban development.

Of the three options for the East Dundee Interchange, the South Option would have the most substantial social consequences on the City of Dundee. The East Dundee area inside the UGB is a large, substantially undeveloped property that is expected to accommodate most of Dundee's

[191] The South Option could contribute to future fragmentation of residential areas inside the Dundee UGB. However, that area is not one that requires goal exceptions.

future residential growth. While the property is currently farmed and maintained in an agricultural holding zone, it will be rezoned incrementally as the need for residential land is demonstrated. Because the property is so large, it offers potential for community scale development. The South Option would not only reduce the overall number of residential units that could be developed on this property by displacing 10.8 acres, it would also reduce the viability of developing the property as a cohesive neighborhood because the parcel would be fragmented into three pieces. Full access control on both the Bypass and the connector road would also greatly complicate local circulation in this future urban development area.

The alignment of the North Option connector road would displace a private, 2000-foot long grass/turf airstrip on Tax Lot 3325-02600 that has been owned and operated for personal use since 1969. Three personal airplanes are based at the property. Beyond the landing strip, there are no other facilities such as a landing tower, landing lights, fuel sales, or other infrastructure associated with the operation. Individuals land at the airstrip only with the permission of the property owner. Hot air balloons departing from Sportsman Airpark have landed at this strip a few times, and the property owner has occasionally hosted summer "fly ins" attracting 17–18 planes.

Unlike the Sportsman Airpark in Newberg or the McMinnville Airport, both of which are public use airports, this personal use airstrip is not recognized or protected with Yamhill County Airport Zoning and Landing Field Overlays. The airstrip is registered with the Oregon Division of Aeronautics, but it has no state legal protection from displacement. Personal use airports are listed as a conditional use in the EFU and AF-10 zones. However, personal use airports are not listed as a permitted or conditional use in the VLDR-5 zone. Accordingly, this airstrip may be a non-conforming use.

The South Option would not affect this airstrip. However, the Middle Option potentially could displace it. The connector road alignment for the Middle Option would not directly displace the airstrip, but the curve in the connector road could shorten the area needed for safe takeoff and landing.[192]

7.7.4.6 Environmental Impacts

Environmental impacts relevant to these options include impacts to threatened and endangered fish habitat, riparian and upland wildlife habitat, wildlife corridors, and wetlands.

The environmental consequences of the North and Middle Options are about the same but somewhat greater than those associated with the South Option. As shown in Table 4, the North Option affects 7.5 acres of fish habitat, less than the Middle Option at 9 acres, but more than the South Option at 3 acres. The North Option affects 1.93 acres of riparian areas, more than both the Middle Option at 1.54 acres and the South Option at 0.89 acre. The stream and riparian impacts of the three alternatives are visible on the aerial photo base of Figure 13.

[192] Riparian areas are defined as wooded areas within 600 feet of streams and other waterways.

None of the three interchange options impacts identified wildlife corridors. The North Option affects the most wildlife habitat at 29.73 acres, relative to the Middle Option at 24.03 acres and the South Option at 26.92 acres. For all three interchange options, the wildlife habitat affected is categorized primarily as either low or medium value. For the North Option, approximately 2.26 acres of wildlife habitat affected is categorized as high value, compared to 1.3 acres for the Middle Option and 0.62 acres for the South Option.

The North Option has the smallest impact on wetlands at 1.04 acres, compared with 2.22 acres affected with the Middle Option and 1.68 acres affected with the South Option. For all options, only low value wetlands are affected.

Viewed overall, environmental consequences are somewhat greater for the North Option because the connector road ramps to the Bypass encroach into a tributary to Chehalem Creek. The stream and associated riparian area provide multiple fish and wildlife habitat values. On balance, the overall environmental consequences associated with the Middle Option are not substantially different from the North Option. In general, the environmental consequences of the South Option are the lowest because the interchange ramps and connector road are a longer distance south of the tributary to Chehalem Creek. The South Option primarily affects cultivated agricultural land with no visible water or wooded areas.

In considering environmental impacts, it is important to recognize that Federal and State laws require that certain environmental impacts be avoided, minimized, or mitigated. In particular, stringent Federal and State laws and permitting requirements apply to wetlands and threatened and endangered species.[193] These laws and requirements help to balance the overall differences between the alternatives. The overlay of the Federal and State laws and permitting requirements on top of the local land use decision provides assurance that environmental consequences will be avoided, minimized, and/or mitigated at the design phase of the Bypass project.

7.7.4.7 Energy Impacts

As shown in Table 4, there is not a substantial difference in the length of the connector road between the three options for the East Dundee Interchange. The connector road for the North Option is 0.72 mile. This is slightly longer than the Middle Option (0.70 mi) but shorter than the South Option (0.91 mi). Therefore, fuel consumption associated with vehicle miles traveled is expected to be very similar for the three East Dundee Interchange options.

[193] See East Dundee Interchange Options ESEE Analysis (November 14, 2003).

7.7.4.8 Overall Assessment of ESEE Consequences

The three alignment options for the East Dundee Interchange are relatively similar in terms of their overall net adverse environmental, social, and energy consequences. The North Option, which is the proposed Interchange option, generally has somewhat higher overall environmental consequences (T & E fish habitat and wildlife habitat) but lower overall social consequences (residential displacements, noise, and community cohesion). In contrast, the South Option generally has lower overall environmental consequences but somewhat higher overall social consequences. The Middle Option generally has somewhat higher overall environmental consequences and moderate social consequences.

As noted in the discussion of environmental consequences, federal and state law and permitting requirements provide assurance that environmental consequences will be avoided, minimized, and/or mitigated at the design phase of the project. This helps to balance out the overall environmental impacts between alternatives.

The North Option is recommended primarily because its connector road does not further fragment Columbia Empire Farms. This is the main feature that distinguishes the North Option from the other two alternatives. By locating the connector road at the northern edge of the farm parallel with the zoning boundary between the EFU and VLDR areas, the North Option avoids the potentially major adverse fragmentation impacts of the Middle and South Options described in the analysis of economic impacts above. Particularly for this reason, the net adverse impacts associated the North Option would not be significantly more adverse than the net impacts associated with the Middle and South Options. For this reason, the overall net impacts of the North Option are likely to be less adverse than those of the Middle and South Options, given that the environmental, social and energy consequences tend to balance out.

7.8 OAR 660-012-0070(8), ORS 197.732(1)(c)(D), Goal 2 Part II(c)(4), and OAR 660-004-0020(2)(d)

OAR 660-012-0070(8) provides that to comply with Goal 2 Part II(c)(4), the exception must describe the adverse effects that the proposed transportation improvement is likely to have on the surrounding rural lands and land uses, including increased traffic and pressure for non-farm or highway oriented development on areas made more accessible by the transportation improvement. This section also requires, as part of the exception, facility design and land use measures which minimize accessibility of rural lands from the proposed transportation facility and support continued rural use of surrounding lands.

Similarly, OAR 660-004-0020(2)(d) requires the exception to explain how the proposed use is compatible with other adjacent uses or will be rendered compatible through measures designed to reduce adverse impacts. The exception must describe how the proposed use is situated in such a manner as to be compatible with surrounding natural resources and resource management or production practices. As used in this section, "compatible" is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses.

7.8.1 Likely adverse impacts on surrounding rural lands and land uses

As described in detail in Section 7.7 of this document, incorporated herein by this reference, the Bypass and the East Dundee Interchange (including its connecting road) will affect surrounding rural lands and land uses in numerous ways. These include "economic impacts" such as business displacements, loss of access, displacement of land designated for farming and rural residential use, and impacts to farming practices; "social impacts" including residential displacements, noise and visual impacts, impacts to community cohesion, and the need to relocate some driveways and roadways; "environmental impacts", including impacts to wetlands and to fish, wildlife and riparian habitat; and "energy impacts" in the form of increased driving distance through the area. At this corridor stage of this proceeding, the extent of these impacts cannot be fully determined. They will be better known at the design stage. However, as indicated in Section 7.7, the kinds of likely impacts can be generally identified and the scale of such impacts generally determined.

Two impacts that OAR 660-012-0070(8) expressly requires be taken into consideration are (1) increased traffic in rural areas and (2) pressure for non-farm or highway oriented development in areas made more accessible by the transportation improvement (i.e., induced development).

7.8.1.1 Increased Traffic

According to an analysis prepared by ODOT in 2002 using ODOT's internationally recognized integrated economic, land use, and transportation model,[194] building the Bypass would increase population in Yamhill County by less than five percent and jobs by half as much, compared to doing nothing. However, almost all of the increased growth would occur in the McMinnville area rather than in the Newberg-Dundee area, with most growth happening within 20 years of opening of the Bypass. With the Bypass, McMinnville would become more attractive as an employment center and as a place to live because of the increased accessibility to economic markets that the Bypass itself affords, with or without the East Dundee Interchange.[195]

According to the model, the Newberg area would see "minimal effects" in job or population growth because the Bypass does not improve accessibility to the Portland area. In terms of commuting, increases between the McMinnville area and parts of the Portland metropolitan area would be offset by reductions elsewhere. Commuting from the Newberg area to the Portland metropolitan area would be slightly less with the Bypass, while commuting between the Newberg area and McMinnville would slightly increase.[196]

The model found that while "the total number of trips in the Highway 99W/18 corridor increases and the total miles of system-wide travel increase as well, the total number of system-wide *auto*

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[194] See ODOT Transportation Planning Analysis Unit, Exploratory Analysis of OTIA Projects Using the Gen1 Statewide Model, Newberg-Dundee Case Study, Methodology and Results, May 3, 2002.

[195] November 20, 2003, telephone conversation between Brian Gregor, Senior Transportation Analyst, Planning Section, Transportation Planning Analysis Unit, ODOT, and Terry Cole, Senior Transportation Planner, ODOT Region 2. Mr. Gregor was the principal analyst involving in applying ODOT's integrated economic, land use, and transportation model to the Bypass project. According to Mr. Gregor, the effects of the Bypass project on future economic growth in McMinnville are the same with or without the East Dundee Interchange.

[196] Id.

trips does not increase under the build scenarios." (Emphasis in original.) The corridor would be less congested with better accessibility and would attract drivers from alternative routes or who would otherwise avoid the corridor because of congestion. The model also found that system-wide, there would be very small increases in the number of passenger and freight miles traveled. While the Bypass could induce more travel along the Oregon 99W/Oregon 18 corridor, it would not induce more traffic on Oregon's transportation system as a whole. The increased travel would be a consequence of stimulating job growth in the McMinnville area and reducing the cost of travel between the McMinnville area and the Portland region.[197]

The model shows that with the Bypass, there will be some additional traffic traveling in rural areas, particularly in the form of commuter traffic traveling between the Newberg-Dundee urban area and the McMinnville area and between the McMinnville area and the Portland metropolitan area. However, the overall effect would be small, and system wide, the total number of auto trips would not change with construction of the Bypass.

Because the total number of auto trips system wide would not change, it is questionable whether traffic attracted by the Bypass would be diverted off onto more local rural roads and increase traffic volumes in rural communities. Given the statewide and regional nature of most trips that will occur along the Bypass, it is questionable that these drivers would want to divert onto local rural roads in reaching their destinations. The more likely scenario for this to occur is with the No-Build, where travel congestion and travel delay encourage drivers to find alternative routes. The improvement of mobility within the Oregon 99W corridor should retain traffic on Oregon 99W or the Bypass that otherwise would be seeking rural alternatives to avoid congestion.

Rural driver infiltration also is less likely to occur because the Bypass would not easily facilitate such movements. The directional interchanges at the Bypass termini would keep Bypass traffic on the main roadways of Oregon 99W and Oregon 18 rather than providing drivers with easy access onto rural roads. As a limited access roadway, the East Dundee Interchange connector would direct all traffic using that roadway onto either Oregon 99W or the Bypass rather than allowing that traffic to access rural local streets. And while traffic exiting at Oregon 219 would not have to travel far outside the Newberg UGB to access rural areas east and south of that interchange, there would be few incentives to do so from a transportation standpoint, and land use controls imposed through new plan policies or intergovernmental agreements between ODOT and Yamhill County will discourage rural development of a nature that would attract large volumes of traffic to those rural areas. These include proposed new comprehensive plan policies to maintain and protect agricultural and rural exceptions lands near interchanges from urban development pressures. They include application of an "Interchange Limited Use Overlay" to lands outside UGBs within 0.5 miles of each interchange, within which zone changes to more intensive uses would not be allowed and limitations on some currently authorized conditional uses would be imposed. They also include policies to direct future UGB expansions away from interchange areas.

[197] Id.

7.8.1.2 Pressure for Non-Farm Development on Rural Lands

The four interchanges included in the Bypass project would be located within or close to the urban growth boundaries of Newberg, Dundee, or Dayton. These interchanges would improve accessibility to vacant land planned for urban development within the Newberg, Dundee, and Dayton urban growth boundaries. They also would improve accessibility to rural residential and agricultural lands located outside of the urban growth boundaries.

As described in greater detail in Section 4.2 of the LDEIS Final Technical Memorandum: Land Use and Planning (September, 2002), incorporated herein by this reference, the question of highway capacity expansion and induced travel is one of the most complex facing transportation planners today.

There is no debate that highway projects in the U.S. have had indirect impacts on land use. But while the literature on the effect of transportation infrastructure on the development of land is extensive, it reaches few definitive conclusions and provides little empirical guidance for project-specific evaluations. A recent guidebook completed for ODOT[198] by ECONorthwest and Portland State University highlights the following key points regarding the issue of induced growth:

- There is substantial agreement that transportation improvements *can* directly or indirectly affect land use and development.
- Because the network of highways in urban areas is now extensive, the interstate system is largely completed, and ODOT projects predominantly provide improvements in safety and small improvements to overall travel time and accessibility, the indirect land use impacts of many state highway improvement projects could be small.

Because of these factors, any single highway project is likely to have a proportionately smaller effect on travel, congestion, and land use than a similar sized project would have had 20 years ago. Further, so much transportation and land development has occurred that it is difficult to make a clear determination of what is causing what: Is land use responding to the highway network, or are highway improvements a response to transportation problems that are a result of settlement patterns? In Oregon the interrelationship is stronger than in many other places because transportation plans must conform to local land use plans that are based on the statewide planning goals. Hence, national and international research and literature on induced travel associated with transportation improvements needs to be evaluated in the context of Oregon's land use planning program.

Oregon's land use planning laws are among the strongest in the nation. With a history of almost 30 years, the planning framework has been institutionalized at the state, county, and city level. Oregon's statewide goals are achieved through local comprehensive planning. An acknowledged

[198] ECONorthwest and Portland State University. *A Guidebook for Evaluating the Indirect Land Use and Growth Impacts of Highway Improvements.* ODOT SPR Project 327 (April 2001). http://www.odot.state.or.us/tddresearch/reports/guidebook.pdf

local comprehensive plan is the controlling document for designating the location and density of planned land uses. Public infrastructure, including transportation improvements, must be provided consistent with the local comprehensive plan.

Relative to other states, Oregon's land use planning laws may have helped to limit the potential for induced travel. Urban growth boundaries and agricultural and forest zoning have controlled leapfrog development and limited the expansion of urban areas. Because of this, the more dispersed development that has occurred around freeways in other parts of the country has not occurred to the same degree in Oregon.

It is easy to find examples where land use restrictions have held back development pressures. For example, a large area located adjacent to I-205 at the Stafford Road interchange has remained outside the Portland metropolitan area urban growth boundary and has remained sparsely developed despite its excellent accessibility and close proximity to the cities of Lake Oswego, Tualatin, and West Linn.[199]

The ECONorthwest/PSU guidebook provides evidence that Oregon's land use laws have limited the effect of highway expansions in inducing land use changes. The study compared urbanization trends in 20 Oregon cities to state highway improvements in those cities. It also completed in depth case studies of highway widening projects and changes in land use patterns in six Oregon cities. The guidebook found that:

- Development occurring after the highway improvements was generally consistent with the comprehensive plans established before the highway improvements were made. In other words, the highway improvements, at most, facilitated making the expectations of future development a reality.
- The case studies support the hypothesis that the scale of land use change will correlate with the scale of improvement to accessibility. The highway improvements may have influenced the *rate of development* in two of the case studies (Bend and Corvallis). However, a strong economy and other site-specific factors (availability of infrastructure and visibility) could have been equally significant factors in the rates of growth.
- Good access is a necessary but not sufficient condition for local development. The amount of development responds to the availability of other key public facilities (especially water and sewer) and their costs (including how such facilities will be funded and who will pay for them).
- As implemented by counties, state policies that restrict development of resource lands have been effective in limiting development associated with highway improvements outside UGBs. The case study analysis did not identify any major new developments outside UGBs.

The six case studies support the conclusion that in Oregon, highway-widening projects, by themselves, are not likely to cause changes in land use from what they would have been in the

[199] Brian Gregor, *Statewide Congestion Overview for Oregon*, September 2001 Draft (page 44).

absence of those improvements. Widenings are unlikely to change what gets developed. They are more likely to facilitate whatever development is already allowed by the local comprehensive plan and zoning. There is no conclusion that plan designations or zoning would change in a corridor where a widening has occurred. But the conclusion, based on the six case studies, is that the widenings are neither a necessary nor sufficient condition to predict whether such policy changes will occur.

For the Bypass project, the adopted local comprehensive plans play a central role in the discussion of indirect impacts. The local plans define how much land is needed to meet projected 20-year urban growth needs, and the NDTIP travel demand forecasts are extrapolated from the acknowledged plan projections. The local plans also define the desired location and density of future development. Established urban growth boundaries provide a long-term tool to manage the direction of urban growth. It is assumed that resource lands outside of the UGBs will continue to be protected with strong state statutory provisions and county exclusive farm use zoning. Finally, through intergovernmental agreements with the affected local governments, ODOT will plan, design and manage the Bypass not only to support the acknowledged local plans but also to achieve Oregon Highway Plan objectives to protect the Bypass and its interchanges for their intended functions. This will be realized through:

- Full access control.
- Adoption of Interchange Area Management Plans.
- Amendments to comprehensive plans, zoning ordinances, and TSPs to prevent upzoning of rural lands and to limit or prohibit highway-oriented commercial development near interchanges.

All of these are elements of the IGAs currently being developed by ODOT, Yamhill County and the Cities of Newberg, Dundee, and Dayton for the Bypass project. Moreover, plan policies to protect EFU and rural lands from upzoning and traffic-generating conditional uses, such as those described in the immediately preceding subsection, are being considered for adoption by Yamhill County and by the Cities of Newberg, Dundee, and Dayton concurrently with the County's review of this application.

Concern has been raised that pressures for urban or nonfarm development could extend south of the Willamette River towards or into St. Paul. This is unlikely because this area is a long distance from any city UGB or urban services and, perhaps more tellingly, because the St. Paul and northern Marion County areas already have direct access to the Portland metropolitan area via the I-5/Donald interchange and McKay Road. The Bypass, even with an interchange at Oregon 219, is unlikely to offer faster or more convenient commuter access from St. Paul or northern Marion County to the Portland region than already exists via McKay Road and I-5.[200]

In summary, with full access control, directional interchanges, establishment of an overlay zone to protect rural lands within 0.5 miles of Bypass interchanges, adoption of policies discouraging

[200] See technical memorandum entitled "Other Land Use Issues" (October 8, 2003).

UGB expansions on EFU lands near interchanges, and adoption and implementation of Interchange Area Management Plans to protect the function and capacity of the Bypass and each of its interchanges, the Bypass and the East Dundee Interchange are not likely to have any significant impacts on surrounding rural lands and land uses in terms of increased traffic or pressure for non-farm or highway oriented development. Because they eliminate an otherwise potentially severe congestion problem in the Newberg-Dundee area, they may have the opposite effect of retaining traffic on the major roadway system that, under a No-Build scenario, would seek alternative rural routes to avoid the congestion.[201]

7.8.2 Measures to Reduce Adverse Impacts, Minimize Accessibility to Rural Lands, and Support Rural Uses

OAR 660-012-0070(8) requires, as part of the exception, facility design and land use measures which minimize accessibility of rural lands from the proposed transportation facility and support continued rural use of surrounding lands. Also, OAR 660-004-0020(2)(d) requires an explanation of how the proposed use is compatible with other adjacent uses (including natural resources and resource management or production practices) or how it will be rendered compatible through measures designed to reduce adverse impacts.

7.8.2.1 Compatibility

Looking first at the requirements of OAR 660-004-0020(2)(d), the Bypass and the East Dundee Interchange cannot be developed in a way that avoids all adverse impacts. However, the rule does not require this result. As stated in this rule, "'compatible' is not intended as an absolute term meaning no interference or adverse impacts of any type with adjacent uses."

As with other major ODOT transportation projects, the Bypass project involved a process in which an advisory committee, here the POST, considered a very broad range of impacts in developing a recommended alternative for ODOT to consider. The POST recommended an alternative that it felt met the identified transportation need while minimizing overall adverse economic, social and environmental impacts. This was an appropriate way to approach transportation projects. In addressing OAR 660-004-0020(2)(d), it is important to remember that Goal 12 and the TPR expressly direct local governments and ODOT to plan for, approve, and develop transportation facilities to meet identified transportation needs following consideration of alternative methods and locations and, where exceptions are justified, following analysis and comparison of ESEE consequences. OAR 660-004-0020(2)(d) must be interpreted and applied in a manner that is consistent with this Goal 12 policy directive.

As noted in Section 7.7, the Bypass and the East Dundee Interchange will result in a number of adverse economic, social, and environmental impacts. Where businesses or residences are displaced, ODOT will acquire the displaced properties at fair market value and/or provide relocation benefits, consistent with federal guidelines. For environmental impacts, including

[201] It is not the intent of this discussion to claim that pressure for non-farm or highway oriented development does not occur when new facilities like a bypass are built. Without land use controls, those pressures would occur. However, with the land use controls being put in place, those pressures are not likely to occur for this project.

potential impacts to historic properties, ODOT will follow federal regulations to avoid, minimize or mitigate impacts or, where necessary, develop a wetland or habitat mitigation plan. Mitigation of wetlands could occur in the form of repairing, restoring, or rehabilitating affected wetlands or compensating for wetland impacts consistent with federal regulations.[202] In addition, ODOT will continue to work with federal and state agencies and local governments during the design phase of the Bypass project and will continue to development appropriate mitigation during that process.

Noise impacts can be addressed through the use of noise walls or other devices where appropriate. Visual impacts will be addressed as part of the design phase, with mitigation folded in where appropriate. Visual mitigation techniques include, but are not limited to, landscaping, construction design features, and selection of materials. For some impacts, mitigation will not be feasible. For example, it is difficult to mitigate impacts associated with a loss of neighborhood cohesion. However, ODOT will provide access roads to reconnect areas separated by the Bypass and the East Dundee Interchange. ODOT also will provide farm operations with reasonable access to reach portions of their farm properties divided by the Bypass or the East Dundee Interchange connector road.[203] This will include Bypass crossings at Fullquartz and Riverwood roads to provide access to commercial farms between Dundee and Dayton.

7.8.2.2 Facility Design Measures to Minimize Rural Land Accessibility

The Bypass and its interchanges will be designed to minimize rural land accessibility. The Bypass and interchanges will be fully access controlled.[204] Access to the interchanges will be limited to public street connections only. The two Bypass termini at East Newberg and Dayton will be directional interchanges that will keep Bypass traffic on the main roadways of Oregon 99W and Oregon 18. Additionally, ODOT design standards require that private approach roads near interchanges will be relocated to a distance of at least 1,320 feet away from the interchange ramps. Through complete access control, the East Dundee Interchange connector will direct all traffic using that roadway onto Oregon 99W rather than allowing vehicles direct access to rural local streets.[205] To further minimize rural land accessibility, the Oregon 219 interchange is being designed for location fully within Newberg's UGB.

Additionally, wherever practicable, existing accesses near interchanges will be relocated to a distance of at least 1,320 feet away to comply with ODOT interchange design standards. Besides protecting the interchanges, this should help to minimize travel into rural areas.

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[202] See Bypass Corridor Alternatives ESEE Analysis (November 21, 2003) and East Dundee Interchange Options ESEE Analysis (November 14, 2003). Mitigation also is addressed in each of the technical memoranda prepared for the LDEIS. A list of those memoranda appears in Appendix D-1 of the LDEIS.

[203] Id.

[204] LDEIS at 6-1.

[205] Because the Newberg 219 interchange would be located inside Newberg's UGB, it does not require goal exceptions and it is not necessary to demonstrate that this interchange complies with the standards for goal exceptions. Nonetheless, through intergovernmental agreements and Interchange Area Management Plans adopted by ODOT and Yamhill County, land use controls will be established to discourage rural development of a nature that would attract large volumes of traffic to those rural areas.

7.8.3 Other Measures to Minimize Rural Land Accessibility

Under OAR 734, Division 51, IAMPs are required for any new interchange or significant modifications to an existing interchange. IAMPs also are required by OHP Bypass Policy 1H. The objectives of IAMPs under these standards include:

- Maintaining and enhancing the utility of the state investment;
- Identifying and protecting the functions of bypasses and their interchanges;
- Providing safe and efficient operations between connecting roadways;
- Minimizing the need for major improvements of existing interchanges;
- Assuring land uses that are consistent and compatible with Oregon statewide land use goals; and
- Guiding the long-term operation of bypasses through agreement on land use and transportation management actions.[206]

Principal measures used to minimize rural land accessibility include the access control and design measures described in the preceding subsection. But land use measures being developed by Yamhill County and ODOT also will help to discourage land uses that otherwise might attract more vehicle trips into rural areas. These measures include, among other things: new comprehensive plan policies to maintain and protect agricultural and rural exceptions lands near interchanges from urban development pressures; application of an "Interchange Overlay District" to lands outside UGBs within 0.5 miles of each of the four Bypass interchanges; policies to direct future UGB expansions away from interchanges; and ODOT commitment to provide reasonable access to farms for farm uses only.

Under terms of the interchange overlay district that are currently under consideration, no zone changes to more intense uses would be allowed within these areas. This will help both ensure consistency with Oregon's land use program and protect the function and capacity of the interchanges. Moreover, limitations on some currently authorized conditional uses would be imposed, and these lands will become the lowest priorities for urban growth boundary expansions. This will help reduce pressures to convert agricultural lands to nonfarm uses. These measures are described in the IGAs and proposed ordinances and policy changes that are being submitted concurrent with this goal exceptions application.

[206] See LDEIS at 6-2 and the Introduction to OHP Bypass Policy.