City of Elgin

Transportation System Plan
Final

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Prepared for
City of Elgin

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CHAPTER 1: INTRODUCTION

The Elgin Transportation System Plan (TSP) identifies existing transportation facilities and provides guidelines for future planned and constructed transportation facilities until the year 2018. This TSP updates the transportation element of the Elgin Land Use Plan and replaces the 1979 Elgin Street Plan. The TSP is intended to satisfy the requirements of the Oregon Transportation Planning Rule (TPR) and implement Statewide Planning Goal 12: Transportation, which is Oregon’s transportation planning law. The TPR requires local jurisdictions to coordinate land use and transportation planning, and to consider all modes of travel.

It is important to recognize the relationship between land use and transportation because vehicle trip generation is a direct result of land use. Intense land uses produce large amounts of traffic. If the transportation system around these land uses cannot accommodate the traffic, then congestion, delays, and pollution can degrade quality of life and harm business opportunities. Planning for future development in conjunction with planning the future transportation system results in the most efficient possible transportation system. Identifying transportation needs for the next 20 years also provides the opportunity to plan the most equitable and economically beneficial transportation system for Elgin. The TSP takes into account surrounding land uses as it identifies potential transportation projects.

PLANNING AREA

The TSP planning area includes the City of Elgin and all areas inside the Elgin Urban Growth Boundary (UGB). This TSP applies to streets that fall under different jurisdictions, including the State of Oregon, Union County, and the City of Elgin. Located at the junction of Oregon Highways 82 and 204, Elgin is approximately 20 miles north of La Grande and roughly 9 miles west of the Wallowa County border. Elgin contains an estimated 1,715 people. Principal industries include agriculture, timber processing and public employment. The natural beauty of the Elgin area draws many outdoor enthusiasts for activities such as skiing, hunting, fishing, and hiking. Union County is roughly 49% publicly owned, with National Forest land comprising the majority of public ownership. A map of the planning area is shown in Figure 1-1. The map shows Elgin’s Urban Growth Boundary (UGB), and the state and local street systems.

There are two significant state corridors that intersect in the City of Elgin. Oregon Highway 82 and Oregon Highway 204 travel through Elgin. Oregon Highway 82 originates in La Grande at its intersection with US Highway 30 and extends approximately 33 miles in a northeasterly direction to the Wallowa County line, connecting Imbler, Elgin, La Grande, and Interstate 84. Oregon Highway 204, also known as the Weston-Elgin Highway, originates in Weston, Oregon and extends roughly 20 miles in a southeasterly direction to its intersection with Highway 82 in Elgin.

At the local level, these state facilities serve as principal arterials, and support a large volume of freight and passenger vehicle traffic. On a regional level, these corridors also provide connectivity between population centers in other counties. In addition to state highways, a network of local city streets connects with the state system and provides local access, as well as connectivity to rural areas of Union County.

PLANNING PROCESS

The Elgin Transportation System Plan is part of a larger project funded by the Oregon Transportation and Growth Management Program to develop individual TSPs for rural Union County and the
incorporated jurisdictions of Elgin and Imbler. The Imbler and Elgin City Councils are serving as each jurisdiction’s Technical Advisory Committee (TAC). In Union County, the County Transportation Advisory Committee is serving as the county’s TAC. Important components of the process include:

- Involving the Elgin community (Chapter 1)
- Developing goals and objectives (Chapter 2)
- Reviewing existing plans, policies, and transportation conditions (Chapters 3 & 4)
- Developing travel forecasts (Chapter 5)
- Developing and evaluating potential transportation system improvements (Chapter 6)
- Developing modal plans (Chapter 7)
- Identifying funding options (Chapter 8)
- Developing implementing policy and ordinance amendments (Chapter 9)

**Community Involvement**
Community involvement is an important aspect of any planning process. Part of the transportation planning process includes providing opportunity for the public to participate in the development of the Elgin Transportation System Plan. The opportunity for the public to become involved depends on distribution of notice to affected citizens. Letters mailed to stakeholders, local officials, and interested citizens are the most direct methods of notification, and proved most useful to the City of Elgin. Posters, flyers, and public service announcements in local newspapers also serve to notify citizens of upcoming opportunities for public participation. A public involvement record is included in Appendix A.

**Goals and Objectives**
The goals and objectives of the Elgin TSP were developed using input from Elgin’s TAC. These goals and objectives were used to make decisions about potential improvement projects. The goals and objectives are listed in Chapter 2.

**Review and Inventory of Existing Plans, Policies, and Public Facilities**
In order to understand the present conditions of, and identify deficiencies in, Elgin’s transportation system, all existing plans and policies were analyzed and the current transportation system and facilities were cataloged. The purpose of this inventory and analysis is to assess Elgin’s growth and development based on existing policies and ordinances and to catalog the current transportation system and facilities.

The inventory of existing conditions is included in Appendix B and is explained in detail in Chapter 3. Chapter 4 describes how Elgin’s current system functions.

**Future Transportation System Demands**
The Transportation Planning Rule requires a 20-year forecast be incorporated into each TSP. Future traffic volumes for the existing, plus committed, transportation system were projected using ODOT’s Level 1 - Trending Analysis methodology. The population and travel forecasts are discussed in detail in Chapter 5.

**Potential Transportation System Improvements**
Once future traffic volumes were identified, an analysis of several potential improvement projects took place. These potential projects were also evaluated against the goals and objectives identified in Chapter 2. The analysis of the potential improvement projects was based on several factors including the estimated cost of each project, land use impacts, safety, and equity for transportation users. The potential improvement projects were developed with the help of Elgin’s TAC, community members, ODOT, and Union County staff. After project analysis, a series of recommended transportation system improvements was selected. These recommendations are described in detail in Chapter 6.
**Transportation System Plan**

The Transportation System Plan addresses all modes of travel and identifies a future street system plan for the City of Elgin. This section of the TSP provides a framework for implementation by including street design standards, access management guidelines, and a capital improvement program. The street system plan was developed from TAC discussions and evaluation of the potential transportation improvement projects.

The Elgin Bicycle and Pedestrian Plan is a separate document adopted by the Elgin City Council on August 13, 1996. The public transportation, rail, air, pipeline, and waterborne transportation modal plans were developed based on discussions with the owners and operators of the facilities. Chapter 7 details each of the modal plans and discusses street and access management standards.

**Funding Options**

The City of Elgin will have to work with ODOT and each of the other eight county incorporated jurisdictions to pay for new transportation projects over the next 20 years. A survey of potential funding and financing opportunities is described in Chapter 8.

**Recommended Policies and Ordinances**

Recommended policy and ordinance amendments for the Elgin Land Use Plan, the Elgin Subdivision and Partition Ordinance, and the Elgin Zoning Ordinance are included in Chapter 9. These policy and ordinance changes are necessary to implement the TSP and meet the requirements of the TPR.

**RELATED DOCUMENTS**

The Elgin TSP addresses local transportation needs within its Urban Growth Boundary and City Limits. There are several other documents related to specific local and regional transportation needs, which are listed below.

**City Transportation System Plans**

Three city TSPs were prepared and adopted during the summer of 1998 for communities in the southern portion of Union County. These are:

- City of Cove Transportation System Plan
- City of Union Transportation System Plan
- City of North Powder Transportation System Plan

Additionally, La Grande and Island City are in the process of preparing a joint TSP to address transportation needs within both cities. This TSP is slated for adoption during fall 1999.

In conjunction with Elgin’s Transportation System Plan, two more TSPs are being developed. These are:

- City of Imbler Transportation System Plan
- Union County Transportation System Plan

Each small city TSP addresses identified needs within that jurisdiction’s UGB. Each plan describes street development standards, access management standards, a Street System Plan showing the layout of future streets, modal plans, and policy and ordinance changes necessary for the implementation of each TSP.
Corridor Strategies
Oregon Highway 82 is a highway of statewide significance and constitutes a major transportation corridor in Union County. A final Oregon Highway 82 Corridor Plan was completed in May 1998 and details several corridor strategy objectives in order to protect the function of the state highway system.

Other Plans
The Elgin TSP will coordinate with Oregon Highway 82 corridor strategies, as well as the following plans:

- Oregon Transportation Plan (1992)
- Oregon Highway Plan (1991)
- Elgin Bicycle and Pedestrian Plan (1996)
- Oregon Aviation System Plan (1974 – currently being updated)
- La Grande/Union County Airport Master Plan Update (1998)
- Oregon Rail Freight Plan (1994)
CHAPTER 2: GOALS AND OBJECTIVES

The following goals and objectives provide a framework against which to compare each element of the TSP; specifically, the potential transportation system improvement projects. These goals and objectives were developed with input from the Technical Advisory Committee.

OVERALL TRANSPORTATION GOAL
Develop a transportation system that enhances the livability of Elgin and the county and accommodates growth and development through careful planning and management of existing and future transportation facilities.

GOAL 1:
Improve and enhance safety and traffic circulation on the local street system.

Objectives:
A) Develop an efficient road network for Elgin and the county.
B) Improve and maintain existing roadways.
C) Ensure planning coordination between Elgin, the county, and the state.
D) Identify truck routes to reduce truck traffic in urban areas where needed.
E) Ensure that roads created in land division and development be designed to tie into existing and anticipated road circulation patterns.
F) Review and revise, if necessary, street cross section standards for local, collector, and arterial streets to enhance safety and mobility.
G) Evaluate the need for traffic control devices.
H) Analyze the safety of traveling speeds and consider proposals to modify posted speeds.
I) Identify local problem spots and recommended solutions.

GOAL 2:
Preserve the function, capacity, level of service, and safety of Oregon Highways 82 and 204.

Objectives:
A) Develop access management standards.
B) Develop alternative, parallel routes.
C) Promote alternative modes of transportation.
D) Promote demand management (rideshare, park & ride).
E) Promote transportation system management (median barriers, etc.)
F) Develop procedures to minimize impacts to and protect transportation facilities, corridors, or sites during the development review process.
G) Promote railroad freight service.

GOAL 3:
Identify the 20-year roadway system needs to accommodate developing or undeveloped areas without undermining the rural nature of Elgin.

Objectives:
A) Adopt policies and standards that address street connectivity, spacing, and access management.
B) Integrate new arterial and collector routes into improved grid systems with an emphasis on removing the pressure from traditionally heavy traffic collectors.
C) Examine improved access into and out of Elgin and the county for goods and services.
D) Explore improved access on and off arterials to encourage growth.
E) Determine whether there are opportunities to promote railroad freight service to reduce truck-related traffic.

**GOAL 4:**
Increase the use of alternative modes of transportation (walking, bicycling, rideshare/carpooling, and transit) through improved access, safety, and service.

**Objectives:**
A) Identify where shoulder bikeways are appropriate on rural collector and arterial roads.
B) Promote alternative modes and rideshare/carpool programs through community awareness and education.
C) Promote future expanded transit service by recommending funding to local transit efforts and seeking consistent state support.
CHAPTER 3: TRANSPORTATION SYSTEM INVENTORY

Part of the TSP planning process includes an inventory of Elgin’s existing transportation system. The inventory records the roadway system and roadway functional classifications, pedestrian and bicycle facilities, public transportation, rail service, and whether air service, pipeline systems, and waterborne transportation are present.

ROADWAY SYSTEM
The most obvious element of the transportation system is the roadway system. Historically, reliance on the automobile and rapid urbanization have led to the majority of transportation dollars being spent on building and maintaining roads. Recently, consideration of other modes, in addition to vehicular travel, has emerged as an alternative focus for transportation dollars.

This TSP inventories and discusses all modes of travel, but in Elgin the automobile remains the prevalent mode due to the distances between Elgin and other population centers and due to the lack of mass transit service. As a result, over the 20-year planning period, the roadway system will remain the emphasis of the transportation system; therefore, maintaining a safe, equitable transportation system is the primary focus of this TSP.

The existing street system in the City of Elgin was inventoried through several methods and includes facilities under different jurisdictions. All state highways, county and city arterials, collectors, and local streets included in the planning area were cataloged. Components of the inventory include:

- Road name, classification, and jurisdiction
- Road length, pavement width and total right-of-way width
- Road surface and surface condition
- Number of travel lanes
- Presence of parking, bicycle, and pedestrian facilities
- Posted speed limits

The complete inventory of Elgin’s roadway system is included in Appendix B.

Roadway Classification
Elgin’s streets are in state, county, or city jurisdiction. Some streets around Elgin’s periphery are in joint city-county jurisdiction. Oregon Highways 82 and 204 serve as principal arterials for the City of Elgin. The state functional classification system is recognized as a separate classification system. Remaining city streets are grouped as arterials, collectors, or local streets according to their function. Figure 3-1 shows Elgin’s existing street system and functional classifications.

State Highways
In Elgin, state highways serve as arterials and form the basis of the primary street network. This network facilitates the movement of large volumes of people and freight within and through Elgin and the outlying area. It also links distant jurisdictions and provides connections with the greater region and surrounding states. Though the purpose of an arterial is to expeditiously move cars and trucks from one destination to the next, the state highways in Elgin also serve to access property. This is evident in Elgin where the state highways accommodate local, regional, and statewide transportation needs.
Oregon Highway 82

Oregon Highway 82 extends approximately 33 miles in a northeasterly direction to the Wallowa County line, connecting Interstate 84 and La Grande to Imbler and Elgin, and eventually terminating at Wallowa Lake in Wallowa County. Oregon Highway 82 is a two-lane, paved highway with a posted speed of 55 miles per hour, except within cities and potentially hazardous areas due to topography or weather. Oregon Highway 82 in Elgin is locally known as 8th Avenue. Posted speeds within Elgin’s UGB are typical of urban development; 25 miles per hour in congested areas, 20 miles per hour in school zones, and 40 miles per hour at the periphery of town. Pavement condition is generally “good.” The highway does accommodate pedestrians in the urban area but bicyclists commonly travel along the paved shoulders, which are typically 4 feet in width. Land uses along the highway are generally zoned for commercial and residential activities, with some industrial uses. City streets connect with Oregon Highway 82 to provide individual property access, and access to local businesses.

Oregon Highway 82 is a highway of statewide significance and originates in La Grande at its intersection with US Highway 30. According to the 1991 Oregon Highway Plan, the primary function of statewide highways is to provide connections and links to larger urban areas, ports, and major recreation areas that are not directly served by interstate highways. Statewide highways also provide connection to the interstate system. The management objective of statewide highways is to provide for safe and efficient high-speed, through travel in rural areas and high-to-moderate speed traffic flow with limited interruptions in urban and urbanizing areas.

According to the 1991 Oregon Highway Plan, Oregon Highway 82 is part of the Access Oregon Highway classification system, which was developed to identify a network of primary statewide highways that link major economic and geographic activity centers to each other, to other high level highways, to ports, and to other states. Designation as an Access Oregon Highway means that the Oregon Highway 82 corridor is a top priority for improvement project funding. Oregon Highway 82 is also part of the Hells Canyon Oregon Scenic Byway system and portions of the corridor in Wallowa County are part of the Oregon Scenic Waterway and National Wild and Scenic Study Corridor, which is tied to the Wallowa and Minam River systems.

According to the Oregon Highway 82 Corridor Plan, “the overall strategy for the Highway 82 Corridor is to maintain the condition and increase the functionality of existing transportation facilities.” Corridor strategy objectives were identified in order to achieve the overall strategy and are grouped into either “transportation performance measures” or “transportation impacts.” These are terms developed by ODOT to provide common language for statewide corridor analysis and are based on Oregon Transportation Plan goals and policies. Each corridor strategy objective is also associated with specific “decisions.” Decisions can be either “management decisions,” “capital improvement decisions,” or “service improvement decisions.” These decisions, then, become the recommended improvement projects from the plan for the next 20 years. The Oregon Department of Transportation (ODOT) chose to use the term “decision” in order to demonstrate that some action was proposed to address an identified need within the corridor. These decisions, or improvement projects, will be implemented through the Statewide Transportation Improvement Program (STIP) and the ODOT Region 5 work program, depending on funding resources. The STIP balances recommended improvement projects from the Oregon Highway 82 Corridor Plan with other recommended improvement projects throughout the state in order to achieve a safe, efficient, and equitable transportation system. Each decision, or recommended improvement project, is prioritized as a “near” (0-5 years), “mid” (5-10 years), or “long” (10-20 years) term project. A more detailed discussion of improvement projects follows in Chapter 6.

Oregon Highway 204
Oregon Highway 204, also known as the Weston-Elgin Highway, and locally called Division Street, is a highway of regional significance. It originates at its junction with Oregon Highway 11 in Weston (Umatilla County) and extends roughly 20 miles in a southeasterly direction to its terminus at the junction with Oregon Highway 82 in Elgin. It is a two lane, paved highway with turn-outs provided for slow-moving vehicles outside the urban area. There are sidewalks installed along urban sections but cyclists share the travel lane or utilize two foot, paved shoulders. Posted speeds inside Elgin’s UGB are typical of urban development; 25 miles per hour in congested areas, 20 miles per hour in school zones, and 40 miles per hour at the periphery of town. Generally, pavement conditions are “fair” to “poor.” Land uses along Oregon Highway 204 are generally zoned for residential and general commercial uses. Outside the city limits, but within the UGB, the Elgin Boise Cascade Wood Products Operation is in a County I-2 Heavy Industrial Zone on the south side of Oregon Highway 204. City streets connect with Oregon Highway 204 to provide individual property access to these uses.

The primary function of regional highways is to provide connections and links to areas within regions of the state, between small, urbanized areas and larger population centers, and to higher level facilities. A secondary function is to serve land uses in the vicinity of these highways. The management objective of regional highways is to provide for safe and efficient high-speed, through travel in rural areas, except where there are significant environmental constraints, and moderate-to-low speed traffic operation in urban and urbanizing areas with moderate interruptions of traffic flow.

City Streets
The City of Elgin has about 43 public streets totaling approximately 18 miles in its jurisdiction. These streets connect with the state highway system to form a network that provides circulation around the City of Elgin, and provides individual land access. City streets are two-lane facilities with most streets providing on-street parking. Pedestrian facilities are provided on core city streets. The adopted Elgin Bicycle and Pedestrian Plan identifies bicycle and pedestrian facilities on city streets, and is included in Appendix C.

For the purposes of the TSP, city streets are classified into three categories. Functional classifications for state highways are determined at the state level. The function of state highways is mobility (movement through Elgin) versus access (movement to a specific destination within Elgin), and they carry the highest traffic volumes. Both Highway 204 and Highway 82 are paved facilities.

Elgin’s designated arterials overlap with the state highway system. Therefore, portions of Division Street (Oregon Highway 204), South 8th Avenue (Oregon Highway 82), and Albany Street (Oregon Highway 82) are designated as arterials by the City of Elgin, as well as by the State of Oregon. The segment of 7th Avenue between Division and Albany and the segment of 8th Avenue between Albany and Baltimore are also designated as arterials to accommodate the signed truck route. Elgin’s city streets are designated either as arterials, collectors, or local streets. Arterials serve through traffic while collectors balance mobility and access. Both carry significant traffic volumes and connect major activity centers. Virtually all arterials and collectors are paved, very few are gravel. Local streets carry the lowest traffic volumes and their purpose is primarily to provide access to individual properties. Many local streets are paved, though several are gravel. Table 3-1 lists city arterials and collectors. City streets not identified as arterials or collectors are classified as local streets. Figure 3-1 shows Elgin’s existing street system and functional classifications.
Table 3-1
Elgin Functional Classifications

<table>
<thead>
<tr>
<th>Elgin Arterials</th>
</tr>
</thead>
<tbody>
<tr>
<td>South 8th Avenue (Oregon Highway 82)</td>
</tr>
<tr>
<td>East Albany Street (Oregon Highway 82)</td>
</tr>
<tr>
<td>West Division Street (Oregon Highway 204)</td>
</tr>
<tr>
<td>7th Avenue – Division to Albany</td>
</tr>
<tr>
<td>8th Avenue – Albany to Baltimore</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elgin Collectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hartford Lane</td>
</tr>
<tr>
<td>Detroit Street – 10th to 15th</td>
</tr>
<tr>
<td>Birch Street – 8th to 17th</td>
</tr>
<tr>
<td>Cedar Street – east of Highway 82</td>
</tr>
<tr>
<td>Palmer Street</td>
</tr>
<tr>
<td>10th Avenue</td>
</tr>
<tr>
<td>14th Avenue – south of Highway 204</td>
</tr>
<tr>
<td>15th Avenue – north of Highway 204</td>
</tr>
<tr>
<td>17th Avenue – south of Highway 204</td>
</tr>
<tr>
<td>Division Street – 7th to 8th</td>
</tr>
<tr>
<td>Baltimore Street – 8th to 10th</td>
</tr>
</tbody>
</table>

Bridges

There are 208 bridges in Union County on county, state, and local facilities. Union County has jurisdiction over 70 of these bridges and ODOT has 133 bridges on its system. The City of Elgin has 5 bridges in its jurisdiction, two of which have recently undergone rehabilitation projects.

There are two small bridges across Phillips Creek. The first bridge over Phillips Creek exists on Highway 82 between Dogwood Street and Canning Street. The second bridge exists on the Boise Cascade Access Road west of Pumpkin Ridge Road.

Just outside the city limits the following three bridges exist over the Grande Ronde River:

- Highway 82 east of 3rd Avenue
- Cedar Street/Clark Creek Road at the east city limits
- Highway 82 south of Canning Street

The process for determining the priority of bridge rehabilitation projects is dependent upon several factors. ODOT has a program where a consultant bridge inspector is retained to inspect bridge facilities. Specific elements, such as structural conditions and functional obsolescence, are evaluated. A complex formula based on several factors is used to rate each bridge. The rating system ranges from 0 to 100 with numbers over 80 indicating bridge sufficiency. Bridges can, however, be considered functionally obsolete yet still be structurally sound. This means that the bridge no longer meets minimum horizontal or vertical size requirements because the amounts and types of vehicles have changed over time, yet the integrity of the structure is not compromised. Bridge ratings then serve to prioritize maintenance and rehabilitation projects. This information is forwarded to the appropriate governmental unit.
PEDESTRIAN SYSTEM
Walking is a popular form of exercise, as well as the most basic form of transportation, for people of all ages and income levels. Everyone is a pedestrian, yet in rural Oregon, pedestrian facilities are seldom designed as an integral component of the road system. According to the Oregon Bicycle and Pedestrian Plan, a person in reasonable physical condition can walk up to one kilometer (about .6 miles) in less than twenty minutes with minimal physical exertion. This makes walking a viable alternative to many short commuter trips, and actually may take less time than driving a car.

Elgin’s pedestrian traffic is concentrated in the vicinity of the schools and commercially zoned areas, though many people walk throughout Elgin for exercise. Sidewalks are provided on most streets within the downtown core, although many sidewalks do not have curb cuts to facilitate wheelchair traffic. Elgin’s small size accommodates foot travel, but moderate-to-severe cold weather can often deter wintertime pedestrians. Some of Elgin’s outlying neighborhoods do not have sidewalk systems, forcing pedestrians to share the roadway with vehicles. Generally speaking, traffic volumes on local streets are not significant enough to jeopardize pedestrian safety.

Nine crosswalk locations exist within Elgin. Three of these crosswalks are located across Highway 204 east of 12th Street, west of 11th Street, and west of 8th Street. Four crosswalks exist on all four approaches of the Baltimore Street/12th Avenue intersection. The remaining two crosswalks exist on 12th Street north of Division Street and Baltimore Street west of 10th Avenue.

Figure 3-2 shows Elgin’s existing pedestrian system.

BIKEWAY SYSTEM
Bicycle facilities, like pedestrian facilities, are seldom designed as an integral component of the road system. Often, bikeways are added as an afterthought, and as a result, conflicts between cyclists and vehicles can occur, compromising safety.

Cycling is an efficient mode of travel, with the average bicycle trip being two miles in length, and cycling mitigates some of the negative impacts of growth, such as air and water pollution, traffic congestion, and noise.

The Elgin City Council adopted the Elgin Bicycle and Pedestrian Plan on August 13, 1996. This plan identifies appropriate streets, based on traffic volumes and posted speeds, that can safely accommodate bicycle traffic. Few of these streets contain facilities sanctioned only for bicycle travel; the majority of bicycle projects call for shared travel lanes with vehicles, or on roadway shoulder bikeways. Figure 3-2 shows Elgin’s existing bikeway system.

The City of Elgin sees a moderate level of bicycle use, both for recreational and transit purposes. Most cyclists in Elgin are children at play or traveling to and from school activities. Bicycle travel between cities also occurs on arterials and collectors, though on a much smaller scale. The recommendations from the Elgin Bicycle and Pedestrian Plan will expand and enhance bicycle travel in the city. The Elgin Bicycle and Pedestrian Plan is included in Appendix C.

The Elgin Bicycle and Pedestrian Plan was funded by the Transportation and Growth Management Program and prepared in accordance with the TPR. The plan identifies a set of goals and objectives to guide the development of a safe and efficient bikeway system for the City of Elgin. The plan was developed involving citizen participation and was guided by the Elgin City Council.
PUBLIC TRANSPORTATION SYSTEM

Public transportation in Elgin is provided by Community Connection, who provides transit services to the general public. Client transport services are provided by New Day Enterprises and the Center for Human Development for the elderly and disabled. Wallowa Valley Stage Line, Blue Mountain Cab Company, Greyhound Bus Lines, and Mid-Columbia Bus Company offer a variety of specific transportation services, all affect the City of Elgin to some degree.

Community Connection is a Dial-A-Ride transit service begun originally for the transportation disadvantaged, but has expanded to serve the general public. Requests for rides should be made a day in advance. The bus fare is 50 cents per one way trip and $1.00 per round trip. Community Connection has a total of six vans; one 10-passenger bus is utilized in Elgin. Transit service in Elgin operates two days per week and all drivers are volunteers. The Elgin bus operates on Wednesdays, traveling to Elgin and Imbler, then continuing to La Grande. On Thursdays, the Elgin bus provides transit exclusively in Elgin, with a focus on the Elgin Senior Meal Site.

Community Connection is projecting a substantial ridership increase. In the mid-1990s, countywide, Community Connection served about 13,650 rides per year, and this is anticipated to grow to 27,000 rides per year.

There are two Dial-A-Ride services available in the Elgin area specifically for the transportation disadvantaged. New Day Enterprises and the Center for Human Development both provide client transportation only. New Day Enterprises operates three lift-equipped vans, one lift-equipped mini-van, two standard vans, one standard mini-van, one lift-equipped station wagon, and one lift-equipped bus. The Center for Human Development operates one lift-equipped van, one lift-equipped bus, and three standard vans. These vehicles are used to transport group home clients on a 24-hour basis. Additionally, Union-Wallowa County Veteran’s Services has one 8-passenger van stationed in La Grande for the transportation of veterans to the Veteran’s Administration Hospital in Walla Walla, Washington two times per month. The van also travels periodically to Portland, Oregon. This van is used for medical transportation only and transported 700 people in 1997. There is no cost to passengers. The Veteran’s Administration Hospital pays for vehicle maintenance and fuel and drivers are volunteers.

Together Community Connection, New Day Enterprises and the Center for Human Development provide necessary transit services for the transportation disadvantaged of Union County. In 1990, these three non-profit groups formed the Union County Transportation Coalition to pool resources in an effort to lower the cost per trip, and to efficiently increase service in Union County without duplicating services.

The Wallowa Valley Stage Line is owned by Moffit Brothers Transportation and is based out of the City of Lostine (Wallowa County). An 8-person van operates daily, except Sundays and holidays, between Joseph in Wallowa County and La Grande in Union County with stops in Enterprise, Lostine, Wallowa, Minam, Elgin, Imbler, and Island City. This transit service is a fixed route service but during the summer months, Wallowa Lake is added to the route on an on-call basis only. Scheduled departure from Joseph is 6:30 A.M. with arrival in Elgin at 8:00 A.M. and the return trip is scheduled to depart from Elgin at 12:30 P.M. with arrival in Joseph at 2:45 P.M. The cost for a one-way trip from Joseph to Elgin is $6.65 while a round trip costs $11.90. Fare prices vary depending upon trip length. Wallowa Valley Stage Line does not currently have a van with wheelchair transport capabilities but is taking steps to remedy this situation. Until they have a van that complies with the Americans with Disabilities Act (ADA), Wallowa Valley Stage Line rents a van with these capabilities when a patron specifically requests the service. In addition to transporting passengers, Wallowa Valley Stage Line also transports individual packages. Moffit Brothers Transportation also offers charter service.
Blue Mountain Cab Company provides 24-hour taxi service to the general public, though they do not comply with the ADA. Trips within La Grande’s City Limits cost $5.00 one way and trips outside the city limits cost an additional $1.25 per mile. The cost for senior citizens is $2.50 one way, to any destination.

Greyhound Bus Lines does not provide transit service within Union County, but does provide connections with destinations outside of Union County. During the summer months there are eight buses per day traveling through Union County while during the rest of the year there are five buses per day traveling through the county. Wallowa Valley Stage Line coordinates its arrival in La Grande to connect with Greyhound Bus service. Greyhound Bus Lines has an agreement with AMTRAK whereby AMTRAK tickets can be used to ride Greyhound buses in order to facilitate the movement of passengers through areas no longer served by passenger rail.

Mid-Columbia Bus Company, based in Condon (Gilliam County), does not provide public transit services but does hold the contract in Union County for bussing school children. Additionally, Mid-Columbia Bus Company offers charter service.

**RAIL SERVICE**

Union County no longer has passenger rail service. AMTRAK’s “Pioneer” route originated in Chicago, Illinois and ended in Seattle, Washington, utilizing the corridor that parallels Interstate 84 and stopping in La Grande. AMTRAK terminated its passenger rail service in May 1997 due to federal budget cuts. There is local interest in restoring AMTRAK service to La Grande. As passenger rail is developed in other parts of Oregon, an extension of this service to the east may be considered within the 20-year planning period. According to the ODOT Rail Section, there is a tentative proposal to implement a fleet of small, efficient trains for express service in the Willamette Valley within the 20-year planning period. This would serve as a test case to gauge support and ridership, and if successful, may impact eastern Oregon because express rail service may be extended to the eastern region of the state.

AMTRAK designated Greyhound Bus Lines a carrier of AMTRAK ticket holders in order to move passengers through areas no longer served by the passenger rail company. This means that through trips can be booked using the same ticket.

The Idaho Northern and Pacific (INP) railroad operates a freight line in Union County, which extends to Elgin. Idaho Northern and Pacific utilizes a branch line that diverges from the Union Pacific mainline in La Grande and heads due north along Oregon Highway 82 through Imbler to Elgin. This line moves less than one million gross tons of freight per year, mostly timber and agricultural products. In 1994, the Idaho Northern and Pacific petitioned the Surface Transportation Board to abandon roughly 61 miles of track between Elgin and Joseph, which lies mostly in Wallowa County. This petition for abandonment was approved March 12, 1997 by the Surface Transportation Board. The Oregon Highway 82 Corridor Plan identifies the acquisition of the INP railroad right-of-way to utilize as a multi-use path between Elgin and Joseph as a potential improvement project.

**AIR SERVICE**

Union County owns and operates the La Grande/Union County Airport, which is located roughly 20 miles south of Elgin. Vehicle access is provided from Pierce Road, which intersects with Oregon Highway 82 north of Island City and intersects with Oregon Highway 203 south of La Grande. A light industrial park is situated south of the airport containing land uses that are fully compatible with airport uses. The airport and the airport light industrial park are on approximately 680 acres of land zoned for Public Airport and Light Industrial uses. Approximately half of the acreage is vacant and one scenario
for future land use is to expand the light industrial park. Surrounding zoning is for exclusive agricultural use. According to the Union County Zoning, Partition & Subdivision Ordinance, an Airport Overlay Zone was “created in 1983 to provide safe and suitable airport operations without dangerous obstructions to air space and to provide an environment around airports which will not be adversely affected by noise and safety problems and which is compatible with an airport and its operations.” Figure 3-3 shows the overlay zone.

The La Grande/Union County Airport is currently a Transport Class Airport and is served by two runways, two parallel taxiways, and two stubtaxiways. Runway 12/30 is 5,600 feet long by 100 feet wide. Runway 16/34 is 3,400 feet long by 60 feet wide. The 1998 La Grande/Union County Airport Master Plan Update delineates two instrument approach procedures: a Non-Precision Instrument Global Positioning System (GPS) approach to Runway 16 or a circling type Non-Precision Non-Directional Beacon (NDB/GPS-A) approach to the airport; though this type is not aligned with a specific runway. In 1997, there were 40 based aircraft and an estimated 15,500 operations (take-offs and landings). As the number of based aircraft increases, so will the number of operations. Table 3-2 shows the forecast of based aircraft and operations until the year 2017.

Table 3-2
Based Aircraft and Operations Forecast

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based Aircraft</td>
<td>40</td>
<td>42</td>
<td>49</td>
<td>54</td>
</tr>
<tr>
<td>Operations</td>
<td>16,436</td>
<td>17,661</td>
<td>18,971</td>
<td>20,983</td>
</tr>
</tbody>
</table>

Source: La Grande/Union County Airport Master Plan Update, 1998

The La Grande/Union County Airport does not have scheduled passenger air service, but charter services are available. Federal Express and United Parcel Service (UPS) both land at the La Grande/Union County Airport on a daily basis (except Sundays) to deliver and pick up individual packages, as well as business inventory. There is also a plane landing twice daily to pick up and deliver bank notes and other important banking documents. This airport also serves as a base of operations for the U.S. Forest Service during fire suppression season facilitating air tanker operations, transporting fire crews and smoke jumpers to fire sites, operating fire spotter planes, and storing and delivering food and materials. The U.S. Forest Service estimates that the La Grande/Union County Airport is the most economically efficient and most strategically located airport for fire suppression in this region.

The La Grande/Union County Airport is currently equipped to accommodate commuter passenger service, except for the necessary metal detectors and related safety equipment for the terminal facilities. Union County supports commuter passenger service and has studied this issue to determine ridership in order to draw an air carrier to Union County. According to the Union County Director of General Services, an informal study of local travel agencies determined that approximately 36 airline tickets per day are purchased in Union and Wallowa Counties. So, theoretically, an airline with a six to ten passenger plane performing four operations per day would have the ridership necessary to support it. It is hard to gauge potential ridership, though, until a carrier actually tries to provide the service. The Union County Director of General Services speculates that La Grande would have to be a stop in...
between two points and that fares would probably be high to cover start-up costs. So while the La Grande/Union County Airport would like to see commercial passenger service, it is not likely within the 20-year planning period.

**PIPELINE SYSTEM**
There are two major pipelines that traverse Union County.

The Chevron Pipeline carries refined products such as gasoline, diesel, and jet fuel. Chevron owns two lines but only one is utilized; the other is abandoned.

The Northwest Pipeline includes two large lines carrying natural gas, which is administered locally in Union County by WP Natural. This pipeline serves seven of the eight incorporated jurisdictions in Union County; only Cove does not have access to natural gas service. The stub gas line that serves Imbler and Elgin roughly parallels Oregon Highway 82 and terminates in Elgin.

Both the Chevron and Northwest Pipelines occupy the same corridor and enter Union County from Baker County at North Powder. They generally parallel Interstate 84 and exit into Umatilla County near Kamela.

**WATER TRANSPORTATION SYSTEM**
Elgin has no navigable waterways, therefore Elgin has no waterborne transportation services.
CHAPTER 4: CURRENT TRANSPORTATION CONDITIONS

As part of the planning process, the current operating conditions for the transportation system were evaluated. This evaluation focused primarily on street system operating conditions since the automobile is by far the dominant mode of transportation in Elgin.

TRAFFIC VOLUMES

A.M. and P.M. peak hour turning movement traffic volumes were collected by Union County and ODOT staff in August and September 1998 at the following study area intersections:

- Division Street (Highway 204)/21st Avenue
- Division Street (Highway 204)/17th Avenue
- Division Street (Highway 204)/10th Avenue
- Cedar Street/8th Avenue (Highway 82)
- Alder Street/8th Avenue (Highway 82)
- Division Street (Highway 204)/8th Street (Highway 82)
- Albany Street (Highway 82)/7th Avenue

The study intersections generally represent major intersections and access points for land uses generating significant amount of traffic. These traffic volumes were adjusted by applying seasonal factors from ODOT’s 1997 Traffic Volume Tables. The seasonal adjustment factors were derived from a permanent count station located on Highway 82 east of the Elgin City Limits. These seasonal factors are summarized in Table 4-1. The resulting A.M. and P.M. peak hour traffic volumes are shown in Figure 4-1.

The A.M. peak hour traffic counts indicate that the A.M. peak hour generally begins between 7:15 and 7:30 A.M. depending on the location. The beginning of the P.M. peak hour generally occurs between 3:30 and 3:45 P.M.

Truck traffic was counted during the A.M. and P.M. peak hour turning movement counts by intersection approach. Table 4-2 summarizes the truck volumes and percentages. As shown in Table 4-2, the truck percentage in the A.M. peak hour on Highways 82 by intersection approach range from 0% to 23% in the northbound direction and 6% to 16% in the southbound direction. These percentages translate from 1 to 45 trucks in the A.M. peak hour in both directions of travel. During the P.M. peak hour, the truck percentages by intersection approach range from 5% to 26% in the northbound direction and 7% to 13% in the southbound direction. The number of trucks on Highway 82 ranged from 27 to 38 in both directions of travel.

The truck percentages in the A.M. peak hour on Highway 204 by intersection approach range from 10% to 30% in the eastbound direction and 9% to 37% in the westbound direction. These percentages translate from 20 to 24 trucks in the A.M. peak hour in both directions of travel. During the P.M. peak hour, the truck percentages by intersection approach range from 9% to 22% in the eastbound direction and 5% to 20% in the westbound direction. The number of trucks on Highway 204 ranged from 22 to 28 in both directions of travel.

The relatively high truck percentages on Highways 82 and 204 are a function of the relatively low traffic volumes, which skew the importance of each truck. The truck percentages were used as one of the input parameters in the levels of service analysis.
City of Elgin Transportation System Plan

LEGEND
XXX/XXX AM/PM Peak Hour
Traffic Volumes
XXX Daily Traffic Volumes

FIGURE 4-1
1998 AM/PM Peak Hour Traffic Volumes
Table 4-1
Summary of Seasonal Adjustment Factors

<table>
<thead>
<tr>
<th>Month</th>
<th>Seasonal Adjustment Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>1.27</td>
</tr>
<tr>
<td>February</td>
<td>1.22</td>
</tr>
<tr>
<td>March</td>
<td>1.25</td>
</tr>
<tr>
<td>April</td>
<td>1.22</td>
</tr>
<tr>
<td>May</td>
<td>1.02</td>
</tr>
<tr>
<td>June</td>
<td>0.93</td>
</tr>
<tr>
<td>July</td>
<td>0.79</td>
</tr>
<tr>
<td>August</td>
<td>0.80</td>
</tr>
<tr>
<td>September</td>
<td>0.87</td>
</tr>
<tr>
<td>October</td>
<td>0.97</td>
</tr>
<tr>
<td>November</td>
<td>1.05</td>
</tr>
<tr>
<td>December</td>
<td>1.27</td>
</tr>
</tbody>
</table>

Existing average daily traffic volumes for Highways 82 and 204 were obtained from ODOT's 1997 Traffic Volume Tables. To factor the 1997 daily traffic volumes to 1998 daily traffic volumes, an annual growth factor was derived from historical daily traffic volumes obtained from ODOT’s Traffic Volume Tables between 1980 and 1997.

Based on these historical counts, Highway 82 traffic volumes have increased by 1.5% per year. The Highway 204 traffic volumes have increased by 1.6% per year. The 1998 daily traffic volumes are shown in Figure 4-1 with the A.M. and P.M. peak hour traffic volumes. As shown in Figure 4-1, the average daily traffic volumes on Highway 82 range from 2,100 to 5,000 and the Highway 204 daily traffic volumes range from 1,800 to 4,600.

LEVEL OF SERVICE
The following section provides a summary of the level of service (LOS) analysis conducted for the Elgin Urban Growth Boundary intersections and roadways. The level of service definition, methodologies used in calculating level of service, and the results of the analysis are summarized below. The purpose of this information is to provide an overview of LOS and to identify its relationship to the transportation goals and policies of the city.
## Table 4-2
Truck Volume and Percentage Summary

### A.M. Peak Hour Truck Volume and Percentage Summary

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Northbound</th>
<th></th>
<th></th>
<th>Southbound</th>
<th></th>
<th></th>
<th></th>
<th>Eastbound</th>
<th></th>
<th></th>
<th></th>
<th>Westbound</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Truck Vol</td>
<td>Total Vol</td>
<td>Truck %</td>
<td>Truck Vol</td>
<td>Total Vol</td>
<td>Truck %</td>
<td>Truck Vol</td>
<td>Total Vol</td>
<td>Truck %</td>
<td>Truck Vol</td>
<td>Total Vol</td>
<td>Truck %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 204/21st Avenue</td>
<td>4</td>
<td>13</td>
<td>31%</td>
<td></td>
<td></td>
<td></td>
<td>13</td>
<td>43</td>
<td>30%</td>
<td>11</td>
<td>30</td>
<td>37%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 204/17th Avenue</td>
<td>0</td>
<td>14</td>
<td>0%</td>
<td>0</td>
<td>3</td>
<td>0%</td>
<td>13</td>
<td>73</td>
<td>18%</td>
<td>14</td>
<td>65</td>
<td>22%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 204/10th Avenue</td>
<td>0</td>
<td>18</td>
<td>0%</td>
<td>1</td>
<td>68</td>
<td>1%</td>
<td>11</td>
<td>106</td>
<td>10%</td>
<td>9</td>
<td>105</td>
<td>9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 82/Cedar Street</td>
<td>23</td>
<td>99</td>
<td>23%</td>
<td>22</td>
<td>151</td>
<td>15%</td>
<td>0</td>
<td>15</td>
<td>0%</td>
<td>1</td>
<td>14</td>
<td>7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 82/Alder Street</td>
<td>22</td>
<td>107</td>
<td>21%</td>
<td>18</td>
<td>173</td>
<td>10%</td>
<td>0</td>
<td>20</td>
<td>0%</td>
<td>0</td>
<td>3</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 82/Hwy 204</td>
<td>24</td>
<td>127</td>
<td>19%</td>
<td>17</td>
<td>109</td>
<td>16%</td>
<td>11</td>
<td>109</td>
<td>10%</td>
<td>1</td>
<td>14</td>
<td>7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 82//7th Avenue</td>
<td>0</td>
<td>12</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>61</td>
<td>0%</td>
<td>1</td>
<td>17</td>
<td>6%</td>
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</tr>
</tbody>
</table>

### P.M. Peak Hour Truck Volume and Percentage Summary

<table>
<thead>
<tr>
<th>Intersection</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Truck Vol</td>
<td>Total Vol</td>
<td>Truck %</td>
<td>Truck Vol</td>
<td>Total Vol</td>
<td>Truck %</td>
<td>Truck Vol</td>
<td>Total Vol</td>
<td>Truck %</td>
<td>Truck Vol</td>
<td>Total Vol</td>
<td>Truck %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 204/21st Avenue</td>
<td>3</td>
<td>23</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
<td>14</td>
<td>65</td>
<td>22%</td>
<td>12</td>
<td>60</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 204/17th Avenue</td>
<td>1</td>
<td>23</td>
<td>4%</td>
<td>0</td>
<td>12</td>
<td>0%</td>
<td>15</td>
<td>95</td>
<td>16%</td>
<td>13</td>
<td>88</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 204/10th Avenue</td>
<td>0</td>
<td>26</td>
<td>0%</td>
<td>0</td>
<td>52</td>
<td>0%</td>
<td>12</td>
<td>132</td>
<td>9%</td>
<td>10</td>
<td>191</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 82/Cedar Street</td>
<td>19</td>
<td>220</td>
<td>9%</td>
<td>19</td>
<td>176</td>
<td>11%</td>
<td>0</td>
<td>6</td>
<td>0%</td>
<td>2</td>
<td>20</td>
<td>10%</td>
<td></td>
<td></td>
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<tr>
<td>Hwy 82/Alder Street</td>
<td>13</td>
<td>243</td>
<td>5%</td>
<td>14</td>
<td>192</td>
<td>7%</td>
<td>0</td>
<td>37</td>
<td>0%</td>
<td>0</td>
<td>15</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 82/Hwy 204</td>
<td>14</td>
<td>247</td>
<td>6%</td>
<td>12</td>
<td>128</td>
<td>9%</td>
<td>14</td>
<td>136</td>
<td>10%</td>
<td>1</td>
<td>20</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hwy 82//7th Avenue</td>
<td>2</td>
<td>7</td>
<td>29%</td>
<td>0</td>
<td>5</td>
<td>0%</td>
<td>21</td>
<td>80</td>
<td>26%</td>
<td>15</td>
<td>115</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Level of Service Definition

Level of service (LOS) is an estimate of the quality and performance of transportation facility operations in a community. The degree of traffic congestion and delay is rated using the letter "A" for the least amount of congestion to the letter "F" for the highest amount of congestion. The following level of service categories provide individual descriptions for non-state roadways. Communities decide what level of traffic congestion is tolerable (i.e. decides whether "C," "D," or some other level). The choice of a particular LOS threshold can vary by planning sub-area, roadway classification, or specific corridor or street.
The level of service methodology for unsignalized intersections was based on reserve or unused capacity available for critical turning movements. Level of service values range from LOS A, indicating free-flowing traffic, to LOS F, indicating extreme congestion and long vehicle delays. Table 4-3 summarizes the relationship between level of service and reserve capacity at unsignalized intersections.

Level of service at the roadway mid-blocks was calculated based on correlating the volume to capacity ratio (V/C) to LOS values. Table 4-4 summarizes the Volume/Capacity ratio ranges that have been developed for determining planning level roadway mid-block LOS on urban and rural roadways.

### Table 4-3

**Level of Service Criteria for Unsignalized Intersections**

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Reserve Capacity</th>
<th>Expected Delay</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>400 or more</td>
<td>Little or no delay</td>
</tr>
<tr>
<td>B</td>
<td>300 to 399</td>
<td>Short delays</td>
</tr>
<tr>
<td>C</td>
<td>200 to 299</td>
<td>Average delays</td>
</tr>
<tr>
<td>D</td>
<td>100 to 199</td>
<td>Long delays</td>
</tr>
<tr>
<td>E</td>
<td>0 to 99</td>
<td>Very long delays</td>
</tr>
<tr>
<td>F</td>
<td>less than 0</td>
<td>Failure - extreme congestion</td>
</tr>
</tbody>
</table>

### Table 4-4

**Level of Service Criteria for Roadway Mid-Blocks**

<table>
<thead>
<tr>
<th>LOS</th>
<th>Description</th>
<th>Volume/Capacity (V/C) Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>less than</td>
<td>0.60</td>
</tr>
<tr>
<td>B</td>
<td>less than or equal to</td>
<td>0.70</td>
</tr>
<tr>
<td>C</td>
<td>less than or equal to</td>
<td>0.80</td>
</tr>
<tr>
<td>D</td>
<td>less than or equal to</td>
<td>0.90</td>
</tr>
<tr>
<td>E</td>
<td>less than or equal to</td>
<td>1.00</td>
</tr>
<tr>
<td>F</td>
<td>Greater than</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Existing Level of Service**

Based on current A.M. peak hour, P.M. peak hour, and daily traffic volumes, levels of service were calculated for the study area intersections and roadway mid-blocks. The results of the unsignalized intersection level of service analysis are summarized in Table 4-5. The results of the roadway mid-block level of service are summarized in Table 4-6.

As shown in Table 4-5, all of the study area intersections in both the A.M. and P.M. peak hours operate at LOS A. All of the roadway mid-block sections are also operating at LOS A as shown in Table 4-6.

**TRANSPORTATION SAFETY**
Accident data for the study area intersections and roadway mid-block sections were obtained from ODOT. Data was provided for a five year period between January 1, 1993 and December 31, 1997. Table 4-7 summarizes the accident data.

Table 4-5
Existing Intersection Level of Service

<table>
<thead>
<tr>
<th>Unsignalized Intersection</th>
<th>AM Peak</th>
<th>PM Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOS</td>
<td>Reserve Capacity</td>
</tr>
<tr>
<td>Highway 204/21st Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Approach</td>
<td>A</td>
<td>1045</td>
</tr>
<tr>
<td>Westbound Left</td>
<td>A</td>
<td>1626</td>
</tr>
<tr>
<td>Highway 204/17th Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Approach</td>
<td>A</td>
<td>1120</td>
</tr>
<tr>
<td>Southbound Approach</td>
<td>A</td>
<td>893</td>
</tr>
<tr>
<td>Eastbound Approach</td>
<td>A</td>
<td>1614</td>
</tr>
<tr>
<td>Westbound Approach</td>
<td>A</td>
<td>1567</td>
</tr>
<tr>
<td>Highway 204 (Division Street)/10th Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Approach</td>
<td>A</td>
<td>814</td>
</tr>
<tr>
<td>Southbound Approach</td>
<td>A</td>
<td>847</td>
</tr>
<tr>
<td>Eastbound Left</td>
<td>A</td>
<td>1511</td>
</tr>
<tr>
<td>Westbound Left</td>
<td>A</td>
<td>1544</td>
</tr>
<tr>
<td>Highway 82 (8th Avenue)/Cedar Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Left</td>
<td>A</td>
<td>1402</td>
</tr>
<tr>
<td>Southbound Left</td>
<td>A</td>
<td>1505</td>
</tr>
<tr>
<td>Eastbound Approach</td>
<td>A</td>
<td>680</td>
</tr>
<tr>
<td>Westbound Approach</td>
<td>A</td>
<td>997</td>
</tr>
<tr>
<td>Highway 82 (8th Avenue)/Alder Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Left</td>
<td>A</td>
<td>1383</td>
</tr>
<tr>
<td>Southbound Left</td>
<td>A</td>
<td>1512</td>
</tr>
<tr>
<td>Eastbound Approach</td>
<td>A</td>
<td>824</td>
</tr>
<tr>
<td>Westbound Approach</td>
<td>A</td>
<td>694</td>
</tr>
<tr>
<td>Highway 204 (Division St)/Highway 82 (8th)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Left</td>
<td>A</td>
<td>1463</td>
</tr>
<tr>
<td>Southbound Left</td>
<td>A</td>
<td>1587</td>
</tr>
<tr>
<td>Eastbound Approach</td>
<td>A</td>
<td>937</td>
</tr>
<tr>
<td>Westbound Approach</td>
<td>A</td>
<td>760</td>
</tr>
<tr>
<td>Highway 82 (Albany Street)/7th Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Approach</td>
<td>A</td>
<td>1164</td>
</tr>
<tr>
<td>Southbound Approach</td>
<td>A</td>
<td>1202</td>
</tr>
<tr>
<td>Eastbound Left</td>
<td>A</td>
<td>1512</td>
</tr>
<tr>
<td>Westbound Left</td>
<td>A</td>
<td>1559</td>
</tr>
</tbody>
</table>
Table 4-6
Existing Arterial Roadway Level of Service Summary

<table>
<thead>
<tr>
<th>Roadway</th>
<th>Section</th>
<th>AADT</th>
<th>Capacity</th>
<th>V/C Ratio</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway 82</td>
<td>South city limits</td>
<td>3,600</td>
<td>14,000</td>
<td>0.26</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 mi north of Cedar St</td>
<td>3,800</td>
<td>14,000</td>
<td>0.27</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 mi south of Hwy 204</td>
<td>5,000</td>
<td>14,000</td>
<td>0.36</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 mi north of Hwy 204</td>
<td>3,000</td>
<td>14,000</td>
<td>0.21</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 mi east of 8th Av</td>
<td>3,200</td>
<td>14,000</td>
<td>0.23</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 mi east of 6th Av</td>
<td>2,400</td>
<td>14,000</td>
<td>0.17</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 east of east city limits</td>
<td>2,100</td>
<td>14,000</td>
<td>0.15</td>
<td>A</td>
</tr>
<tr>
<td>Highway 204</td>
<td>West city limits</td>
<td>1,800</td>
<td>14,000</td>
<td>0.13</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 mi west of 17th Av</td>
<td>2,700</td>
<td>14,000</td>
<td>0.19</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 mi west of 15th Av</td>
<td>2,900</td>
<td>14,000</td>
<td>0.21</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 mi east of 14th Av</td>
<td>4,100</td>
<td>14,000</td>
<td>0.29</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 mi east of 11th Av</td>
<td>4,400</td>
<td>14,000</td>
<td>0.31</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 mi west of Hwy 82</td>
<td>4,600</td>
<td>14,000</td>
<td>0.33</td>
<td>A</td>
</tr>
</tbody>
</table>

Table 4-7
Roadway Segment Accident Summary (January 1993 To December 1997)

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Average Accidents per Year by Severity</th>
<th>Total (acc/yr)</th>
<th>Total (acc/mev)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PDO²</td>
<td>Injury</td>
<td>Fatal</td>
</tr>
<tr>
<td>Alder St/11th Ave</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Baltimore St/6th Ave</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Birch St/11th Ave</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Detroit St/14th Ave</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Hartford Lane/11th Street</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Highway 82/Birch St</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Highway 82 (8th)/Alder St</td>
<td>0.6</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Highway 82/Albany St</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Highway 204/Highway 82</td>
<td>0.4</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Highway 204 (Division St)/10th Ave</td>
<td>0.2</td>
<td>0.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Highway 204 (Division St)/15th Ave</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Palmer St/15th Ave</td>
<td>0.0</td>
<td>0.2</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Mid-Block Roadway Section**
- Highway 204
  - 12th Ave to 14th Ave | 0.2 | 0.0 | 0.0 | 0.2 | 1.25 |

As shown in Table 4-7, all of the intersection accident rates are at or below 0.55 accidents per million entering vehicles. These rates correspond to only 0.2 to 0.6 accidents per year.

The only highway segment with accidents within the analysis period was Highway 204 between 12th Avenue and 14th Avenue. This section had an accident rate of 1.25 accidents per million vehicle miles traveled, which corresponds to one accident in the five year analysis period. In 1997, the average accident rate for rural primary non-freeway highways in Oregon was 0.72 accidents per million vehicle miles traveled.

² PDO=property damage only  
³ acc/yr=accidents per year  
⁴ acc/mev=accidents per million entering vehicles
miles traveled. This rate was taken from the 1997 State Highway Accident Rate Tables, Transportation Data Section – Accident Data Analysis Unit, ODOT, August 1998. Although the accident rate along Highway 204 between 12th Avenue and 14th Avenue is higher than this average, the accident rate only represents one accident in the last five years and does not represent a safety concern.

The following safety concern were identified through the public involvement process:

- Due to the constrained intersection turning radii at the Highway 82/Highway 204 intersection, trucks have a difficult time maneuvering through this intersection.
- Truck traffic through the downtown area of Elgin is a concern to some residents.
- Limited sidewalk facilities along Highway 204 is a concern, especially since the Stella Mayfield Elementary School fronts the highway and school children must utilize this roadway to access the school.

TRANSPORTATION DEMAND MANAGEMENT MEASURES
Transportation Demand Management (TDM) measures consist of efforts taken to reduce the demand on an areas transportation system. TDM measures include such things as alternative work schedules, carpooling, and telecommuting.

Alternative Work Schedules
One way to maximize the use of the existing transportation system is to spread peak traffic demand over several hours instead of a single hour. Statistics from the 1990 Census show the spread of departure to work times over a 24-hour period (see Table 4-8). Approximately 24% of the total employees depart for work between 7:00 and 8:00 A.M. Another 32% depart either the hour before or the hour after the peak.

Assuming an average nine-hour workday, the corresponding afternoon peak can be determined for work trips. Using this methodology, the peak work travel hour would occur between 4:00 and 5:00 P.M., which corresponds with the peak hour of activity measured for traffic volumes. The actual P.M. peak hour begins between 3:30 and 3:45 P.M. and is slightly earlier than the P.M. peak indicated by the departure to work distribution.

<table>
<thead>
<tr>
<th>Departure Time</th>
<th>Trips</th>
<th>1990 Census</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00 a.m. to 4:59 a.m.</td>
<td>29</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>5:00 a.m. to 5:59 a.m.</td>
<td>85</td>
<td>14.7</td>
<td></td>
</tr>
<tr>
<td>6:00 a.m. to 6:59 a.m.</td>
<td>110</td>
<td>19.1</td>
<td></td>
</tr>
<tr>
<td>7:00 a.m. to 7:59 a.m.</td>
<td>140</td>
<td>24.3</td>
<td></td>
</tr>
<tr>
<td>8:00 a.m. to 8:59 a.m.</td>
<td>77</td>
<td>13.3</td>
<td></td>
</tr>
<tr>
<td>9:00 a.m. to 9:59 a.m.</td>
<td>19</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>10:00 a.m. to 10:59 a.m.</td>
<td>9</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>11:00 a.m. to 11:59 a.m.</td>
<td>3</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>12:00 p.m. to 3:59 p.m.</td>
<td>73</td>
<td>12.7</td>
<td></td>
</tr>
<tr>
<td>4:00 p.m. to 11:59 p.m.</td>
<td>32</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>577</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

TRAVEL MODE DISTRIBUTION
Although the automobile is the primary mode of travel for most residents in Elgin, some other modes are used as well. Modal split data is not available for all types of trips; however, the 1990 census data
does include statistics for journey-to-work trips as shown in Table 4-9. The census data reflects the predominant use of the automobile.

Most Elgin residents travel to work via private vehicle. In 1990, 73% of all trips to work were in an auto, van, motorcycle, or truck. Carpooling accounted for almost 14% of work trips. Only one half a percent used public transportation to commute. The remaining 13% of work trips were accounted by either bicycling, walking or telecommuting.

<table>
<thead>
<tr>
<th>Car, Truck, or Van:</th>
<th>1990 Census</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drove alone</td>
<td>432</td>
<td>72.2</td>
</tr>
<tr>
<td>Carpoled</td>
<td>83</td>
<td>13.9</td>
</tr>
<tr>
<td>Public Transportation</td>
<td>3</td>
<td>0.5</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>3</td>
<td>0.5</td>
</tr>
<tr>
<td>Bicycle</td>
<td>4</td>
<td>0.7</td>
</tr>
<tr>
<td>Walked</td>
<td>52</td>
<td>8.7</td>
</tr>
<tr>
<td>Other Means</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Worked at Home</td>
<td>21</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>598</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**EXISTING DEFICIENCIES**

The existing deficiencies are described in the following sections: roadway system deficiencies and bicycle and pedestrian system deficiencies. There are no capacity deficiencies in the City of Elgin based on the level of service analysis. All of the deficiencies are related to existing geometric problems, truck traffic impacts through downtown, and pedestrian safety.

**Roadway System Deficiencies**

Elgin streets were constructed prior to the adoption of land use regulations stipulating street development standards, therefore, many of Elgin’s streets can be identified as deficient. As development allows, and traffic volumes warrant, Elgin is modifying its street system to conform to its land development regulations.

Consider widening the following surface widths to city standards if traffic volumes increase significantly or if safety problems develop:

- Detroit Street from 10th Avenue to 15th Avenue, which is classified as a collector, has a pavement width of only 20 feet. Based on Elgin roadway standards, collectors should have a minimum pavement width of 24 feet, with 8-foot shoulders.

- Birch Street from 8th Avenue to 17th Avenue, which is classified as a collector, has a pavement width of only 20 feet. Based on Elgin roadway standards, collectors should have a minimum pavement width of 24 feet, with 8-foot shoulders.

- 10th Avenue from Division Street to Hartford Lane, which is classified as a collector, has a pavement width of only 22 feet. Based on Elgin roadway standards, collectors should have a minimum pavement width of 24 feet, with 8-foot shoulders.
• 14th Avenue from Division Street to Birch Street, which is classified as a collector, has a pavement width of only 20 feet. Based on Elgin roadway standards, collectors should have a minimum pavement width of 24 feet, with 8-foot shoulders.

• 15th Avenue from Division Street to Palmer Street, which is classified as a collector, has a pavement width of only 20 feet. Based on Elgin roadway standards, collectors should have a minimum pavement width of 24 feet, with 8-foot shoulders.

• 17th Avenue from Division Street to Birch Street, which is classified as a collector, has a pavement width of only 22 feet. Based on Elgin roadway standards, collectors should have a minimum pavement width of 24 feet, with 8-foot shoulders.

• Baltimore Street between 8th and 10th Avenues is classified as a collector yet has a surface width of only 20 feet. Collectors should have a minimum pavement width of 24 feet, with 8-foot shoulders.

• 7th Avenue between Albany and Division is classified as a collector yet has a surface width of only 20 feet. Collectors should have a minimum pavement width of 24 feet, with 8-foot shoulders.

• Division Street between 7th and 8th Avenues is classified as a collector yet has a surface width of only 20 feet. Collectors should have a minimum pavement width of 24 feet, with 8-foot shoulders.

• The following local roadway sections are gravel:
  - 21st Avenue from Boise Cascade Access Road to Albany Street
  - 20th Avenue from Alder Street to Albany Street
  - 19th Avenue from Boise Cascade Access Road to Albany Street
  - 16th Avenue from southern terminus to Adele Terrace
  - 14th Avenue from Carolyn Terrace to northern terminus
  - 13th Avenue from Stella Mayfield Elementary School to Baltimore Street
  - 12th Avenue from southern terminus to Birch Street and Carolyn Terrace to Hartford Lane
  - 11th Avenue from southern terminus to Division Street and Carolyn Terrace to Hartford Lane
  - 9th Avenue from Cedar Street to Alder Street and Detroit Street to northern terminus
  - 6th Avenue from southern terminus to Cedar Street
  - 5th Avenue from Baltimore Street to Detroit Street and Division Street to Albany Street
  - 3rd Avenue from Baltimore Street to Columbus Street
  - Palmer Street from Hartford Lane to Private Trailer Park
  - Galveston Street from 12th Avenue to 10th Avenue
  - Galveston Street from 12th Avenue to 9th Avenue
  - Evanston Street from 10th Avenue to 8th Avenue
  - Columbus Street from 17th Avenue to 12th Avenue and 7th Avenue to 3rd Avenue
- Stella Mayfield Elementary School east-west access road from 13th Avenue to 12th Avenue
- Alder Street from western terminus to 20th Avenue
- Dogwood Street from Cedar Street to Highway 82
- Boise Cascade Access Road/Hemlock Street from 21st Avenue to Highway 82
- Pumpkin Ridge Road from south city limits to Boise Cascade Access Road
- Canning Street from western terminus to Highway 82

- The following local streets have lane widths of less than 10 feet: Beverly Terrace, 5th Avenue, and Depot Street.

- Truck traffic is negatively impacting downtown Elgin. Based on 1998 traffic counts conducted by ODOT and Union County staff, the downtown area is impacted by 20 to 40 trucks in the P.M. peak hour. Also, the deficient intersection geometry at the Oregon Highways 82/204 intersection creates problems for trucks negotiating turning movements at this intersection.

**Bicycle and Pedestrian System Deficiencies**

Sidewalks within the City of Elgin primarily exist in the downtown area. Outside the downtown area, sidewalks are limited to more recently developed areas. To promote walking within the city, the sidewalk installation should be considered to connect the downtown area to residential areas. Also, several of the city’s activity centers such as Tom McDowell Park, Elgin High School, and the Boise Cascade Mill are not served by sidewalks. These activity centers should also be considered for sidewalk installation to link to the downtown area, as well as to residential areas within the city.

Sidewalks along Division Street (Oregon Highway 204) are in poor condition. Since the Stella Mayfield Elementary School fronts Oregon Highway 204, school children utilize this roadway to access the school. Sidewalk improvements along Oregon Highway 204 should be considered to improve safety for school children walking to school.
CHAPTER 5: 2018 TRAFFIC VOLUME FORECAST

Chapter 5 identifies future traffic volumes, and how this could impact the current and planned transportation system in the City of Elgin.

2018 TRAFFIC FORECAST METHODOLOGY

The 2018 traffic projections developed as part of this study are used as the basis for assessing future roadway conditions and likely improvement requirements. These projections were developed through a two step process. First, the historical relationship between traffic growth and population growth was developed. Second, this traffic to population relationship was applied to the 20-year projected population to obtain the 20-year traffic forecast.

The population growth in Elgin between 1980 and 1997 has been very modest. Based on historical population information, the City of Elgin’s population has increased from 1,684 to 1,745 between 1980 and 1997. This equates to an annual population growth rate of 0.2%. Table 5-1 summarizes this information.

Table 5-1
Elgin Historic Population Growth Trend

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,684</td>
<td>1,745</td>
<td>3.6%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

Table 5-2 shows the traffic growth rate for Highways 82 and 204 in the City of Elgin between 1980 and 1997. As shown in Table 5-2, the historic annual traffic growth rates range from 0.5% to 2.4% on Highway 82 and 0.3% to 1.9% on Highway 204. The weighted average historic annual traffic growth rates for Highways 82 and 204 are 1.5% and 1.6% respectively.

The historic traffic-to-population growth rate ratio from 1980 to 1997 is 7.08. This ratio is extremely high and indicates that there is not a direct correlation between the historic traffic and population growth. The majority of traffic growth on Highways 82 and 204 in Elgin can be attributed to trips generated outside the city. Since there is not a direct correlation between traffic growth on Highways 82 and 204 to population growth, the traffic-to-population relationship was not applied to the expected future population growth to obtain the future traffic volumes. Instead, the historical traffic growth rates of 1.5% and 1.6% per year on Highways 82 and 204 were used to forecast the 2018 traffic volumes.

The 2018 A.M. and P.M. peak hour and daily traffic volume forecasts based on the annual traffic growth rates are shown in Figure 5-1.

2018 LEVELS OF SERVICE

Level of service analyses were conducted based on the 2018 traffic volumes shown in Figure 5-1.
The results of the analysis summarized in Tables 5-3 and 5-4. As shown in Tables 5-3 and 5-4, all of the study area intersections and roadways are projected to continue to operate at LOS A in the 2018 condition.

### Table 5-2

**Elgin Historic Traffic Growth Trend on Highway 82**

<table>
<thead>
<tr>
<th>Milepost</th>
<th>Location Description</th>
<th>1980 ADT</th>
<th>1997 ADT</th>
<th>Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway 82</td>
<td>South city limits</td>
<td>2,550</td>
<td>3,500</td>
<td>1.9%</td>
</tr>
<tr>
<td>19.48</td>
<td>0.01 mi north of Cedar Street</td>
<td>3,250</td>
<td>3,700</td>
<td>0.8%</td>
</tr>
<tr>
<td>20.08</td>
<td>0.01 mi south of Highway 204</td>
<td>3,350</td>
<td>4,900</td>
<td>2.3%</td>
</tr>
<tr>
<td>20.24</td>
<td>0.01 mi north of Highway 204</td>
<td>2,750</td>
<td>3,000</td>
<td>0.5%</td>
</tr>
<tr>
<td>20.31</td>
<td>0.01 mi east of 8th Avenue</td>
<td>2,150</td>
<td>3,200</td>
<td>2.4%</td>
</tr>
<tr>
<td>20.42</td>
<td>0.10 mi east of 6th Avenue</td>
<td>2,100</td>
<td>2,400</td>
<td>0.8%</td>
</tr>
<tr>
<td>20.70</td>
<td>0.01 mi east of east city limits</td>
<td>1,600</td>
<td>2,100</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

| Weighted Average | 1.5% |

| Highway 204 | West city limits | 1,700 | 1,800 | 0.3% |
| 40.27       | 0.01 mi west of 17th Avenue | 2,000 | 2,700 | 1.8% |
| 40.37       | 0.01 mi west of 15th Avenue    | 2,250 | 2,900 | 1.5% |
| 40.52       | 0.01 mi west of 14th Avenue    | 3,100 | 4,000 | 1.5% |
| 40.67       | 0.01 mi west of 11th Avenue    | 3,150 | 4,300 | 1.8% |
| 40.83       | 0.01 mi west of Highway 82     | 3,250 | 4,500 | 1.9% |

| Weighted Average | 1.6% |

### 2018 DEFICIENCIES

No additional deficiencies to those previously defined in the Existing Deficiencies section have been identified since the 2018 levels of service analysis yielded the same results as the existing levels of service analysis.

### Table 5-3

**2018 Intersection Level of Service**

<table>
<thead>
<tr>
<th>Unsignalized Intersection</th>
<th>AM Peak</th>
<th>PM Peak</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOS</td>
<td>Reserve Capacity</td>
<td>LOS</td>
<td>Reserve Capacity</td>
</tr>
<tr>
<td>Highway 204/21st Avenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Approach</td>
<td>A</td>
<td>1001</td>
<td>A</td>
<td>952</td>
</tr>
<tr>
<td>Westbound Left</td>
<td>A</td>
<td>1597</td>
<td>A</td>
<td>1542</td>
</tr>
<tr>
<td>Highway 204/17th Avenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Approach</td>
<td>A</td>
<td>1062</td>
<td>A</td>
<td>986</td>
</tr>
<tr>
<td>Southbound Approach</td>
<td>A</td>
<td>838</td>
<td>A</td>
<td>885</td>
</tr>
<tr>
<td>Eastbound Approach</td>
<td>A</td>
<td>1578</td>
<td>A</td>
<td>1540</td>
</tr>
<tr>
<td>Westbound Approach</td>
<td>A</td>
<td>1518</td>
<td>A</td>
<td>1485</td>
</tr>
<tr>
<td>Highway 204 (Division Street)/10th Avenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Approach</td>
<td>A</td>
<td>717</td>
<td>A</td>
<td>643</td>
</tr>
<tr>
<td>Southbound Approach</td>
<td>A</td>
<td>732</td>
<td>A</td>
<td>565</td>
</tr>
<tr>
<td>Eastbound Left</td>
<td>A</td>
<td>1441</td>
<td>A</td>
<td>1247</td>
</tr>
<tr>
<td>Westbound Left</td>
<td>A</td>
<td>1486</td>
<td>A</td>
<td>1459</td>
</tr>
<tr>
<td>Highway 82 (8th Avenue)/Cedar Street</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Left</td>
<td>A</td>
<td>1307</td>
<td>A</td>
<td>1318</td>
</tr>
<tr>
<td>Southbound Left</td>
<td>A</td>
<td>1439</td>
<td>A</td>
<td>1212</td>
</tr>
<tr>
<td>Eastbound Approach</td>
<td>A</td>
<td>582</td>
<td>A</td>
<td>649</td>
</tr>
<tr>
<td>Westbound Approach</td>
<td>A</td>
<td>915</td>
<td>A</td>
<td>644</td>
</tr>
</tbody>
</table>
Highway 82 (8th Avenue)/Alder Street
Northbound Left   A  1283  A  1175
Southbound Left   A  1448  A  1212
Eastbound Approach A  721   A  516
Westbound Approach A  593   A  595
Highway 204 (Division St)/Highway 82 (8th)
Northbound Left   A  1383  A  1250
Southbound Left   A  1544  A  1439
Eastbound Approach A  812   A  637
Westbound Approach A  651   A  433
Highway 82 (Albany Street)/7th Avenue
Northbound Approach A  1127 A  679
Southbound Approach A  1148 A  884
Eastbound Left    A  1448 A  1448
Westbound Left    A  1508 A  1390

Table 5-4
2018 Arterial Roadway Level of Service Summary

<table>
<thead>
<tr>
<th>Roadway</th>
<th>Section</th>
<th>AADT</th>
<th>Capacity</th>
<th>V/C Ratio</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway 82</td>
<td>South city limits</td>
<td>4,800</td>
<td>14,000</td>
<td>0.34</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.02 mi north of Cedar St</td>
<td>5,000</td>
<td>14,000</td>
<td>0.36</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.02 mi south of Hwy 204</td>
<td>6,700</td>
<td>14,000</td>
<td>0.48</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.02 mi north of Hwy 204</td>
<td>4,100</td>
<td>14,000</td>
<td>0.29</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.02 mi east of 8th Av</td>
<td>4,400</td>
<td>14,000</td>
<td>0.31</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.02 mi east of 6th Av</td>
<td>3,300</td>
<td>14,000</td>
<td>0.24</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 east of east city limits</td>
<td>2,900</td>
<td>14,000</td>
<td>0.21</td>
<td>A</td>
</tr>
<tr>
<td>Highway 204</td>
<td>West city limits</td>
<td>2,500</td>
<td>14,000</td>
<td>0.18</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.02 mi west of 17th Av</td>
<td>3,800</td>
<td>14,000</td>
<td>0.27</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.02 mi west of 15th Av</td>
<td>4,000</td>
<td>14,000</td>
<td>0.29</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.02 mi east of 14th Av</td>
<td>5,600</td>
<td>14,000</td>
<td>0.40</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.02 mi east of 11th Av</td>
<td>6,000</td>
<td>14,000</td>
<td>0.43</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>0.01 mi west of Hwy 82</td>
<td>6,300</td>
<td>14,000</td>
<td>0.45</td>
<td>A</td>
</tr>
</tbody>
</table>
CHAPTER 6: TRANSPORTATION IMPROVEMENT OPTIONS

The Transportation Planning Rule requires that Transportation System Plans evaluate alternatives to resolve system deficiencies. Various improvement alternatives were developed and analyzed with input from the TAC, City of Elgin staff, the Transportation Subcommittee, and the public. The transportation system alternatives attempt to satisfy TSP goals and objectives, and meet identified needs.

The proposed improvement projects include state and city street projects; bicycle and pedestrian improvements; rail, air, and public transportation plans; and transportation demand management strategies. The proposed improvement projects address identified needs for all modes of travel in Elgin.

EVALUATION OF PROJECT ALTERNATIVES

Analysis of current and forecasted traffic volumes identified no capacity issues within the City of Elgin over the next 20 years. Improvement alternatives were evaluated based on project cost; safety; connectivity between high impact land uses; and environmental, socioeconomic, and land use impacts. Listing project alternatives, however, does not imply final approval of the projects. Environmental issues may result in changes, delays or cancellation of projects.

The previously listed factors were the basis for determining project priority. Capacity issues aside, safety, truck routing, and connectivity emerged as the Elgin TAC’s primary considerations. Other transportation system projects were also identified and prioritized in previous plans, such as the Oregon Highway 82 Corridor Plan, the Elgin Bicycle and Pedestrian Plan, and the La Grande/Union County Airport Master Plan Update. These projects have been incorporated into the TSP.

The City of Elgin identified two concerns within the TSP process, the safety issue at the intersection of Oregon Highways 82 and 204 and connectivity issues at Elgin’s periphery. Four projects are listed, and each project contains a series of improvements. The first project is the preferred truck route improvement project (titled, Alternative 7). It was developed by the Elgin Transportation Subcommittee to alleviate the safety concerns at the intersection of the two highways in Elgin. The remaining three projects were developed to provide adequate traffic circulation within industrial and residential areas, and to provide adequate transportation connections for the new fire station site.

The Elgin TAC designated the Elgin Transportation Subcommittee to identify different options for the Oregon Highway 82/204 intersection. The subcommittee held a public meeting on January 14, 1999 and considered different options presented by the TSP Management Team. Members of the subcommittee and the general public collaborated on other considerations, eventually developing the preferred alternative. Seven alternatives were considered and are included in Appendix D.

The four projects are detailed in the Street System Improvements section at the end of this chapter. The Elgin TAC recommends all projects eventually be constructed.

STATE WIDE TRANSPORTATION IMPROVEMENT PROGRAM PROJECTS

The Oregon Department of Transportation has a comprehensive improvement and maintenance program for Oregon’s highway system. The Statewide Transportation Improvement Program (STIP) is updated every two years and identifies projects that could improve the overall transportation system.

A complete list of committed and preliminary STIP projects for 1999-2003 is identified in the Union County Transportation System Plan. Draft STIP projects for 2000 through 2003 are listed below and specify transportation needs.
Elgin Section
This is a reconstruction project located on the Weston-Elgin Highway (OR-204) between milepoints 40.25 and 40.84. Improvements to this section include rebasing and paving the roadway, installing sidewalks, curbs, storm sewers, and relocating utilities. Estimated project cost is $1,200,000 (High Priority).

Umatilla County Line – NW City Limits (Elgin)
This project includes resurfacing the roadway (OR-204) between milepoints 21.30 and 40.25, with alignment improvements. Estimated project cost is $12,300,000 (High Priority).

Highway 82 Scenic Turnouts
This project includes adding scenic turnouts to Highway 82 to highlight scenic cultural/historical, environmental, and recreational resources between milepoints 20.74 and 71.42. Project cost is estimated at $300,000 (Low Priority).

Minam Grade (Phase 2)
This project includes the realignment of curves and roadway widening (OR-82) near milepoint 30.00. Estimated project cost is $5,000,000 (Low Priority).

OREGON HIGHWAY 82 CORRIDOR PLAN
Improvement projects identified in the Oregon Highway 82 Corridor Plan will be implemented through the Statewide Transportation Improvement Program (STIP) and the ODOT Region 5 work program. Each recommended improvement project is prioritized as a “near” (0-5 years), “mid” (5-10 years), or “long” (10-20 years) term project. Projects are associated with three categories of management decisions, which are “Management Decisions,” “Capital Improvement Decisions,” and “Service Improvement Decisions.” Improvements that are projected to be implemented within the next 20 years include:

Capital Improvement Decisions
1. **Right-of-Way Acquisition, Elgin to Joseph** (near: 0-5 years) – This project includes the acquisition and preservation of the Idaho and Northern Pacific (INP) railroad right-of-way between Elgin and Joseph for future rail or other transportation purposes.
2. **Highway 204 Truck Connection** (mid: 5-10 years) – To alleviate truck impacts through downtown Elgin, two alternatives have been identified: Alternative (1) involves increasing the turning radiiuses at the Highway 82/Highway 204 intersection by cutting back the curb returns, eliminating on-street parking, and restriping as needed. This alternative primarily attempts to improve the truck turning problems at the Oregon Highways 82/204 intersection and does not address truck impacts through downtown Elgin. Alternative (2) involves developing a truck bypass using the Boise Cascade Access Road. This solution would divert eastbound to southbound truck traffic from Oregon Highway 204 to Oregon Highway 82 and northbound to westbound truck traffic from Oregon Highway 82 to Oregon Highway 204 away from downtown Elgin. However, southbound to westbound truck traffic from Oregon Highway 82 to Oregon Highway 204 would still impact downtown Elgin and would still have problems negotiating the Oregon Highways 82/204 intersection.
3. **Grade Crossing Protection Program** (long: 10-20 years) – The program is intended to improve the safety of highway and side road crossings of the Idaho Northern and Pacific (INP) by consolidating private and public crossings where practical between Island City and Elgin. The following are specific crossings that could be considered for future modification: Combine two crossings near both MP 8.2 and MP14.2; consolidate three crossings to two near Baum Industrial Park; close one
of three public crossings near the center of Imbler; close Hayes and Janson Roads near the track; gate the six remaining public crossings between Island City and the east end of Elgin.

4. **Railroad Track Improvement Program, La Grande to Elgin** (long: 10-20 years) – The program is designed to improve the average speed of the INP to 25 mph between the Union Pacific Railroad interchange in Island City and Elgin by implementing track and maintenance enhancements such as partial tie replacement, addition of ballast, and surface and track alignment.

**Service Improvement Decisions**

1. **Elgin to Joseph Freight Rail Preservation Plan** (near: 0-5 years) – Work with Oregon Parks and Recreation Department, Union and Wallowa Counties, local jurisdictions, interested groups and the INP, to develop a plan that addresses the ongoing preservation of the Elgin-Joseph rail line for freight transportation.

**STREET SYSTEM IMPROVEMENTS**

The four locally identified projects are described and listed below. Improvement projects are located in Figure 7-4, except for the truck route alternative, which is located in Figure 7-5. If roadway improvements are identified in the Elgin Bicycle and Pedestrian Plan, then they are depicted in Figure 7-6 rather than 7-4.

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Baltimore Street – upgrade to collector with one railroad crossing</td>
<td>$375,000</td>
</tr>
<tr>
<td>(B) Hemlock Street – upgrade to collector with two railroad crossings</td>
<td>$1,920,000</td>
</tr>
<tr>
<td>(C) Local Streets – new local streets as depicted in Figure 7-4</td>
<td>*</td>
</tr>
<tr>
<td>(Alt. 7) Elgin preferred truck route improvement</td>
<td>$315,000</td>
</tr>
</tbody>
</table>

* Developers will pay the cost for new local streets as development occurs.

(A) **New Fire Hall Site** – Elgin’s new fire hall will be sited on the southeast corner of Baltimore and 10th Streets. This project includes improving to a collector standard, the segment of Baltimore between 8th and 10th Avenues and the segment of 8th Avenue between Baltimore and Albany. The railroad crossing also needs to be upgraded to a public crossing.

(B) **Industrial Development** – This recommendation involves land owned by Boise Cascade Corporation and will be considered only when the land is available. The land is located south of Elgin and west of Oregon Highway 82. The project includes upgrading the Boise Cascade private haul road and a portion of Pumpkin Ridge Road to a collector standard, improving the bridge over Phillips Creek, and upgrading private railroad crossings to public railroad crossings. Additionally, a local street network plan will be developed at the time Elgin considers this project to facilitate an orderly and efficient street development pattern.

(C) **Residential Connectivity** – This project includes the extension and creation of specific streets in north Elgin. It is recommended that 14th and 15th Streets be extended to connect with Hartford Lane. The cul-de-sac on the west end of Evangeline Terrace should be extended to the west. On the north side of Hartford Lane, 11th, 13th, and 16th Streets should be extended to intersect with a proposed east-west street. It is recommended that Baltimore Street be extended to the west and 19th Avenue be extended to the north so that they intersect. These recommendations will accommodate residential development.
• Construct the following new local streets for the identified projects as they are needed:

- Baltimore Street from 19th Avenue to 17th Avenue
- 19th Avenue from Baltimore Street to Division Street
- Levi Lane from 11th Avenue to 16th Avenue
- 13th Avenue from Levi Lane to Hartford Lane
- 16th Avenue from Levi Lane to Hartford Lane
- 14th Avenue from current northern terminus of 14th Avenue to Hartford Lane
- 15th Avenue from Palmer Street to Hartford Lane
- Evangeline Terrace from western terminus to drainage ditch

New local streets are depicted in Figure 7-4.

• Upgrade the following arterials and collector streets for the identified projects as shown in Figure 7-4.

- Division Street from 8th Avenue to 7th Avenue – upgrade to arterial
- 7th Avenue from Highway 82 to Division Street – upgrade to arterial
- 8th Avenue from Highway 82 to Baltimore Street – upgrade to collector
- Baltimore Street from 10th Avenue to 8th Avenue – upgrade to collector and upgrade railroad crossing to public standard
- Boise Cascade private haul road from 17th Avenue to Highway 82 – upgrade to collector
- 17th Avenue from Birch Street to Hemlock Street – upgrade to collector

• To alleviate truck impacts through downtown Elgin, several alternatives were considered, including the following two alternatives identified in the *Oregon Highway 82 Corridor Plan*, ODOT, May 29, 1998.

Alternative One in the *Oregon Highway 82 Corridor Plan* involves increasing the turning radiuses at the Highway 82/Highway 204 intersection by cutting back the curb returns, eliminating on-street parking, and re-striping as needed. This alternative primarily attempts to improve the truck turning problems at the Highway 82/Highway 204 intersection and does not address truck impacts through downtown Elgin.

Alternative Two in the *Oregon Highway 82 Corridor Plan* involves developing a truck by pass using the Boise Cascade Access Road. This solution would divert eastbound to southbound truck traffic from Highway 204 to Highway 82 and northbound to westbound truck traffic from Highway 82 to Highway 204 away from downtown Elgin. However, southbound to westbound truck traffic from Highway 82 to Highway 204 would still impact downtown Elgin and would still have problems negotiating the Highway 82/Highway 204 intersection.

Neither of the two alternatives identified in the *Oregon Highway 82 Corridor Plan* was preferred by Elgin’s citizens. Instead, the citizens of Elgin developed the truck route depicted in Figure 7-5 (titled Alternative 7). A total of seven alternatives were considered and are included in Appendix D. The preferred alternative utilizes the existing street system and requires signing and upgrading the pavement of two city blocks. The streets needing pavement upgrades are Division Street between Highway 82 and 7th Avenue, and 7th Avenue from Division Street to Highway 82. A signal would be installed to direct traffic through the intersection. The signal is crucial in making the alternative work because heavily
loaded trucks, or trucks stopping on an adverse incline require traffic control to proceed through the intersection in a timely and safe manner. Traffic control devices, such as signals, must be reviewed by an ODOT traffic engineer.

With the preferred truck route alternative, to avoid turning at the Highway 82/Highway 204 intersection with the restricted turning radii, trucks would go through the intersection and make a loop around the block under this alternative. For example, Highway 204 eastbound truck traffic desiring to travel southbound on Highway 82 would travel through the Highway 82/Highway 204 intersection, take a right at the Division Street/7th Avenue intersection, take another right at the 7th Avenue/Alder Street intersection, and finally take a final turn left onto Highway 82 southbound at the Alder Street/Highway 82 intersection. For Highway 82 northbound truck traffic wanting to travel west on Highway 204 would travel through the Highway 82/Highway 204 intersection, take a right at the Highway 82/Albany Street intersection, take a second right at the Highway 82/7th Avenue intersection, take a third right at the 7th Avenue/Division Street intersection, and finally go through the Highway 82/Highway 204 intersection westbound.

A longer term truck route alternative would be to utilize Hemlock Street and 17th Street if the Boise Cascade private haul road is upgraded to a collector street. This concept is depicted in Figure 7-4 (titled Industrial Development) with the other transportation system improvements.

**BICYCLE AND PEDESTRIAN SYSTEM IMPROVEMENTS**

The Elgin Bicycle and Pedestrian Plan was adopted on August 13, 1996 and specifies improvements necessary to mitigate previously identified deficiencies and improve pedestrian and bicycle facilities in Elgin. The Elgin Bicycle and Pedestrian Plan is included in Appendix C. Recommended bicycle and pedestrian improvements for Elgin are listed in Table 6-2 and project cost is listed in 1996 dollars. Figure 7-6 shows the improvements identified in the Elgin Bicycle and Pedestrian Plan.

<table>
<thead>
<tr>
<th>Road Segment</th>
<th>Project Description</th>
<th>Length (miles)</th>
<th>Priority</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th Avenue (Hwy 82)</td>
<td>Phillips Creek Bridge to 5th Ave</td>
<td>.32</td>
<td>Medium -High</td>
<td>$37,800</td>
</tr>
<tr>
<td></td>
<td>(2) 6’ sidewalks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Division Street (Hwy 204)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th Ave to 17th Ave</td>
<td>(2) 6’ sidewalks &amp; paint crosswalks</td>
<td>.44</td>
<td>High</td>
<td>$105,800</td>
</tr>
<tr>
<td>Birch Street</td>
<td>8th Ave to 17th Ave</td>
<td>(2) 14’ travel lanes + (2) 8’ gravel parking lanes + (2) 5’ sidewalks</td>
<td>.44</td>
<td>High</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------</td>
<td>---------------------------------------------------------------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Cedar Street</td>
<td>8th Ave to Elgin E.C.L.</td>
<td>(2) 14’ travel lanes + (2) 8’ gravel parking lanes + (2) 5’ sidewalks</td>
<td>.38</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Detroit Street</td>
<td>10th Ave to 15th Ave</td>
<td>(2) 12’ travel lanes + (2) 8’ gravel parking lanes + (1) 5’ sidewalk on south side</td>
<td>.24</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Hartford Lane</td>
<td>10th Ave to Palmer St</td>
<td>(2) 12’ travel lanes + (2) 4’ paved shoulder bikeways + (1) 8’ gravel parking lane &amp; (1) 5’ sidewalk on north side</td>
<td>.42</td>
<td>High</td>
</tr>
<tr>
<td>Palmer Street</td>
<td>Hartford Ln to Carolyn Terrace</td>
<td>(2) 12’ travel lanes</td>
<td>.20</td>
<td>Medium-High</td>
</tr>
<tr>
<td>10th Avenue</td>
<td>Division St to Hartford Ln</td>
<td>(2) 12’ travel lanes + (2) 4’ paved shoulder bikeways + (2) 8’ gravel parking lanes + (1) or (2) 5’ sidewalks</td>
<td>.52</td>
<td>High</td>
</tr>
<tr>
<td>14th Avenue</td>
<td>Division St to Birch St</td>
<td>(2) 12’ travel lanes + (2) 8’ gravel parking lanes + (2) 5’ sidewalks</td>
<td>.11</td>
<td>High</td>
</tr>
<tr>
<td>15th Avenue</td>
<td>Carolyn Terrace to Division St</td>
<td>(2) 12’ travel lanes + (2) 8’ gravel parking lanes</td>
<td>.38</td>
<td>Medium-High</td>
</tr>
<tr>
<td>17th Avenue</td>
<td>Division St to Birch St</td>
<td>(2) 12’ travel lanes + (1) 8’ gravel parking lane on west side + (2) 5’ sidewalks</td>
<td>.11</td>
<td>Medium-High</td>
</tr>
</tbody>
</table>

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES
Transportation demand management strategies shift the reliance on one specific mode of travel to other modes, including walking and cycling. Demand management strategies also include ridesharing, telecommuting, or staggering workdays per week or work hours per day in order to spread traffic demand over many hours instead of focusing it into a specific peak time period.

PUBLIC TRANSPORTATION PROJECTS
Public transportation is coordinated by the Union County Transportation Coalition. The Coalition includes Community Connection, New Day Enterprises, and the Center for Human Development (CHD). Clients of these various organizations make up the majority of transit trips, but the public is also served by Community Connection. Shelter from the Storm and Union/Wallowa Veteran’s Services are not considered part of the Union County Transportation Coalition, yet if a centralized transit program were developed, with a fixed point system and full-time coordinator to manage the overall program, they would benefit tremendously.

The diverse needs of the transportation disadvantaged make it difficult for each organization to reach their financial goals. As a result, the Coalition strives to consolidate resources in order to accommodate
the specific needs of the elderly, disabled, and general public. The Union County Transportation Coalition desires to form one corporate umbrella over all of the non-profit transit services in Union County with a full-time coordinator to manage the entire program. Forming the Union County Transportation Coalition has allowed the three groups to combine their efforts to obtain grant money to purchase vehicles.

Demand for Dial-A-Ride service has increased steadily and is reaching capacity. The Coalition estimates that transit will have to shift from a Dial-A-Ride system to a fixed point system in order to be efficient. A fixed point system has all bus stops “fixed,” but the route used by the driver varies depending upon the discretion of the dispatcher and driver. Though this is the Union County Transportation Coalition’s primary goal, they estimate they are $13,000 short of instituting a fixed point system. This type of service requires a centralized scheduling system, and specific locations and travel times. A full-time coordinator would be necessary to manage scheduling and coordinate vehicle maintenance. The coordinator would also be responsible for grant writing and identifying other funding opportunities for project support. Currently, the major funding source for these services is ODOT’s Special Transportation Fund, which comes from a 2-cent cigarette tax.

Another goal of the Union County Transportation Coalition is intercity bus service between all jurisdictions in Union County, which would provide total connectivity within Union County. This would expand the service area to include North Powder and Summerville, which do not currently have access to transit service. The Coalition would also like to expand service to include weekends. In order to reduce traffic congestion and reserve capacity on the state highway system, the Union County Transportation Coalition is considering utilizing park and ride lots in conjunction with a fixed point system that would primarily benefit commuters to the Baum Industrial Park.

**AIRPORT PROJECTS**

The La Grande/Union County Airport Master Plan Update was adopted by Union County in 1998 and identifies a 20-year capital improvement plan for airport expansion. A detailed description of airport improvement projects is listed in the La Grande/Union County Airport Master Plan Update and the Union County TSP.
CHAPTER 7: TRANSPORTATION SYSTEM PLAN AND RECOMMENDATIONS

Elements of the transportation plan include street development standards, access management standards, transportation demand management measures, and modal plans.

STREET DEVELOPMENT STANDARDS
Street development standards are an important component of the TSP because they direct the design of future street construction or re-construction. Therefore, street standards must reflect the kind of street development the City of Elgin wants to see in the future. Table 7-1 shows the current street development standards. During the TSP process, the Elgin TAC revisited these street standards and the recommended standards are shown in Table 7-2.

Table 7-1
Existing Street Development Standards for the City of Elgin

<table>
<thead>
<tr>
<th>Type of Street</th>
<th>Minimum R-O-W</th>
<th>Roadway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterials</td>
<td>80’</td>
<td>44’</td>
</tr>
<tr>
<td>Collectors</td>
<td>60’</td>
<td>40’</td>
</tr>
<tr>
<td>Minor Streets</td>
<td>60’</td>
<td>40’</td>
</tr>
<tr>
<td>Cul-de-sac streets less than 800’ in continuous length</td>
<td>50’</td>
<td>36’</td>
</tr>
<tr>
<td>Radius for turn-around at end of cul-de-sac</td>
<td>45’</td>
<td>30’</td>
</tr>
<tr>
<td>Alleys</td>
<td>20’</td>
<td>20’</td>
</tr>
</tbody>
</table>

*Marginal access rights-of-way or private access easements shall not be less than 10% of street length, and shall be provided with utility easements on each side to provide 50’ combined utility easement and right-of-way width.

City Arterial Streets
City arterials are the primary corridors of travel in Elgin. Arterials connect high activity areas, link Elgin with the state highway system, and link Elgin with outlying communities and regions. Arterials carry the highest traffic volumes.

Figure 7-1 shows the recommended cross section for city arterial streets in Elgin. Right-of-way width is 80 feet, with a 28-foot paved surface width. The right-of-way includes two, eight-foot parking lanes, two, eight-foot shoulders and, if designated in the Bicycle and Pedestrian Plan, the provision for sidewalks or shoulder bikeways.

City Collector Streets
Collector streets distribute traffic between local and collector streets. Collector streets also serve to access property.

Figure 7-1 shows the recommended cross section for city collectors in Elgin. The total right-of-way width is 60 feet, with a 24-foot paved surface width. The right-of-way includes two, eight-foot parking lanes, two, eight-foot shoulders and, if designated in the Bicycle and Pedestrian Plan, the provision for sidewalks or shoulder bikeways.
City of Elgin Transportation System Plan

Arterial

- Overlays: 3" asphalt concrete
- Leveling Course: 4" deep, 1.5" minus
- Base: 9" deep, 4" minus
- Shoulder Overlay: chip seal
- *5' sidewalks &/or shared shoulder bikeway as designated -- see Bike & Pedestrian Plan

Collector

- Overlays: 2" asphalt concrete
- Leveling Course: 4" deep, 1.5" minus
- Base: 8" deep, 4" minus
- Shoulder Overlay: chip seal
- *5' sidewalks &/or shared shoulder bikeway as designated -- see Bike & Pedestrian Plan

Local

- Overlays: 2" chip seal (applied in 3 courses)
- Leveling Course: 4" deep, 1.5" minus
- Base: 8" deep, 4" minus
- Shoulder Overlay: crushed gravel
- *5' sidewalks &/or shared shoulder bikeway as designated -- see Bike & Pedestrian Plan

Marginal Access

- Overlays: 2" chip seal (applied in 3 courses)
- Leveling Course: 4" deep, 1.5" minus
- Base: 8" deep, 4" minus

FIGURE 7-1
Recommended Typical Cross Sections
City Local Streets
The primary purpose of local streets is to access property. These streets typically have lower traffic volumes than arterial or collector streets.

Figure 7-1 shows the recommended cross section for Elgin’s local streets. The total right-of-way width is 60 feet, with a 24-foot chip sealed surface. The right-of-way includes two, eight-foot parking lanes, two, eight-foot shoulders and, if designated in the Bicycle and Pedestrian Plan, the provision for sidewalks or shoulder bikeways.

Bicycle and Pedestrian Facilities
The Elgin Bicycle and Pedestrian Plan designates shared shoulder bikeways or separated bike lanes and sidewalks along selected Elgin streets. Average daily traffic, and in some cases, travel speed determined what type of facility would be added.

Table 7-2
Recommended Street Development Standards for the City of Elgin

<table>
<thead>
<tr>
<th></th>
<th>Arterial</th>
<th>Collector</th>
<th>Local</th>
<th>Cul-de-sacs (&lt;800’ in continuous length)</th>
<th>Cul-de-sac radius</th>
<th>Marginal Access</th>
<th>Alley</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROW</td>
<td>80’</td>
<td>60’</td>
<td>60’</td>
<td>50’</td>
<td>45’</td>
<td>30*</td>
<td>20’</td>
</tr>
<tr>
<td>Surface width</td>
<td>28’</td>
<td>24’</td>
<td>24’</td>
<td>20’</td>
<td>30’</td>
<td>20’</td>
<td>20’</td>
</tr>
<tr>
<td>Parking lane width</td>
<td>8’</td>
<td>8’</td>
<td>8’</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Base depth &amp; material</td>
<td>9” deep</td>
<td>8” deep</td>
<td>8” deep</td>
<td>8” deep</td>
<td>8” deep</td>
<td>8” deep</td>
<td>8” deep</td>
</tr>
<tr>
<td></td>
<td>4” minus</td>
<td>4” minus</td>
<td>4” minus</td>
<td>4” minus</td>
<td>4” minus</td>
<td>4” minus</td>
<td>4” minus</td>
</tr>
<tr>
<td>Leveling course</td>
<td>4” deep</td>
<td>4” deep</td>
<td>4” deep</td>
<td>4” deep</td>
<td>4” deep</td>
<td>4” deep</td>
<td>4” deep</td>
</tr>
<tr>
<td></td>
<td>1.5” minus</td>
<td>1.5” minus</td>
<td>1.5” minus</td>
<td>1.5” minus</td>
<td>1.5” minus</td>
<td>1.5” minus</td>
<td>1.5” minus</td>
</tr>
<tr>
<td>Overlay material</td>
<td>3” asphalt concrete</td>
<td>2” asphalt concrete</td>
<td>2” chip seal (applied in 3 courses)</td>
<td>2” chip seal (applied in 3 courses)</td>
<td>2” chip seal (applied in 3 courses)</td>
<td>2” chip seal (applied in 3 courses)</td>
<td>2” crushed gravel</td>
</tr>
<tr>
<td>Shoulder width</td>
<td>8’ chip seal</td>
<td>8’ chip seal</td>
<td>8’ crushed gravel</td>
<td>8’ crushed gravel</td>
<td>8’ crushed gravel</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Shoulder depth &amp; material</td>
<td>Same as base + leveling course</td>
<td>Same as base + leveling course</td>
<td>Same as base + leveling course</td>
<td>Same as base + leveling course</td>
<td>Same as base + leveling course</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Where designated: sidewalk &amp; bicycle facilities</td>
<td>5’ sidewalks &amp;/or shared shoulder bikeways (see Bike &amp; Pedestrian Plan)</td>
<td>5’ sidewalks &amp;/or shared shoulder bikeways (see Bike &amp; Pedestrian Plan)</td>
<td>5’ sidewalks &amp;/or shared shoulder bikeways (see Bike &amp; Pedestrian Plan)</td>
<td>5’ sidewalks &amp;/or shared shoulder bikeways (see Bike &amp; Pedestrian Plan)</td>
<td>5’ sidewalks &amp;/or shared shoulder bikeways (see Bike &amp; Pedestrian Plan)</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

*Marginal access rights-of-way or private access easements shall not be less than 10% of street length, and shall be provided with utility easements on each side to provide a combined utility easement and access right-of-way width. Marginal access streets may be permitted for 2 to 5 dwellings, only where local street connectivity is not practical due to topographic constraints or existing development patterns preclude a through route extension.

ACCESS MANAGEMENT
Access management is an important means of transportation system protection. By managing the location, design, and number of access points to a transportation system, the overall system level of service can be maintained. Too many connections to state highways in the form of new driveways and public roads can degrade the function of the road by increasing congestion and causing traffic delays. Too many access points can also create safety problems by increasing the potential for traffic conflicts at intersections or driveways.

The Oregon Department of Transportation has an access management policy for the state highway system to protect the function of Oregon highways. State highways are divided into levels of importance to prioritize improvement needs and define operational objectives. The four levels of importance are interstate, statewide, regional, and district. The degree of access management coincides with each level of importance. A primary and secondary function is designated for each level of importance, as well as management objectives to guide highway operations. Elgin has one highway of statewide significance, Oregon Highway 82; and one highway of regional significance, Oregon Highway 204.

### Table 7-3
**Oregon State Highway Access Management Standards**

<table>
<thead>
<tr>
<th>Highway</th>
<th>Category</th>
<th>Level of Importance</th>
<th>Urban/Rural</th>
<th>Intersection Type</th>
<th>Spacing</th>
<th>Private Drive Type</th>
<th>Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>82</td>
<td>4</td>
<td>Statewide</td>
<td>Inside UGB</td>
<td>at-grade or interchange</td>
<td>1320’</td>
<td>L/R turns</td>
<td>500’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Outside UGB</td>
<td>at-grade or interchange</td>
<td>5280’</td>
<td>L/R turns</td>
<td>1200’</td>
</tr>
<tr>
<td>204</td>
<td>5</td>
<td>Regional</td>
<td>Inside UGB</td>
<td>at-grade</td>
<td>1320’</td>
<td>L/R turns</td>
<td>300’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Outside UGB</td>
<td>at-grade</td>
<td>2640’</td>
<td>L/R turns</td>
<td>500’</td>
</tr>
</tbody>
</table>

Source: Table 1 – Access Management Classification System, Appendix B, 1991 Oregon Highway Plan.

### Potential Access Management Mitigation Measures

The frequency of access points to the state highway system can be managed in the following ways:

- Restrict the spacing between access points
- Share access points among adjacent properties
- Utilize access points on side streets, not the state system
- Construct frontage roads for the connection of new access points, instead of connecting to the state highway system
- Offset driveways to produce T-intersections so conflicts between driveway traffic and through traffic can be minimized
- Install raised median islands
- Add turn lane refuges

### Recommended Access Management Policy

Union County and ODOT have collaborated with the jurisdictions in the county to develop a process for access management in conjunction with the 1991 Oregon Highway Plan. According to ORS 374.305, ODOT retains state highway access permitting authority, while within Elgin’s UGB, Elgin retains land use authority. Together, ODOT and the City of Elgin developed a Memorandum of Understanding (MOU) detailing joint review of access points to the state system, and this MOU provides joint criteria by which access review is carried out (Appendix F).
All land within the Urban Growth Boundary (UGB) is divided into “urban” and “urbanizable” categories. Urban land is land that is built out. There are few opportunities for new or denser development. Urbanizable land is land between the built out, or urban area, and the UGB. Urbanizable land is typically sparsely developed with opportunities for new construction, and additional opportunities for driveways and new public streets. Existing accesses onto the state highway system at the time of TSP adoption are designated as conforming features. The existing block spacing of approximately 225 to 250 feet will not be affected by the spacing standards set forth in the TSP.

Included in Appendix E is a checklist designed to gauge the preliminary location and intensity of proposed development. The purpose of the checklist is to alert potential developers/property owners that they must coordinate with ODOT, Region 5 before planning development, such as architectural drawings or site plans, and address Elgin development standards. In part, the checklist asks whether the property in question joins either Oregon Highway 82 or 204. If so, the checklist gives contact information so the developer/property owner can coordinate with ODOT prior to submitting any land use application.

All existing access points to Oregon Highways 82 and 204 within Elgin’s UGB are mapped and any access points with potential safety hazards have been identified as Reviewable Access Points on the TSP Access Management Maps (Figures 7-2 and 7-3). The identification of potential safety hazard access points indicates an opportunity for ODOT review prior to Elgin’s final decision on the land use application.

**Elgin Urban TSP Area:** If a property is proposed for new development or redevelopment and is identified on the TSP Access Management Maps (Figures 7-2 and 7-3) as a Reviewable Access Point, the applicant will coordinate with ODOT, Region 5 prior to submitting any land use application. Additionally, if a proposed property use will generate a change equal to 100 daily vehicle trips or more on Oregon Highways 82 or 204, then the applicant will coordinate with ODOT, Region 5 prior to submitting any land use application. All proposals accessing Oregon Highways 82 or 204 requiring a zone change or plan amendment will also be referred to ODOT, Region 5 prior to submitting any land use application. The purpose of ODOT, Region 5 review is so applicants have the benefit of ODOT comments prior to large financial expenditures (i.e. site plan preparation, architectural drawings, etc.).

There are several alternatives when considering Reviewable Access Points - the access onto the state highway is closed and moved to a side street, the access is combined with other accesses within the same block, the access is moved toward the center of the block in order not to conflict with intersection traffic, the access conforms to previously listed “Potential Access Management Mitigation Measures,” or nothing is done and the access is left alone.

**Elgin Urbanizable TSP Area:** On the south end of Elgin and west of Oregon Highway 82, is an area that is urbanizable. There is an opportunity for one additional road connection onto Oregon Highway 82 based on the access management standards identified in the 1991 Oregon Highway Plan. The Boise Cascade Corporation private haul road is in the approximate location.
of this future connection and could be upgraded to a collector street. To serve future industrial development in this area, additional driveways and streets could connect to the new collector street and not to the state highway system.

MODAL PLANS
Elgin modal plans were drafted using data collected from a physical inventory of existing conditions, previous plans, Technical Advisory Committee and public input, forecasts, and community goals. The modal plans address transportation needs over the next 20 years, taking into account projected traffic volume growth. The specifics of recommended transportation improvement projects may change slightly depending on the timing and location of projected growth in Elgin.

Street System Plan
Recommended improvements to the transportation system, including project priority and estimated cost, are listed in Tables 7-4 and 7-5. Table 7-4 lists state identified transportation system recommendations. Street system improvement projects identified by Elgin and refined by the Elgin TAC are listed in Table 7-5. Figure 7-4 shows project locations and is numbered based on Table 7-5. Figure 7-5 shows the preferred truck route alternative in detail.

Table 7-4
State Identified Transportation System Recommendations

<table>
<thead>
<tr>
<th>State Identified Projects</th>
<th>Priority</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Oregon Highway 82 Corridor Plan Project Recommendations</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right-of-way Acquisition, Elgin to Joseph</td>
<td>High</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Elgin to Joseph Freight Rail Preservation Plan</td>
<td>High</td>
<td>$50,000</td>
</tr>
<tr>
<td>Elgin Section</td>
<td>High</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Umatilla County Line – NW City Limits (Elgin)</td>
<td>High</td>
<td>$12,300,000</td>
</tr>
<tr>
<td>Highway 204 Truck Connection</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Grade Crossing Protection Program</td>
<td>Low</td>
<td>No Estimate</td>
</tr>
<tr>
<td>Railroad Track Improvement Program, La Grande to Elgin</td>
<td>Low</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Highway 82 Scenic Turnouts</td>
<td>Low</td>
<td>$300,000</td>
</tr>
<tr>
<td>Minam Grade (Phase 2)</td>
<td>Low</td>
<td>$5,000,000</td>
</tr>
</tbody>
</table>

Table 7-5
Locally Identified Street System Recommendations

<table>
<thead>
<tr>
<th>Locally Identified Projects</th>
<th>Priority</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) New Fire Hall Site</td>
<td>High</td>
<td>$375,000</td>
</tr>
<tr>
<td>(B) Industrial Development</td>
<td>High</td>
<td>$1,920,000</td>
</tr>
<tr>
<td>(C) Residential Connectivity</td>
<td>High</td>
<td>*</td>
</tr>
<tr>
<td>(Alt. 7) Oregon Highways 82/204 Intersection (Preferred Truck Route Alternative)</td>
<td>High</td>
<td>$315,000</td>
</tr>
</tbody>
</table>

* Developers will pay the cost for new local streets as development occurs.

Bicycle and Pedestrian System Plan
Table 7-6 lists recommended bicycle and pedestrian projects from the Elgin Bicycle and Pedestrian Plan, which was adopted in 1996. Figure 7-6 shows bicycle and pedestrian improvement locations.
City of Elgin Transportation System Plan

Elgin, Oregon 1997

LEGEND
- Existing Arterial
- Existing Collector
- Existing Local Street
- Upgrade to Arterial
- Upgrade to Collector
- Future Local Street

Alternative 7
See Figure 7-5 for Proposed Truck Route improvements

FIGURE 7-4
Transportation System Improvements
LEGEND

--- Tollgate to Wallowa County — use signed truck route (same route both directions)

La Grande to Wallowa County — use Highway 82 (same route both directions)

Tollgate to La Grande — use loop to the south
La Grande to Tollgate — use loop to the north

1 Round corners to accommodate truck turning radii

2 Upgrade pavements for heavy truck traffic

3 Install traffic signal tied to railroad crossing

4 Paint solid centerline

5 Provide traffic control/truck route signs

FIGURE 7-5
Truck Route Improvements
### Table 7-6
Recommended Elgin Bicycle and Pedestrian Projects

<table>
<thead>
<tr>
<th>Road Segment</th>
<th>Project Description</th>
<th>Length (miles)</th>
<th>Priority</th>
<th>Cost (1996 dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th Avenue (Hwy 82)</td>
<td>Phillips Creek Bridge to 5th Ave (2) 6’ sidewalks</td>
<td>.32</td>
<td>Medium -High</td>
<td>$37,800</td>
</tr>
<tr>
<td>Division Street (Hwy 204)</td>
<td>8th Ave to 17th Ave (2) 6’ sidewalks &amp; paint crosswalks</td>
<td>.44</td>
<td>High</td>
<td>$105,800</td>
</tr>
<tr>
<td>Birch Street</td>
<td>8th Ave to 17th Ave (2) 14’ travel lanes + (2) 8’ gravel parking lanes + (2) 5’ sidewalks</td>
<td>.44</td>
<td>High</td>
<td>$160,143</td>
</tr>
<tr>
<td>Cedar Street</td>
<td>8th Ave to Elgin E.C.L. (2) 14’ travel lanes + (2) 8’ gravel parking lanes + (2) 5’ sidewalks</td>
<td>.38</td>
<td>Medium -High</td>
<td>$119,402</td>
</tr>
<tr>
<td>Detroit Street</td>
<td>10th Ave to 15th Ave (2) 12’ travel lanes + (2) 8’ gravel parking lanes + (1) 5’ sidewalk on south side</td>
<td>.24</td>
<td>Medium -High</td>
<td>$51,078</td>
</tr>
<tr>
<td>Hartford Lane</td>
<td>10th Ave to Palmer St (2) 12’ travel lanes + (2) 4’ paved shoulder bikeways + (1) 8’ gravel parking lane &amp; (1) 5’ sidewalk on north side</td>
<td>.42</td>
<td>High</td>
<td>$278,643</td>
</tr>
<tr>
<td>Palmer Street</td>
<td>Hartford Ln to Carolyn Terrace (2) 12’ travel lanes</td>
<td>.20</td>
<td>Medium -High</td>
<td>$178,120</td>
</tr>
<tr>
<td>10th Avenue</td>
<td>Division St to Hartford Ln (2) 12’ travel lanes + (2) 4’ paved shoulder bikeways + (2) 8’ gravel parking lanes + (1) or (2) 5’ sidewalks</td>
<td>.52</td>
<td>High</td>
<td>$418,530</td>
</tr>
<tr>
<td>14th Avenue</td>
<td>Division St to Birch St (2) 12’ travel lanes + (2) 8’ gravel parking lanes + (2) 5’ sidewalks</td>
<td>.11</td>
<td>High</td>
<td>$31,891</td>
</tr>
<tr>
<td>15th Avenue</td>
<td>Carolyn Terrace to Division St (2) 12’ travel lanes + (2) 8’ gravel parking lanes</td>
<td>.38</td>
<td>Medium -High</td>
<td>$80,258</td>
</tr>
<tr>
<td>17th Avenue</td>
<td>Division St to Birch St (2) 12’ travel lanes + (1) 8’ gravel parking lane on west side + (2) 5’ sidewalks</td>
<td>.11</td>
<td>Medium -High</td>
<td>$28,560</td>
</tr>
</tbody>
</table>

**Transportation Demand Management Plan**
Transportation demand management promotes efficient utilization of the existing transportation system.
rather than widening or constructing new roadways. Some successful techniques include ridesharing, telecommuting, encouraging the use of other modes, and staggering work schedules. Many of these strategies work best when focused on high density employment areas.

Encouraging other modes, such as bicycle and pedestrian facilities, could reduce some traffic congestion and such facilities are being recommended in all local bicycle and pedestrian plans. Telecommuting and staggered work schedules provide for employee work schedule flexibility, less onsite parking demand, and reduced peak hour traffic flows.

Community Connection is pursuing the implementation of intercity bus service, and is currently developing a 5-year plan for the identification of transit needs and funding sources. Intercity bus service would incorporate the area industrial parks and may reduce congestion.

No costs have been estimated for the transportation demand management plan.

**Public Transportation Plan**

Wallowa Valley Stage Line, Blue Mountain Cab Company, Greyhound Bus Lines, and Mid-Columbia Bus Company offer a variety of privately owned public transportation services for Union County and the City of Elgin. Public transportation is also provided through the Union County Transportation Coalition. The Coalition includes Community Connection, New Day Enterprises, and the Center for Human Development (CHD). Clients of these various organizations make up the majority of transit trips, but the general public is also served by Community Connection. Shelter from the Storm and Union/Wallowa Veteran’s Services provide client transport as well.

Wallowa Valley Stage Line, Blue Mountain Cab Company, Greyhound Bus Lines, and Mid-Columbia Bus Company have no plans for service expansion.

The Union County Transportation Coalition is working toward the implementation of a fixed point system in the La Grande area, and eventually instituting intercity bus service connecting Union County communities and linking with Baker and Wallowa Counties. The Coalition is currently formulating a 5-year plan that identifies countywide transit needs and funding opportunities to meet those needs.

Fixed point bus service would include connecting the court system, Eastern Oregon University, and mental and public health services with Max Square, the downtown intermodal transportation hub, and with the senior center and businesses along Island Avenue (Oregon Highway 82) in La Grande. Fixed point bus service would ultimately connect with outlying communities, including Elgin, and could provide increased mobility within the Union County community. Intercity transit service would also reserve capacity on the state highway system by providing alternatives to auto travel.

**Rail Transportation Plan**

There is local interest in restoring AMTRAK service to La Grande, and ODOT’s Rail Section is currently pursuing restoration at this time. As passenger rail develops in other parts of Oregon, an extension of this service to the east may be considered within the 20-year planning period. According to the ODOT Rail Section, there is a tentative proposal to implement a fleet of small, efficient trains for express service in the Willamette Valley within the next 20 years. This would serve as a test case to gauge support and ridership, and if successful, may be extended to the eastern region of the state.

In 1994, the Idaho Northern and Pacific petitioned the Surface Transportation Board to abandon roughly 61 miles of track between Elgin and Joseph, which lies mostly in Wallowa County. This abandonment petition was approved March 12, 1997 by the Surface Transportation Board. The Oregon Highway 82
Corridor Plan identifies the acquisition of the INP railroad right-of-way to be used as a multi-use path between Elgin and Joseph as a potential improvement project.

Discussion between Union County and Wallowa County is ongoing. Additionally, the Oregon Parks and Recreation Department is pursuing a grant application for Statewide Transportation Enhancement (TEA-21) funds through the Oregon Department of Transportation for the purchase of the abandoned rail corridor between Elgin and Joseph. There is local support for the preservation of the abandoned Idaho Northern and Pacific railroad right-of-way for a multi-use path between Elgin and Joseph.

Air Transportation Plan
The La Grande/Union County Airport Master Plan Update was adopted by Union County in 1998 and identifies a 20-year capital improvement plan for airport expansion. A detailed description of airport improvement projects is listed in the La Grande/Union County Airport Master Plan Update and the Union County TSP.

Pipeline Transportation Plan
The two major pipelines that traverse Union County are the Chevron and Northwest Natural Gas Pipelines. The pipelines are projected to provide adequate capacity over the next 20 years.

Water Transportation Plan
The City of Elgin has no navigable waterways, therefore Elgin has no waterborne transportation services.

TRANSPORTATION SYSTEM PLAN IMPLEMENTATION PROGRAM
The implementation program includes a 20-year TSP Capital Improvement Program, which identifies project priorities for the next 20 years. High priority projects are those scheduled to be undertaken in the next 5 years, medium priority projects are those scheduled to be undertaken in the next 5 to 10 years, and low priority projects are those scheduled to be undertaken between the next 10 to 20 years. This Capital Improvement Program shall be updated yearly by resolution, if determined necessary by the Elgin City Council. Table 7-7 includes the Capital Improvement Program, project priority, and estimated project cost. These projects originate from several sources including the Oregon Highway 82 Corridor Plan, the Elgin Bicycle and Pedestrian Plan, and locally identified TSP projects. Bicycle and pedestrian facilities are listed in 1996 dollars. The timing of these projects may change based on staff and financial resources.
Table 7-7
TSP Capital Improvement Program

<table>
<thead>
<tr>
<th>Project</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Priority</strong></td>
<td></td>
</tr>
<tr>
<td>Right-of-way Acquisition, Elgin to Joseph</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Elgin to Joseph Freight Rail Preservation Plan</td>
<td>$50,000</td>
</tr>
<tr>
<td>New Fire Hall Site</td>
<td>$375,000</td>
</tr>
<tr>
<td>Residential Connectivity</td>
<td>**</td>
</tr>
<tr>
<td>Industrial Development</td>
<td>$1,920,000</td>
</tr>
<tr>
<td>Oregon Highways 82/204 Intersection (Locally Identified Truck Route Option)</td>
<td>$315,000</td>
</tr>
<tr>
<td>Elgin Section</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Umatilla County Line – NW City Limits (Elgin)</td>
<td>$12,300,000</td>
</tr>
<tr>
<td>8th Avenue – Phillips Creek Bridge to 5th Avenue*</td>
<td>$37,800</td>
</tr>
<tr>
<td>Division Street – 8th Avenue to 17th Avenue*</td>
<td>$105,800</td>
</tr>
<tr>
<td>Birch Street – 8th Avenue to 17th Avenue*</td>
<td>$160,143</td>
</tr>
<tr>
<td>Cedar Street – 8th Avenue to East City Limit*</td>
<td>$119,402</td>
</tr>
<tr>
<td>Detroit Street – 10th Avenue to 15th Avenue*</td>
<td>$51,078</td>
</tr>
<tr>
<td>Hartford Lane – 10th Avenue to Palmer Street*</td>
<td>$278,643</td>
</tr>
<tr>
<td>Palmer Street – Hartford Lane to Carolyn Terrace*</td>
<td>$178,120</td>
</tr>
<tr>
<td>10th Avenue – Division Street to Hartford Lane*</td>
<td>$418,530</td>
</tr>
<tr>
<td>14th Avenue – Division Street to Birch Street*</td>
<td>$31,891</td>
</tr>
<tr>
<td>15th Avenue – Carolyn Terrace to Division Street*</td>
<td>$80,258</td>
</tr>
<tr>
<td>17th Avenue – Division Street to Birch Street*</td>
<td>$28,560</td>
</tr>
<tr>
<td><strong>Medium Priority</strong></td>
<td></td>
</tr>
<tr>
<td>Highway 204 Truck Connection (Highway 82 Corridor Plan Options)</td>
<td>Option 1 = $60,000</td>
</tr>
<tr>
<td></td>
<td>Option 2 = $4,000,000</td>
</tr>
<tr>
<td><strong>Low Priority</strong></td>
<td></td>
</tr>
<tr>
<td>Grade Crossing Protection Program</td>
<td>No Estimate</td>
</tr>
<tr>
<td>Railroad Track Improvement Program, La Grande to Elgin</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Highway 82 Scenic Turnouts</td>
<td>$300,000</td>
</tr>
<tr>
<td>Minam Grade (Phase 2)</td>
<td>$5,000,000</td>
</tr>
</tbody>
</table>

*Elgin Bicycle and Pedestrian Plan

**Developers will pay the cost for new local streets as development occurs.
CHAPTER 8: FUNDING OPTIONS

The Transportation Planning Rule, OAR 660-012-0040 states under “Transportation Financing Program” that TSPs for jurisdictions within an Urban Growth Boundary containing a population greater than 2,500 people shall include a transportation financing program. Elgin’s population of 1,745 people precludes a detailed TSP transportation financing program. This TSP will, however, evaluate potential funding and financing sources available for identified transportation improvement projects.

HISTORICAL STREET IMPROVEMENT FUNDING SOURCES

In the State of Oregon, transportation improvements are coordinated among state, county, and city jurisdictions in order to benefit the overall transportation system. Because of this relationship, project costs are frequently shared.

Table 8-1 shows the distribution of road revenues by jurisdiction level in Oregon. This analysis was performed in 1991, and continues to reflect the current funding allocation revenue structure.

Table 8-1
Road Revenue Allocation by Jurisdiction Level

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Jurisdiction Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
</tr>
<tr>
<td>State Highway Fund</td>
<td>57%</td>
</tr>
<tr>
<td>Local</td>
<td>0%</td>
</tr>
<tr>
<td>Federal Road</td>
<td>34%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: ODOT 1993 Oregon Road Finance Study

Across Oregon, the State Highway Fund comprises 49% of road revenues and becomes a significant source of funding at all levels of government. Sources of revenue for the fund include gas taxes, vehicle registration fees, and weight/mile taxes. Federal road sources generate another 30% of road revenues, and are comprised of federal highway funds and federal timber revenues. The remainder of road revenues are generated at the local level and are comprised of property taxes, Local Improvement Districts (LIDs), bonds, impact fees, system user taxes, general funds, and other sources.

In Oregon, the state produces 94% of its highway revenues from user fees, which is a much higher percentage than the average 78% for all other states. These highway revenues are generated from vehicle registration fees, weight/mile taxes, and fuel taxes. Theoretically, this is an equitable fee system because it generates the highest revenues from those creating the highest system maintenance needs. Oregon has not tied this fee system to inflation, therefore, the fuel tax is a fixed 24 cents per gallon.

Transportation Revenue Outlook

In a Financial Assumptions document prepared by ODOT in March 1995, some assumptions are recommended for consideration in the preparation of Transportation System Plans. The document projects revenues from the State Highway Fund through the year 2018. These estimates assume (1) the fuel and weight/mile tax will increase one cent per gallon per year, with an additional one cent per gallon every fourth year; (2) TPR goals are met; and (3) that inflation occurs at an average annual rate of 3.7%. Figure 8-1 shows projected State Highway Fund revenues to the year 2018. Both current and adjusted dollar amounts are shown. Revenues are projected to increase faster than inflation in the first 10 years, but slow to a rate less than inflation, and decline slightly, in the last 10 years.
The State Highway Fund will remain a significant source of funding for Elgin over the next 20 years, however due to a projected reduction in State Highway Fund revenues, it is recommended that Elgin reduce reliance on this funding source.

REVENUE SOURCES
Road revenues have decreased, along with USFS timber receipts. Additionally, property tax limitations (Measures 5 and 50) have further reduced revenues for road maintenance and improvements. Over the next 20 years, Elgin will need to pursue other transportation funding sources. The following overview provides several Elgin funding options.

Property Taxes
Property taxes can be a local revenue source controlled by local decision makers because they can be relatively more stable than income or sales taxes.

Property taxes can be assessed in three ways – tax base levies, serial levies, and bond levies. The most common assessment method is through tax base levies, which don’t expire and currently in Oregon can be increased by 3% per year. Serial levies place a limit on the levied amount and limit the time they can be imposed. Bond levies are project specific and have time limits based on the local jurisdiction’s debt load.

Ballot Measure 5, passed in the early 1990s, limits the property tax rate for purposes other than payment of certain voter-approved general obligation debt. The tax rate for all local taxing authorities is limited to $15 per $1,000 of assessed valuation. Non-school taxing authorities are limited to $10 per $1,000 of assessed valuation. All tax base, serial, and special levies are subject to the tax rate limitation.
Measures 47 and 50 were passed in November 1996, and 1997, respectively. They reduce and limit property taxes while also limiting local revenues. The measures limited 1997-98 property taxes to the lesser of either 1995-96 taxes minus 10%, or 1994-95 taxes. It also limits future annual property tax increases to 3%, with some exceptions. The lost revenue may be replaced only with state income tax, unless voters approve replacement fees or charges. Tax levy approvals require 50% voter participation in certain elections. Measure 50 also requires that cities and counties prioritize funding for education and public safety, and obtain voter approval to raise fees for services, if increased fee revenue is a substitute for property tax support.

**System Development Charges**

System development charges, or SDCs, are a method of generating revenue only if a community has specific infrastructure plans in place according to state guidelines. SDCs allocate infrastructure system development costs to the portion of property development that creates the increased system need.

Cities and counties have the legal authority to assess property owners/developers SDCs based on the projected demand from their development. SDCs usually target improvements to infrastructure systems, such as transportation, sewer, and water systems.

Elgin could utilize SDCs to generate money for transportation system maintenance and improvement. The fee is collected upon building permit issuance. In the case of transportation, SDCs would be calculated based on new development trip generation. This may not prove to be a significant revenue source, because the development rate in Elgin is slow, and not projected to increase to a level that make SDCs a pragmatic funding source.

**State Gas Taxes**

Fuel taxes are allocated by the state to all cities and counties for road system maintenance and construction. The fuel tax, along with vehicle registration fees and weight/mile taxes, are allocated back to cities and counties based on population and other factors determined at the state level. This is a significant source of revenue for Elgin.

**Local Gas Taxes**

The Oregon Constitution permits incorporated jurisdictions and counties to levy an additional fuel tax beyond the state fuel tax. The locally levied fuel tax must be used only for road system construction or improvements within the jurisdiction. Currently, only a handful of cities and counties use this method, including Woodburn, The Dalles, Washington County, and Multnomah County.

**Vehicle Registration Fees**

Oregon vehicle registration fees are distributed for city and county road funding based on a state level formula. Oregon counties do have state authority to impose local vehicle registration fees. This fee would be assessed to passenger cars on a biannual basis. This method is not currently being used in Oregon and would require coordination among other incorporated jurisdictions, Union County and Elgin.

**Local Improvement Districts**

Oregon Revised Statutes do allow local governments to form Local Improvement Districts (LIDs) to construct public improvements. LIDs are commonly used to construct projects in specific areas, such as a new bikeway, or a neighborhood street improvement project. State statutes allow for district formation by either the local government or property owners. An ordinance must be in place stipulating the procedure for district formation and participant payback. Costs can be allocated based on property frontage or other methods, such as trip generation. Participants’ costs are considered an assessment
against the property, which is similar to a tax lien. Participants can generally choose to pay the assessment in cash or apply for financing through their local jurisdiction. Since Ballot Measure 5, counties often fund LIDs by selling special assessment bonds.

**Grants and Loans**

Most grants and loans are aimed at furthering economic development. They are typically used in developing areas that lack specific infrastructure, such as sewer, water, and adequate transportation. Many grant and loan programs require a local match and should not be counted on as a stable revenue source because there is no guarantee of project selection. These programs include Immediate Opportunity Grants, Oregon Special Public Works Funds, Public Transportation Funds, and Bicycle and Pedestrian Programs, which are described below.

**Immediate Opportunity Grant Program**

The Oregon Economic Development Department (OEDD) and the Oregon Department of Transportation jointly administer the Immediate Opportunity Grant Program. The program purpose is to provide financial opportunity for local and regional economic development efforts. The program receives $5,000,000 from Oregon fuel tax revenues and individual maximum grants are $500,000. The most significant components in determining whether a grant request will be funded are the potential improvement of public roads, the inclusion of a regionally significant economic development project, the creation of primary employment, and the presence of a local match.

**Oregon Special Public Works Fund**

This fund is derived from the Oregon Lottery and was created in 1995 as a means of distributing lottery money for economic development projects. Grants and loans are available to fund infrastructure construction necessary to support developments creating permanent jobs or retaining jobs. Infrastructure in support of developments wishing to locate, expand, or remain in Oregon are eligible for this program. These funds can be used for new construction or the expansion and rehabilitation of public improvements, such as sewage treatment plants, water works, and public transportation facilities.

Even though both loans and grants are available, the program emphasizes loans in order to ensure that money returns to the program for local project reinvestment. The maximum loan amount per project is $11,000,000. The loan term cannot exceed the life of the project, or 25 years, whichever is less. The maximum grant per project is $500,000 and may not exceed 85% of total project cost.

**Public Transportation Funds**

There are many grants and loans available for public transportation funding, some include Special Transportation Funds (STF), Section 5311 funds, Community Transportation Program funds, and Special Transportation District funds. All of these programs require local matches from the participating agencies.

**Bicycle and Pedestrian Program Funds**

Oregon’s Bicycle and Pedestrian Program have grants for bicycle and pedestrian system improvements. These funds cannot be used for the construction or improvement of purely recreational facilities, but must be spent on projects that provide alternatives to the automobile. Local matches are required.
**Elgin Transportation System Plan**

**ODOT Funding Options**
The Statewide Transportation Improvement Program (STIP) is administered by ODOT and prioritizes transportation projects throughout the state that would enhance the statewide transportation system. Projects are identified over a 3-year period and updated yearly. ODOT coordinates projects with local jurisdictions and verifies that the STIP is consistent with other plans including, corridor plans, TSPs, ODOT modal plans, and ISTEA planning requirements. Likewise, the Elgin TSP provides ODOT with a 20-year local transportation improvement projects estimation.

ODOT has stipulated that improvement projects not on the state highway system may be eligible for state funding if the project would reserve capacity on the state system by reducing congestion and preserving safety. ISTEA made this possible by allowing for the use of federal and state dollars outside of highway corridors. This is a viable option for Elgin.

**FINANCING TOOLS**
Financing tools are an opportunity for local governments to pay for projects over time. These are different than the previously mentioned funding opportunities because here financing means *accruing money through debt obligation*. The previously mentioned funding opportunities are *the actual generation of dollars* for projects.

There are many types of financing options available to Elgin. These should not be viewed as a source of income, however, only as a method of shifting funding over time. Using debt to finance improvements depends upon the local government’s ability to pay for debt service, the impact of the debt load, and the local government’s credit rating. Debt financing is a way to shift the improvement cost burden to the people using the transportation system, and spreading it over the life of the transportation system.

**General Obligation Bonds**
General obligation bonds (GO bonds) are voter-approved and are the least expensive borrowing mechanism on the part of the local government. These bonds are typically supported by property tax levies that are specifically approved to retire debt, and do not expire until the debt is paid. The property tax levy is spread throughout the taxing district based on assessed valuation. These types of bonds are appropriate for public improvements, such as the transportation system, that benefit the entire community.

GO bonds are not subject to the limitations set by Ballot Measures 5 and 50 since they are issued subsequent to voter approval.

**Limited Tax Bonds**
Limited tax bonds are similar to general obligation bonds because they are an obligation on the part of the local government. This obligation is limited by current revenue sources and does not require voter approval. Since these are not issued pursuant to the taxing power of a local government, there is a higher borrowing cost than general obligation bonds. Because these bonds are not voter approved, Ballot Measure 5 and 50 limitations apply.

**Bancroft Bonds**
State law allows for local governments to issue Bancroft bonds. These bonds would pledge Elgin’s faith and credit. They are essentially general obligation bonds that are paid with assessments. Historically, these bonds did not require voter approval, yet provided Elgin with the ability to pledge its faith and credit to obtain a lower borrowing cost. Since they are not voter approved, the Ballot Measure 5 and 50 limitations apply to the taxes levied to pay debt service. Bancroft bonds have generally not been used since 1991 and the passage of Ballot Measure 5.
CHAPTER 9: RECOMMENDED POLICY AND ORDINANCE AMENDMENTS

IMPLEMENTATION PLAN
Transportation System Plan implementation includes updating street development standards, utilizing access management guidelines, and amending the Elgin Land Use Plan, Zoning Ordinance, and Partition & Subdivision Ordinance. This ensures implementation at the local level through coordinated and consistent development review, allows Elgin to address emerging transportation issues, and satisfies the requirements of the Transportation Planning Rule (TPR).

Table 9-1 shows TPR requirements for land use regulations and whether they are currently addressed in Elgin’s Land Use Plan and Zoning, Partition & Subdivision Ordinances. Some elements are partially addressed and some are not addressed at all. Upon adoption of the Transportation System Plan, all the required elements will be addressed in Elgin’s code language.

Table 9-1
Required Code Elements of the Transportation Planning Rule

<table>
<thead>
<tr>
<th>TPR Requirements</th>
<th>Addressed in Code Language</th>
<th>Partially Addressed in Code Language</th>
<th>Not Addressed in Code Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amend land use regulations to reflect and implement the TSP – including road development standards</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Identify which transportation services and facilities will be allowed outright and which will be conditionally allowed</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Adopt land use or subdivision ordinance measures, consistent with applicable federal and state requirements to protect transportation facilities, corridors, and sites for their identified functions, to include the following topics:</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Access management and control</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Protection of public use airport</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>A process for coordinated review of land use actions with ODOT</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>A process to apply conditions to development approvals</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Regulations to provide notice to public agencies</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Land use applications that require public hearings</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Subdivision and partition applications</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Other applications that affect private access to roads</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Regulations ensuring that amendments to land use designations and densities are consistent with the function, capacity, and facility levels of service identified in the TSP</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

The Elgin Bicycle and Pedestrian Plan was adopted on August 13, 1996 and was found to be in compliance with the TPR for bicycle and pedestrian facilities. Therefore, the proposed amendments in this chapter address other requirements of the TPR. The La Grande/Union County Airport Master Plan Update addresses the required elements of the TPR for public use airports. Policy and ordinance amendments are recommended for the Elgin Land Use Plan, the Elgin Zoning Ordinance, and the Elgin Partition and Subdivision Ordinance. Upon adoption of the Elgin TSP, the 1979 Elgin Street Plan will be repealed and replaced by the Elgin Transportation System Plan.

To comply with ORS 197.015 Statewide Planning Goal 12: Transportation, and OAR Chapter 660, Division 12, The Transportation Planning Rule (as amended), adoption of the final Elgin Transportation System Plan must take place following public review and comment on the draft TSP.
Proposed language is written in bold format while language proposed for deletion is stricken through.

**Elgin Land Use Plan**

**Land Use Planning Goal**

Policies:

(D) The Plan will be coordinated with the Union County Land Use Plan and with other state and federal agencies, that may have an effect upon or be affected by local decisions.

10. **Land use decisions will consider impacts on existing or planned transportation facilities.**

11. **Development proposals, plan amendments, or zone changes will conform with the adopted Transportation System Plan.**

Policy Recommendations:

3. Elgin will submit amendments and updates to the Land Use Plan for Union County Planning Commission and Union County Court review.

**Public Facilities and Services Goal**

Policies:

1. That in planning for future development, the existing capacity or planned capability of public facilities and services, and the proximity of future development to the transportation system will be considered.

4. That improvements or development of City facilities and services be guided by the Capital Improvement Program and the Transportation System Plan, but that enough flexibility be allowed to move projects to a higher priority if funding from outside sources becomes available.

Policy Recommendations:

2. Development and improvement of City facilities and services will be guided by the Capital Improvement Program and the Transportation System Plan. This program The Capital Improvement Program will be updated annually.

**Transportation Goal**

Background Information:

2. Inventory of Local, Regional, and State Transportation Needs –

On June 10, 1980, the City of Elgin adopted a Street Plan that recognizes the interrelationship between planning for land use, public facilities and service, and streets. Policies were adopted to devise a system of arterial, major and minor collectors, and secondary and local streets that will facilitate existing and anticipated traffic movement. Improvement standards, sign placement, and maintenance programs are also outlined within the plan which is included as part of the comprehensive plan.

State highways 82 and 204 run through the City and have been slated for future improvement. A section of Highway 82 between Elgin and Minam Junction for a distance of 9.7 miles was overlaid, widened and straightened. A storm drainage improvement project in downtown Elgin on Highway 82 was completed in the summer of 1982. The Traffic Safety Commission has identified the need to place railroad gates and signals on Division Street.

The Elgin Transportation System Plan was developed in 1998-1999 in order to inventory the transportation system, recognize the relationship between land use and transportation, and identify system needs over a 20-year period.
5. Minimize Adverse Social, Economic and Environmental Impacts and Costs – Elgin is encouraging infilling that utilizes existing transportation networks. New street development will be discouraged to minimize maintenance, safety and environmental hazards. The Elgin Street Plan does not identify significant residential developments along existing arterial streets, therefore reducing environmental impacts associated with highway noise.

9. Conform with local and regional comprehensive land use plans – According to a policy in the Elgin Street Plan, the Transportation System Plan street planning decisions will be in accord with the area Land Use Plan, and Zoning Maps Ordinance, and Partition and Subdivision Ordinance. The Elgin Land Use Plan and Transportation System Plan have been written in cooperation with Union County.

Policies:

1. The Transportation System Plan is an element of the Elgin Land Use Plan and identifies the general location of transportation improvements.

2. Elgin will continue to support the development of all types of economical transportation for local citizens, including a network of streets, bikeways, sidewalks, and safe street crossings to promote safe and convenient bicycle and pedestrian circulation within the community, as set forth in the Elgin Bicycle and Pedestrian Plan.

3. A priority list, as a part of the TSP, will guide road improvements and developments.

4. That roads created in subdividing or land parceling will be designed to tie into existing and anticipated road systems.

5. That the cost for street improvements for land being converted to urban uses be borne by the developer and constructed to city standards identified in the Transportation System Plan.

6. Road or street right-of-ways will not generally be vacated, but the corridors will be considered for other possible public uses, such as accessways, paths, or trails.

7. Elgin will protect the function of existing and planned roadways or roadway corridors as identified in the Transportation System Plan through the application of appropriate access control measures and land use regulations.

8. All development proposals, plan amendments, zone changes, and transportation facilities shall conform with the adopted Transportation System Plan street development standards.

9. Elgin will coordinate with the Oregon Department of Transportation to implement the highway improvements listed in the Statewide Transportation Improvement Program (STIP) that are consistent with the Elgin Transportation System Plan and Land Use Plan.

Policy Recommendations:

1. The Transportation System Plan and Capital Improvement Program will coordinate and prioritize transportation improvements and developments.

2. Elgin will support programs to improve transportation conditions for the disadvantaged.

3. Elgin will cooperate with other and notify all appropriate local, state, and federal agencies to help and transportation interest groups when an application potentially impacts a transportation facility. Transportation interest groups must request notice in writing and may be subject to a fee. Notification will help to identify agency standards and provide an efficient and economical transportation system.

Energy Conservation Goal

Background Information:

4. Encourage: 1) Non-petroleum or pedestrian means of transportation and 2) alternatives to single occupancy vehicles.
The Elgin Street Bicycle and Pedestrian Plan recognizes that bicycle and pedestrian travel are important alternatives to vehicular transportation. The city is seeking funding to establish a bicycle trail and development of the floodplain for bicycle and pedestrian use and is under consideration. New residential development may require sidewalks on at least one side of the street to accommodate pedestrian needs. Due to the rural nature of the area, the principal transportation system route is by highway. Establishment of a community center car pool referral service would encourage fuel savings. The community center currently serves as a stopping point for the County Senior Citizen bus service.

Policies:
1. Developments with high demand for transportation and utilities will be located along major transportation and utility routes while incorporating access management standards set forth in the Transportation System Plan.

Policy Recommendations:
1. The Zoning Ordinance map and standards in the Transportation System Plan will be used to locate high demand transportation developments near transportation routes.

Elgin Zoning Ordinance

Article 2: Definitions

URBAN TSP AREA. The platted and developed portions within Elgin’s Urban Growth Boundary where existing driveways onto the state highway system are conforming features.

REVIEWABLE ACCESS POINT. Reviewable Access Points are accesses identified in yellow on the TSP Access Management Maps (Figures 7-2 and 7-3 in the TSP) requiring evaluation by the City of Elgin and ODOT in order to preserve safety.

URBANIZABLE TSP AREA. The sparsely developed portion of land between the Urban TSP Area and the Urban Growth Boundary where new public streets accessing the state highway system are based on the access management standards identified in the Transportation System Plan and new driveways accessing the state highway system are at least 500 feet apart, provided connections can be made in a safe manner.

Article 10: Provisions Applicable to all Zones
Section 10.13 Access

Existing access points (streets and driveways) on Oregon Highways 82 or 204, in place at TSP adoption shall be designated as conforming features.

For proposed Urban TSP Area property development or redevelopment accessing Oregon Highways 82 or 204 the developer/property owner shall, prior to making application, notify and coordinate with the City of Elgin and the ODOT District Manager to ensure access safety and pursue access alternatives if safety is compromised. Reviewable Access Points on the TSP Access Management Maps, proposals accessing Oregon Highways 82 or 204 that generate a change equal to 100 daily vehicle trips or more, and zone changes/plan amendments adjacent to the state system will be evaluated by the City of Elgin and ODOT in order to preserve safety. The purpose of such contact is to involve ODOT at the beginning of the application process so that the
developer/property owner has the benefit of ODOT comments prior to submitting a site plan, conditional use, or tentative plat map.

There are several alternatives available when considering Reviewable Access Points - the access onto the state highway is closed and moved to a side street, the access is combined with other accesses within the same block, the access is moved toward the center of the block in order not to conflict with intersection traffic, the access conforms to “Potential Access Management Mitigation Measures” listed in the TSP, or nothing is done and the access is left alone.

For proposed Urbanizable TSP Area development or redevelopment of properties accessing a state highway, new public streets shall be based on the access management standards identified in the Transportation System Plan and new driveways shall be at least 500 feet apart.

Land development affecting State Highways 82 or 204 will address safety, capacity, functional classification, and level of service. Access management policies for the City of Elgin set forth in the Transportation System Plan will be observed.

Section 10.14 Standards for Transportation Projects
All transportation facilities will conform with the Transportation System Plan street development standards. Changes in the specific alignment of proposed public roads and highways shall be permitted without plan amendment if the new alignment falls within a transportation corridor identified in the Transportation System Plan. Transportation projects involving the operation, maintenance, repair, and preservation of existing facilities that are consistent with the Transportation System Plan, the classification of that roadway and approved road standards shall be allowed, except where specifically regulated (i.e. within a floodplain). Dedication of right-of-way, authorization of construction and the construction of facilities and improvements shall be allowed, where the improvements are consistent with the Transportation System Plan, the classification of the roadway and approved road standards. For state projects that require an Environmental Impact Statement (EIS) or Environmental Assessment (EA), the draft EIS or EA shall serve as the documentation for local land use review, if local review is required. More specifically, uses will be permitted as follows:

(A) Uses Permitted Outright
1. Normal operation, maintenance, repair, and preservation activities associated with transportation facilities.
2. Installation of culverts, pathways, fencing, guardrails, lighting, and similar types of improvements that take place within the existing right-of-way.
3. Projects specifically identified in the Transportation System Plan as not requiring further land use regulation.
4. Landscaping as part of a transportation facility.
5. Emergency measures as necessary for the safety and protection of property.
6. Acquisition of right-of-way for public roads, highways, and other transportation projects identified in the Transportation System Plan are permitted outright, except for those that are located in exclusive farm or forest zones.

(B) Conditional Uses Permitted
1. Construction, reconstruction, or widening of highways, roads, bridges, or other transportation projects that are: (1) not specifically identified in the Transportation System Plan or (2) not designed and constructed as part of a subdivision or planned development subject to site plan and/or conditional use review, shall comply with the Transportation System Plan and applicable standards, and shall address the following
criteria. For state projects that require an EIS or EA, the draft EIS or EA shall be reviewed and used as the basis for findings to comply with the following criteria:

- The project is designed to be compatible with existing land use and social patterns, including noise generation, safety, and zoning.
- The project is designed to minimize avoidable environmental impacts, to identified wetlands, wildlife habit, air and water quality, and cultural resources.
- The project preserves or improves the safety and function of the facility through access management, traffic calming, or other design features.
- The project includes provision for bicycle and pedestrian circulation as consistent with the Land Use Plan and other requirements of this ordinance.

2. Construction of rest areas, weigh stations, and temporary storage and processing sites.

3. If review under this section indicates that the use or activity is inconsistent with the Transportation System Plan, the procedure for a plan amendment, including any necessary goal exceptions, shall be undertake prior to or in conjunction with the conditional permit review.

Article 14: Site Plan Review
Section 14.02 Site Plan Contents

All site plans shall include the following information as well as any additional information which may be required by the City Council:

1. Lot dimensions.
2. Existing and proposed structures – location, dimensions, height, size and type.
3. Existing and proposed fences and signs – heights, size and type.
4. Off-street parking – location, number and size of spaces, traffic flow.
5. Access points – including loading and unloading areas and proposed connections to adjoining streets in order to insure adequate traffic circulation for Elgin’s transportation system.
6. Existing and proposed lighting.
7. Landscaping – type of irrigation.
8. All existing and proposed utility lines and size.
9. Any elevation lines at five foot intervals.
10. The location, width, and purpose of easements.
11. The location and design of existing and proposed bicycle and pedestrian facilities, including bicycle parking facilities.
12. If direct access to Oregon Highways 82 or 204 is proposed, access must be provided in a manner consistent with the access management provisions and spacing standards set forth in the Transportation System Plan.

Article 15: Amendments
Section 15.01 Initiation

The Council may on its own motion, or upon property owner petition, after public notice and hearing, amend the text of the Elgin Land Use Plan, and the Zoning Ordinance, or the Partition and Subdivision Ordinance, and the Transportation System Plan, and change plan and zone boundaries. Amendments will address Transportation System Plan policies and standards.

Section 15.02 Notice

(A) A Plan or Zoning map change may be made only after notice to the owners of record of the properties within the area proposed for change, and to those other property owners of record within
the area determined by the Council to be that logical for inclusion in the change, and to those property owners within 200 feet of such areas. Width of streets and of alleys shall be excepted in the measurement of areas mentioned above.

(B) A proposal to amend the Land Use Plan or Zoning or Partition and Subdivision Ordinances or Transportation System Plan to adopt a new land use regulation shall be submitted to the Director of the Oregon Department of Land Conservation and Development and the Oregon Department of Transportation, Region 5 Office at least 45 days before the final City Council hearing on adoption. The proposal submitted shall contain four three copies of the text and any supplemental information the City believes is necessary to inform the Director of DLCD and ODOT, Region 5 as to the effect of the proposal and shall indicate the date of the final hearing on adoption by the City Council.

Section 15.05 Findings

In considering an amendment, the City Council shall seek to determine that:

a) The change is in accord with the Land Use Plan for the area, and

b) There has either been a substantial change in the character of the area since the current zoning was adopted which warrants changing the zone, or the zoning adopted for the area was in error, and

c) If the amendment significantly affects a transportation facility, the amendment shall assure that land uses are consistent with the function, capacity, and level of service of the facility identified in the Transportation System Plan. This shall be accomplished by one of the following:
   • Limiting allowed land uses to be consistent with the planned function of the transportation facility;
   • Amending the Transportation System Plan to ensure that existing, improved, or new transportation facilities are adequate to support the proposed land uses consistent with the requirement of the Transportation Planning Rule; or,
   • Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes.

A plan or land use regulation amendment significantly affects a transportation facility if it:

• Changes the functional classification of an existing or planned transportation facility;
• Changes standards implementing a functional classification system;
• Allows types or levels of land use that would result in levels of travel or access that are inconsistent with the functional classification of a transportation facility; or
• Would reduce the level of service of the facility below the minimum acceptable level identified in the Transportation System Plan.

Section 15.06 Notice of Final Action

Notice of City Council final action shall be given in the following:

The signed copy of each amendment to the Land Use Plan or a land use regulation shall be maintained on file in the office of the City Clerk. Additional copies shall be made available to the public.

Four Three copies of the ordinance amending the Land Use Plan or land use regulation, or new land use regulations and findings to support the adoption shall be mailed or otherwise submitted
to the Director of the Oregon DLCD and ODOT, Region 5 within five days after the final decision by the City Council.

Elgin Partition and Subdivision Ordinance

Section 3: Approval of Subdivisions and Partitions. All subdivisions, partitions, and streets or ways created for the purpose of partitioning land shall be approved by the City Council in accordance with these regulations and the Transportation System Plan (TSP). A person desiring to subdivide land, partition land or create a street or way for the purpose of partitioning, shall submit tentative plans and final documents for approval as provided in this ordinance, the TSP, and in the State law.

If any parcel of land proposed for development joins Oregon Highways 82 or 204 then the applicant shall notify ODOT, Region 5 Office prior to submitting any land use application. The purpose for this contact is to involve ODOT, Region 5 at the beginning of the application process so that the property owner/developer has the benefit of ODOT comments prior to submitting a site plan, conditional use application, or tentative plat map. The identification of access points with potential safety hazards indicates an opportunity for ODOT review prior to Elgin’s final decision on the land use application.

Section 4: Definitions.

Urban TSP Area. The platted and developed portions within Elgin’s Urban Growth Boundary where existing driveways onto the state highway system are conforming features.

Reviewable Access Point. Reviewable Access Points are accesses identified in yellow on the TSP Access Management Maps (Figures 7-2 and 7-3 in the TSP) requiring evaluation by the City of Elgin and ODOT in order to preserve safety.

Urbanizable TSP Area. The sparsely developed portion of land between the Urban TSP Area and the Urban Growth Boundary where new public streets accessing the state highway system are based on the access management standards identified in the Transportation System Plan and new driveways accessing the state highway system are at least 500 feet apart, provided connections can be made in a safe manner.

Section 5: Scope of Regulations.
1. This ordinance and the Transportation System Plan shall be applicable to creation or adjustment of all lots and parcels.
2. Partition and subdivision plats, and streets and ways created for the purpose of dividing land shall be approved by the City in accordance with these regulations and the Transportation System Plan prior to the sale of any such lot or parcel. All changes in property boundary lines shall be in accordance with these regulations.
3. A person desiring to subdivide or partition land within the incorporated area of the City shall submit tentative plans and final documents for approval as provided in this ordinance, the Transportation System Plan, and State law.
4. Recording of a lot or parcel. No lot or parcel created by subdividing or by major or minor partitioning shall be submitted for recording with the Union County Clerk nor have any validity unless it has been approved as required by this ordinance and the Transportation System Plan.
5. No person shall dispose of, transfer, or sell any lot in any partition or subdivision with respect to which approval is required by this ordinance and the Transportation System Plan. In negotiating to sell a lot in a subdivision or convey any interest in a parcel in any partition a person may use the approved tentative plan for such subdivision or partition.
6. Permits. No building permit, or permit for the connection to a water or a sewage disposal system shall be issued for any structure on a parcel or lot in a partition or subdivision for which the tentative plan or plat has not been approved and recorded in a manner prescribed in the Transportation System Plan and herein.

7. The City will withhold all public improvements, including maintenance of streets and roads, from a partition or subdivision which has not been approved and recorded in the manner prescribed in the Transportation System Plan and herein.

Section 5A: Application. A partitioner or subdivider shall submit an application on forms provided by the City accompanied by a tentative plan showing the general design of the proposed subdivision or partition accompanied by a tentative plan showing the general design of the proposed subdivision or partition accompanied by the prescribed fee.

If any parcel of land joins Oregon Highways 82 or 204 then the applicant shall notify and coordinate with the City of Elgin and the ODOT District Manager (ODOT, Region 5) prior to submitting any land use application. The purpose for this contact is to involve ODOT at the beginning of the application process so that the property owner/developer has the benefit of ODOT comments prior to submitting a site plan, conditional use application, or tentative plat map. The identification of access points with potential safety hazards indicates an opportunity for ODOT review prior to Elgin’s final decision on the land use application.

Section 5B: Submission of Tentative Plan. The partitioner or subdivider shall prepare a tentative plan, together with improvement plans and other supplementary materials as specified in this ordinance and the Transportation System Plan. The partitioner…

Section 9: Proposed Design. The following information shall be included on the tentative plan:

4. The location and design of existing and proposed bicycle and pedestrian facilities, including bicycle parking facilities.

5. If direct access to Oregon Highways 82 or 204 is proposed, access must be provided in a manner consistent with the access management provisions and spacing standards identified in the Transportation System Plan and approved by ODOT.

Section 11: Partial Development. Where the plat contains only part of the tract owned or controlled by the developer, the City Council may require a sketch of a tentative layout for streets in the unpartitioned or unsubdivided portion to insure adequate traffic circulation.

Section 12A: Supplemental Plans with Tentative Plan. The following information shall be submitted with the tentative plan:

7. Traffic analysis procedures. If it is determined that a proposed project may impose an undue burden on the public transportation system, then traffic analysis and mitigation must be undertaken. Proposals generating up to 100 vehicle trips per day will be reviewed locally by ODOT, Region 5. Proposals generating between 100 and 400 vehicle trips per day will be reviewed by an ODOT Traffic Engineer. Proposals generating over 400 vehicle trips per day will be required to submit a traffic impact study.

- For developments that are likely to generate more than 400 average daily motor vehicle trips (ADTs), the applicant shall provide adequate information, such as a traffic impact study or traffic counts, to demonstrate the level of impact to the surrounding street system.
Elgin Transportation System Plan

- Standards by which to gauge average daily vehicle trips include: 10 trips per day per single family household; 5 trips per day per apartment; and 30 trips per day per 1,000 square feet of gross floor area such as a new supermarket or other retail development. The developer shall be required to mitigate adverse impacts attributable to the project. The determination of impact or effect, and the scope of the impact study, should be coordinated with the provider of the affected transportation facility.

- Undue burden on the public transportation system includes any one of the following: 1) changes to the functional classification of an existing or planned transportation facility; 2) changes to standards implementing a functional classification system; 3) allowance of land uses that would result in levels of travel or access that are inconsistent with the functional classification of a transportation facility; or 4) reduction in facility level of service below the minimum acceptable level identified in the Transportation System Plan.

Section 14: Consideration of the Tentative Plan.

8. No tentative plan for a proposed subdivision and no tentative plan for a proposed major partition shall be approved unless:
   c) The tentative plan complies with this ordinance and the applicable zoning ordinance and regulations, and Transportation System Plan that are in effect.

Section 16: Final Plat Requirements. The final plat, known as the partition plat or subdivision plat, shall conform to surveying requirements in ORS 92.050 through 92.080, except any parcels created that are greater than 10 acres need not be surveyed or monumented. In addition to specific action in Oregon Revised Statutes, the following information shall be shown on the final plat:

8. Land parcels to be dedicated for any purpose, public or private, to be distinguished from lots intended for sale. The City shall preserve right-of-way for planned transportation facilities through exactions, voluntary dedications, or setbacks.

Section 17: Supplementary Information with Final Plat. The following data shall accompany the final plat:

4. A certificate by the City that the partitioner or subdivider has complied with one of the following alternatives:
   a) All improvements have been installed in accordance with the requirements of these regulations, the Transportation System Plan, and with the action of the Council in giving approval of the tentative plan, or
   b) An agreement has been executed as provided in Sections 30A and 30B to assure completion of required improvements.

Section 18: Technical Review. Upon receipt by the City, the final plat and other accompanying data shall be reviewed by the Planning Official. The Planning Official...

5. Compliance with other provisions of Oregon Revised Statutes, the Transportation System Plan, and this Ordinance.

Section 23: Creation of Streets Not Within a Subdivision.

1. Creation of Streets. The creation of all streets not within a subdivision shall meet the street construction standards for streets within a subdivision identified in the Transportation System
Plan. Creation of such streets may be initiated by the Council or County Court Board of Commissioners by resolution or by property owner or his authorized agent by request.

3. Application for road approval shall comply with applicable tentative plan and final plat procedures and standards as provided in this ordinance and the Transportation System Plan.

Section 24: Creation of Ways. Streets providing access to allow the partitioning of land shall conform to the standards for streets identified in a subdivision the Transportation System Plan except that a private easement of way may be established without full compliance with these regulations. …

Section 26: Principles of Acceptability. Partitions and subdivisions shall conform to the City Comprehensive Land Use Plan, the Transportation System Plan, and related ordinances and shall take into consideration anticipated surrounding area development. Partitions and subdivisions shall also conform to the requirements of State Law (particularly ORS Chapter 92), and the standards established by the Transportation System Plan and this ordinance.

Section 27: Streets.
1. General. The location, width and grade of streets shall be considered in their relation to designed to coordinate with existing and planned streets, to topographical conditions, to public utilities, service, convenience and safety, and to the proposed use of the land to be served by the streets. The arrangement of streets in partitions and subdivisions shall either: …

2. Minimum right-of-way and roadway widths Standards. The widths of streets and roadways in feet and construction standards for streets and roadways shall be adequate to fulfill City specifications as provided for in this ordinance the Transportation System Plan and unless otherwise indicated in the Comprehensive Plan, shall not be less than the minimum shown in the following table; Table 7-2 of the Transportation System Plan for dimensional street standards for arterial, collector, local, marginal access streets, alleys, and cul-de-sacs.

### Table 7-2
Street Development Standards for the City of Elgin

<table>
<thead>
<tr>
<th>ROW</th>
<th>Surface width</th>
<th>Parking lane width</th>
<th>Base depth &amp; material</th>
<th>Leveling course</th>
<th>Overlay material</th>
<th>Shoulder width</th>
<th>Shoulder</th>
<th>Marginal Access</th>
<th>Alley</th>
</tr>
</thead>
<tbody>
<tr>
<td>80’</td>
<td>28’</td>
<td>8’</td>
<td>9” deep 4” minus</td>
<td>4” deep 1.5” minus</td>
<td>3” asphalt concrete</td>
<td>8’ chip seal</td>
<td>Same as</td>
<td>None</td>
<td>20’</td>
</tr>
<tr>
<td>60’</td>
<td>24’</td>
<td>8’</td>
<td>8” deep 4” minus</td>
<td>4” deep 1.5” minus</td>
<td>2” asphalt concrete</td>
<td>8’ chip seal</td>
<td>Same as</td>
<td>None</td>
<td>20’</td>
</tr>
<tr>
<td>60’</td>
<td>24’</td>
<td>8’</td>
<td>8” deep 4” minus</td>
<td>4” deep 1.5” minus</td>
<td>2” chip seal (applied in 3 courses)</td>
<td>8’ crushed gravel</td>
<td>Same as</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>50’</td>
<td>20’</td>
<td>8’</td>
<td>8” deep 4” minus</td>
<td>4” deep 1.5” minus</td>
<td>2” chip seal (applied in 3 courses)</td>
<td>8’ crushed gravel</td>
<td>Same as</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>45’</td>
<td>30’</td>
<td>None</td>
<td>8” deep 4” minus</td>
<td>4” deep 1.5” minus</td>
<td>2” chip seal (applied in 3 courses)</td>
<td>None</td>
<td>Same as</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>30’</td>
<td>20’</td>
<td>None</td>
<td>8” deep 4” minus</td>
<td>4” deep 1.5” minus</td>
<td>2” crushed gravel</td>
<td>None</td>
<td>Same as</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>20’</td>
<td>20’</td>
<td>None</td>
<td>8” deep 4” minus</td>
<td>4” deep 1.5” minus</td>
<td>2” crushed gravel</td>
<td>None</td>
<td>Same as</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
3. Marginal access. Marginal access rights-of-way or private access easements shall not be less than 10% of street length, and shall be provided with utility easements on each side to provide a combined utility easement and access right-of-way width. Marginal access streets may be permitted for 2 to 5 dwellings, only where local street connectivity is not practical due to topographic constraints or existing development patterns preclude a through route extension.

5. City of Elgin Street Alignment. So far as practical, streets other than minor proposed arterial and collector streets shall be in alignment with existing arterial and collector streets by continuations of the center lines thereof. Staggered street alignment resulting in “T” intersections shall, wherever practical, leave a minimum distance of 200 feet between the center lines of such streets having approximately the same direction, and otherwise shall not be less than 125 feet.

6. Intersection angles. Streets shall be laid out to intersect at angles as near to right angles as practical except where topography requires a lesser angle, but in no case shall the acute angle be less than 75 degrees unless there is a special intersection design. The intersection of arterial or collector streets with other arterial or collector streets shall have at least 100 feet of tangent adjacent to the intersection. Other streets, except alleys, shall have at least 50 feet of tangent adjacent to the intersection. Intersections which contain an acute angle of less than 75 degrees or which include an arterial street shall have a minimum corner radius sufficient to allow for a roadway radius of 20 feet and maintain a uniform width between the roadway and the right-of-way line.

8. Half streets. Half streets, while generally not acceptable, may be approved where essential to the reasonable development of the partition or subdivision, when in conformity with the other requirements of these regulations, and when the Council finds it will be practical to require the dedication of the other half when the adjoining property is partitioned or subdivided. When a half street is adjacent to a tract to be partitioned or subdivide, the other half of the street shall be platted within such tract. Reserve strips and street plugs may be required to preserve the objectives of half streets. No parcels or lots shall be allowed to develop on the half street until the remaining half of the street is dedicated and improved as provided in this ordinance.

11. Grades and curves. Centerline radii of curves is determined by speed limit but shall not be less than 300 feet on arterials, 200 feet on collectors, or 100 feet on other streets, and shall be to an even 10 feet. In flat areas allowance shall be made for finished street grades having a minimum slope, preferably, of at least 0.3%.

14. Frontage streets. Where a partition or subdivision abuts or contains an existing arterial street, the Council may require frontage streets or other such treatment as may be necessary for adequate protection of abutting properties, and to afford separation of through and local traffic in order to preserve the arterial level of service.

15. Access. For joint and cross access, adjacent commercial and industrial developments classified as major traffic generators shall provide a cross access drive and pedestrian access to allow
16. Access Connection and Driveway Design. Driveway width shall meet the following guidelines:
   a) if the driveway is a one way in or one way out, then the driveway shall be a minimum width of 10 feet and shall have appropriate signage designating the driveway as a one way connection; b) for two-way access, each lane shall have a minimum width of 10 feet and a maximum of four lanes shall be allowed. Whenever more than two lanes are proposed, a median should be considered to divide the entrance and exit lanes. Driveway approaches must be designed and located to provide an exiting vehicle with an unobstructed view. Construction of driveways along acceleration or deceleration lanes and tapers shall be avoided due to the potential for vehicular weaving conflicts. The length of driveways shall be designed in accordance with the anticipated storage length for entering and exiting vehicles to prevent vehicles from backing into the flow of traffic on the public street or causing unsafe conflicts with onsite circulation.

17. Existing Access Features. Driveway connections and curb cuts (where applicable) on Oregon Highways 82 or 204 in place as of adoption of the TSP shall be designated as conforming features. Proposed property use changes generating an additional 100 daily vehicle trips or more, zone changes/plan amendments, or Reviewable Access Points on the TSP Access Management Maps, trigger the developer/property owner to notify and coordinate with the City of Elgin and the ODOT District Manager (ODOT, Region 5) prior to making application, to ensure access safety and to pursue access alternatives if safety is compromised. There are several alternatives available when considering Reviewable Access Points - the access onto the state highway is closed and moved to a side street, the access is combined with other accesses within the same block, the access is moved toward the center of the block in order not to conflict with intersection traffic, the access conforms to “Potential Access Management Mitigation Measures” listed in the TSP, or nothing is done and the access is left alone.

18. New Access Features. For proposed Urbanizable TSP Area development of properties accessing Oregon Highways 82 or 204, new public streets shall be based on the access management standards identified in Table 7-3 in the Transportation System Plan and new driveways shall be at least 500 feet apart. The highest priority shall be placed on providing access to property adjoining Oregon Highways 82 or 204 from city streets, combining driveways, or providing access points in the middle of the block. Access management policies for the City of Elgin set forth in the Transportation System Plan will be observed.
Table 7-3
Oregon State Highway Access Management Standards

<table>
<thead>
<tr>
<th>Highway</th>
<th>Category</th>
<th>Level of Importance</th>
<th>Urban/Rural</th>
<th>Intersection</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td></td>
<td>Public Road</td>
</tr>
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<td>Type</td>
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<tr>
<td>82</td>
<td>4</td>
<td>Statewide</td>
<td>Inside UGB</td>
<td>at-grade or interchange</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Outside UGB</td>
<td>at-grade or interchange</td>
</tr>
<tr>
<td>204</td>
<td>5</td>
<td>Regional</td>
<td>Inside UGB</td>
<td>at-grade</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Outside UGB</td>
<td>at-grade</td>
</tr>
</tbody>
</table>

Source: Table 1 – Access Management Classification System, Appendix B, 1991 Oregon Highway Plan.

19. Shared Access. Proposed subdivisions with frontage on Oregon Highways 82 or 204 shall be designed to share access points from the highway. If access from a city street is possible, then access shall not be allowed onto the state highway. If access from a city street becomes available, then conversion to that access is encouraged, along with closing the state highway access. Normally, a maximum of 2 state highway accesses may be allowed regardless of the number of lots or businesses served.

Section 28: Blocks.

2. Size. No block shall be more than 1,000 feet in length between street corner lines unless it is adjacent to an arterial street or unless the location of adjoining streets justifies an exception. Blocks abutting Oregon Highways 82 and 204 shall coincide with the existing block length of 225 to 250 feet, in accordance with the access management standards identified in the Transportation System Plan.

3. Easements.
   3. Pedestrian ways. When desirable for pedestrian convenience, Pedestrian ways may be required to connect cul-de-sacs or to pass through unusually long or oddly shaped blocks. It shall be the responsibility of the developer to install four five-foot minimum sidewalks where pedestrian ways are required, per the Elgin Bicycle and Pedestrian Plan.

Section 31: Improvement Procedures. In addition to other requirements, improvements installed by the partitioner or subdivider, either as a requirement of these regulations or at his own option, shall conform to the requirements of this ordinance, the Transportation System Plan, and improvement standards or specifications adopted by the City and shall be installed in accordance with the following procedure: …

4. Streets and sidewalks. The partitioner or subdivider shall improve streets in the partition or subdivision and the extension of such streets intersect in accordance with City approved specifications. Such improvements shall include proper base, curbs and pavement. A five-foot sidewalk on each side of the street within the partition or subdivision may also be required, per the Elgin Bicycle and Pedestrian Plan. Any or all of these street and sidewalk improvements may be required on an exiting street which abuts the partition or subdivision.

Section 37: Amendments.
Consideration of an amendment shall be made by the Council at a public hearing. The Planning Official shall maintain a record of amendments to the text of this ordinance, or to the Transportation System Plan, in a form convenient for public use.
Section 38: Hearings.
Any hearing to consider a modification, amendment, or appeal request shall be held only after publishing public notice of the hearing at least 10 days prior to the hearing in a newspaper of general circulation published in the area in which the land affected is situated.
A public hearing on a proposed transportation system plan will take place during the regular meeting of the Imbler City Council at 7 p.m. Monday at City Hall. Union County Planner Hanley Jenkins will present a report. Additional public hearings on the transportation system plan will take place at 1:30 p.m. Tuesday at the Joseph Annex and at 8 p.m. Tuesday at Elgin City Hall. Transportation plans are being developed for Union County and the cities of Elgin and Imbler. The plans will identify existing facilities and services and project future transportation needs. The plans will cover 20 years.
I. Introduction
   - Brief background of TSP

II. Work to Date
   - Existing Conditions
     - Transportation system inventory
     - Accident history
     - Traffic volumes
   - Travel Forecasts
     - Future traffic volumes
     - Transportation system deficiencies

III. Proposed Alternatives
   - Explanation of alternatives
   - How alternatives shape the future transportation system

IV. Next Steps
   - Where we’re going from here

V. Discussion
## PLEASE SIGN IN!

**Elgin TAC Meeting**  
**Tuesday, December 8, 1998**  
**7:00 p.m. Elgin City Hall**

<table>
<thead>
<tr>
<th>Name</th>
<th>Address/Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dara Decker</td>
<td>Union Co. Planning Dept. Elgin 437-1271</td>
</tr>
<tr>
<td>Ron Brand</td>
<td>P.O. Box 242, 437-7952</td>
</tr>
<tr>
<td>Harlan Scott</td>
<td>ELGIN -</td>
</tr>
<tr>
<td>Karen Olsen</td>
<td>Elgin</td>
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<td>Joanne Rodriguez</td>
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<td>Bobbi Wymore</td>
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<td>Mary (Julie House)</td>
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<td>Taco Shack</td>
<td>Elgin</td>
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<tr>
<td>Carol Katz (Mr. Stuffle)</td>
<td>Elgin</td>
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<tr>
<td>Douglas P. Ramsepp</td>
<td>Elgin</td>
</tr>
<tr>
<td>Frances Keys (City Centre Motel)</td>
<td>Elgin</td>
</tr>
</tbody>
</table>
Traffic safety at issue in Imbler

by Ron Brand

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Traffic congestion, both in and out of the school zone, is a concern. Jenkins explained, "The Traffic division has made some progress, but more work needs to be done."

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New officers, new projects for Elgin Chamber

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The Elgin Chamber of Commerce has elected new officers and has set new projects for the coming year. The Chamber is looking forward to working with local businesses.

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Stampede sponsor "Christmas Lights" parade

by Ron Brand

The Imbler Stampede is planning a "Christmas Lights" parade for the upcoming holiday season. The parade will feature floats, music, and local businesses.

New officers, new projects for Elgin Chamber

by Ron Brand

The Elgin Chamber of Commerce has elected new officers and has set new projects for the coming year. The Chamber is looking forward to working with local businesses.

Truck routing, Elgin planning issue

by Ron Brand

Truck routing through Elgin is a concern. "We need to plan ahead to ensure that our roads are safe," said City Manager Bill Jenkins. The Transportation System Plan will help to address these concerns.

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Traffic safety at issue in Imbler

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Elgin, ODOT join forces
to improve highway safety

ELGIN — There's a hazardous intersection right in the middle of town, but a group of citizens will look at ways to make the corners safer.

The intersection of Ore. Highways 204 and 82 has been a concern for some time because of long tractor trailers making left turns. Alternatives are costly, however, and in some cases unsatisfactory to local businesses.

A subcommittee appointed to look at the problem will meet at 7 p.m. Jan. 14 in City Hall.

City Administrator Joe Garlitz said the Oregon Department of Transportation has proposed two solutions: building a truck bypass around Elgin or reconstructing the corner and adding traffic signals. Both are expensive and will impact downtown businesses.

"We need to make decisions as to what the community wants," Garlitz said. "If we don't, ODOT plans could be implemented."

The hazardous intersection is being considered as part of a long-range transportation plan now being written for the city. No funding has been appropriated for the plan.

Union County Planner Hanley Jenkins, who is working with the city on the transportation proposal, said the research is preliminary, but necessary.

"The issue is making a left-hand turn, coming from La Grande and going to Tollgate," he said. "The obvious alternative route has been to look at Boise Cascade's private haul road."

Jenkins said that no talks have begun with Boise Cascade.

"We haven't gone that far," he said. "We'll be identifying alternatives."

Jenkins said that no major accidents have occurred at the intersection.

"The one thing that's prevented accidents is the slow speed and the local familiarity with the hazard," he said.

Members of the subcommittee are Bill Johnson, Jerry Peters, Chuck Koch and former mayor Rick Smith.

Highway 82 is the La Grande to Joseph route and Highway 204 runs north to Tollgate and west to Weston.
Dear Editor:

The Elgin Transportation Subcommittee will meet on Thursday, January 14, 1999 at 7:00 p.m. in the Elgin City Council Chambers. The purpose of the meeting is to discuss potential alternatives to improve truck traffic through Elgin. This is an opportunity for the City of Elgin to identify safety issues and work towards solutions that will improve Elgin's transportation system for everyone.

If you have questions or would like more information, please contact this office.

Union County Planning Department
1001 4th Street, Suite C
La Grande, Or 97850
(541) 963-1014 (phone)
(541)963-1039 (fax)
Hanley Jenkins, II. (Planning Director)

Dara Decker, Assistant Planner,
La Grande
1-14-99 Transportation Sub Committee
Please Sign In!

Dave Decken
John Z. McBone
Dan Clark
Jim Mullen
Joe Estes
Busta Churchill
Noble Bragginton
John Stover
Ed Gerlitz
Hann Lee, H. Lee & Associates
Mike Buchanan ODOT
Harlan Scott EDDIE Comm
Tom Brown EDC

Barb Stoffen
Dan Stoffen
Brant & Bonnie Schryer
Carol Tate
Rick Smith
Doug Slay

Bjork Jenkins
Grant Darrow
Roy Howell
Julie Howell
Joyce Plustrom
H. A. Moore
Elgin eyes spotlight to ease concerns

By Alice Perry Linker
Observer Staff Writer

ELGIN — Truckers who must squeeze their rigs around the corner of Ore. Highway 204 onto Highway 82 don't know what they're facing as they make the turn.

Several drivers and other interested residents gathered at City Hall Thursday to put together a plan that will make that corner less adventurous — and less dangerous.

They decided the best solution to the narrow intersection in the middle of town is to reroute some truck traffic — and install a traffic signal.

The plan to change the traffic pattern is part of the overall transportation plan required by the state for all cities and counties. No money is available for any improvements at this time, and transportation officials do not say when money will be available.

"This is only a plan," said Elgin's Brent Silver, who proposed the idea. "We can revisit this in five years."

Michael Buchanan of the Oregon Department of Transportation was in the audience. He discouraged the residents from proposing a traffic signal, saying that specific conditions must exist before the state will approve a full traffic signal. He said he doubts a signal would be approved.

Buchanan said the cost of a traffic signal would be about $200,000, including a tie-in with the railroad crossing signal.

Silver proposed the plan after more than an hour of discussion about the best way to safely route trucks from Tollgate to La Grande.

Under his plan, trucks headed for La Grande from Tollgate would cross Highway 82, go one block to Seventh Avenue, turn left, go one block to Albany Street, also Highway 82, turn left and go south through Elgin.

"The plan won't work without a signal," Silver said, adding that without a signal, crossing Highway 82 would take too much time, and drivers would not use the route.

Others in the audience pointed out that Elgin has no crossing for school children on Highway 82, and a traffic signal would improve safety conditions for them.

See ELGIN, Page 3A

Elgin

Continued from Page 1A

Some adjustments at the corners of Seventh Avenue and Albany Street would be needed, corners would be rounded, and the roadbed would need to be improved to handle the heavier traffic. Parking will not be an issue, Silver said, because there is little parking on the proposed route.

Most of the approximately 20 people attending the meeting agreed with Silver's idea.

Another plan presented by Union County planner Hanley Jenkins would remove parking from about a block on the east side of Highway 82 in the middle of town to allow a wider turn lane.

Most in the audience opposed that idea, saying that businesses on the east side would have no convenient way for supplies and equipment to be delivered, and access to the town's only pharmacy would be limited.
Elgin decides on truck routing plan through downtown

by Ron Brand

Although it may take some time to implement, citizens of Elgin came up with a plan to deal with truck traffic in the downtown area.

"It's simple," said Brent Silver as he stood up to present his ideas to Union County planners, the city council, truck drivers, business owners and other Elgin residents at Thursday's transportation committee meeting.

Trucks turning at the intersection of Oregon Highways 82 and 204 are at the heart of the issue, posing congestion and safety problems. Silver's proposal would create a loop using Highway 82 on the west (8th Street) and north (Albany), 7th Street on the east and Division on the south. This would eliminate the most difficult turns that truck drivers now have to negotiate.

Silver's plan also calls for a stoplight, tied in with the railroad crossing on Division. He did not feel that the loop would work without a signal.

Key to making the plan work would be very visible signage to direct traffic flow. Following are the routes that would be followed:

* La Grande to Tollgate - turn right at Albany and 8th toward Wallowa.
* Tollgate to La Grande - go straight across Hwy 82, left at 7th and go around loop to head south on Hwy 82 toward La Grande.
* Tollgate to Wallowa - cross Hwy 82, left on 7th, right on Albany toward Wallowa.
* Wallowa to La Grande - follow Highway 82.
* Wallowa to Tollgate - follow Highway 82 to Division, turn right.

Other suggestions were made to facilitate truck traffic flow - rounding corners in the loop to make turns easier, eliminating parking on one block of 7th Street, reducing the speed limit on Albany as it approaches 8th street and painting a solid stripe to keep traffic from crossing the median at 8th Street and Albany.

"The major problem with the loop/stoplight plan is its cost and likelihood of obtaining funding," ODOT's Mike Buchanan said that the light with a tie-in to the railroad crossing would cost about $200,000. For funding it would have to compete with other plans that meet criteria the Elgin plan does not meet.

Earlier in the meeting, Union County Planner Hanley Jenkins had presented six alternative solutions for discussion. These had been prepared by Dard Dëcker and HaN Lee for Thursday's meeting. Jenkins noted that there would be tradeoffs with all of the plans, and described pluses and minuses for each.

Jenkins Alternative 1 drew the most discussion. This would simply eliminate the center stripe on Highway 82 for one block or either side of the intersection with Division. The plan allows more room for trucks turning south from Tollgate Highway toward La Grande and those turning west toward Tollgate. Parking would be eliminated on the east side of Highway 82 for two blocks.

Continued on page 4
Truck routing

Continued from page 1

blocks and replaced with angle parking on the west side. Parking on the south side of Division across from the post office would be eliminated.

The main objection to Alternative 1 was the loss of parking. Several businesses on Highway 82 between Division and Albany depend on delivery truck parking; particularly Elgin Electric. Using the private alley behind these businesses was discussed but there were questions whether this was possible. Jenkins said that improving the alleyway would have to be part of the plan if it were implemented.

The advantages of Alternative 1 were low cost and the possibility of acting on it quickly.

A plan presented by Grant Darrow, North Country Stoves owner, would eliminate some parking at the Highway 82-204 intersection. The main issue, he said, is the safety of pedestrians. The plan would restrict crossing to the north and west sides of the intersection.

Darrow's plan also called for the installation of stoplight.

Bill Johnson, owner of the Elgin Corner Market, asked, "Is the problem large enough that we have to make a change?" Jenkins responded that getting an Elgin Transportation Plan completed was a priority. "The plan is mandated, not the time of action." Although the plan is to cover 20 years, it can be changed in the future if the city chooses to do this through a public hearings process.
"Boots" Churchill new Elgin Mayor

by Ron Brand

After "almost three terms" on the city council, Berta "Boots" Churchill is now Elgin's new mayor. Churchill replaces Rick Smith, who decided not to run for reelection last November after serving one term. John Braughton was selected to fill Churchill's council position.

The new mayor said she felt there were several issues the city needed to get involved in. Primary among these is to "get some businesses in town."

Elgin EDGE (Economic Development and Growth Endeavor) is involved in work promoting the city and has been making monthly reports to the city council. Churchill said she will be working with Elgin EDGE committees, "as mayor and as a person." In addition to her position as mayor, Churchill is the owner of The Bakery in downtown Elgin.

The Loop/Light truck routing plan that was approved earlier this month at a meeting with Union County planners is, said Churchill, the best solution found so far. She does not see this as being implemented very soon because of funding problems. The city does, however, have a draft to submit for the Transportation System Plan that is being asked for by the state department of transportation.

Another plan discussed at the January 14 transportation meeting would have eliminated downtown parking on the east side of Highway 82. Churchill said this plan was unacceptable. "We need parking on that side of the street."

Eliminating some parking has been discussed in the past in relation to bicycle/pedestrian pathways. Churchill noted. She was not in favor of this, believing that bicycles do not supersede businesses.

Elgin transportation subcommittee recommendations

from Dara Decker, Union County planner

- Paint a solid centerline on Highway 82 on the corner of Albany and 8th Streets
- Round the following corners to accommodate the turning radii of semi trucks:
  1) 8th/Albany (east side)
  2) 7th/Albany (both sides)
  3) 7th/Division (both sides)
  4) 7th/Alder (west side)
- Provide signs to direct drivers utilizing the truck route (To 204, etc.) and provide signs for traffic control (stop signs, etc.)
- Install a traffic signal at the intersection of Oregon Highways 82 and 204 (8th and Division) tied to the railroad crossing
- Reconstruct local streets, including any improvements to the road base, to handle heavy truck traffic on Alder between 7th and 8th and 7th between Division and Alder.
AGENDA

I. Work to Date
   • Identified projects (December 8, 1998 and January 14, 1999 meetings)
   • Bicycle & Pedestrian Plan projects

II. Discuss/Select TSP Projects
   • Specific project selection – preferred alternative and a second alternative
   • Project prioritization – ranked low, medium, or high priority

III. Roadway Functional Classifications
   • Consider any road classification changes

IV. Discuss Road Standards
   • Determine adequacy

V. Discuss Road Jurisdiction (Richard Comstock)
   • Who is responsible for the cost of projects on County roads?
   • Memorandums of Understanding (MOUs) to agree to work together to identify project funding

VI. Other Discussion/Questions
   • Next TAC meeting is March 9, 1999
     Topics include access management and a future street plan
SIGN IN PLEASE!
ELGIN TRANSPORTATION SYSTEM PLAN
Tuesday, February 9, 1999
7:30 P.M.
Elgin City Hall

[Signatures]

Diane Decher
Ron Brand
Harlan Scott
Patrick McDonald
Shawn Gossen
Howard McDonald
Annette Howell
Kathi Jeffrey
Karen Ogden
Joanne Rodrigues
Kathleen & Chuck Rock
Judith Friedman
Jon Lippie
Bill Dline
Joe Galvano
Elgin: Technical committee meets

The Elgin Technical Advisory Committee will meet at 7 p.m.
Tuesday in Elgin City Hall. The committee will discuss the Elgin
Transportation System Plan.

The Observer, La Grande, Oregon, Friday, March 5, 1999
ELGIN TRANSPORTATION SYSTEM PLAN

Tuesday, March 9, 1999
7:00 P.M.
Elgin City Hall

AGENDA

1. Access Management
   - Techniques and purpose
   - Recommended standards
   - How do these standards relate to development?

2. Local Street Plan
   - Future street system – how does this relate to development?
   - Location of future projects
   - Other future modal plans

3. Street Development Standards
   - Are recommended standards adequate?

4. Other Discussion/Questions
   - Next TAC meeting is April 13, 1999
     Topics include implementing language for the TSP
SIGN IN PLEASE!

ELGIN TRANSPORTATION SYSTEM PLAN
Tuesday, March 9, 1999
7:30 P.M.
Elgin City Hall

Dave Decker
Elgin Co. Planning Dept.

Joe Carlitz
Elgin Co.

Jim M. Mullin
Elgin Co.

Glenn G. Clark
Elgin Co. Councilman

Lute Churchwell
Elgin Mayor

John E. Sten
Elgin, OR

T.C. Brengle
Elgin, OR

Harlan Scott
Elgin, OR (EDGE)

Karen Owens
Elgin, OR

Doug Edler
Elgin, OR

Patrick Miller
Elgin Fire Dept.

Howard McDonald


Elgin


Elgin


Bill Parunske


Elgin
Elgin advisory group to meet

The Elgin Technology Committee will meet Tuesday at 7 p.m. at City Hall. The meeting is open to the public.

The Elgin Transit System Plan will be discussed. The meeting is open to the public.
ELGIN TRANSPORTATION SYSTEM PLAN

Tuesday, April 13, 1999
7:00 P.M.
Elgin City Hall

AGENDA

1. Recommended Implementing Language
   - Elgin Land Use Plan
   - Elgin Partition & Subdivision Ordinance
   - Elgin Zoning Ordinance
   - Elgin Street Plan will be replaced by the Elgin TSP

2. Other Discussion/Questions
   - Draft final will be provided for your review before the first public hearing –
     tentatively scheduled for May 11, 1999
<table>
<thead>
<tr>
<th>Name</th>
<th>Address/Agency</th>
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<tbody>
<tr>
<td>Dana Yeager</td>
<td>UC Planning Dept.</td>
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<td>John McNary</td>
<td>City Council</td>
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<td>John Braughton</td>
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<td>John Staer</td>
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<td>Glenn Clark</td>
<td>City of Elgin</td>
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<td>Pat McMullen</td>
<td>Elgin Recorder</td>
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<td>Joe Garlitz</td>
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<tr>
<td>Ron Brand</td>
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**WIC: nutrition class talks gardening**

Gardening is the focus of the WIC nutrition education class at 10 a.m. Wednesday. Master Gardener Debra Kilner of the Oregon State University Extension Service will give the presentation.

The class will meet in the second floor group room of the Joseph Building. The meeting is open to the public.

**Elgin: Intersection of 204, 82 safety is focus**

The Elgin Technical Advisory Committee for the city's transportation system plan will meet Tuesday.

The meeting will be during the city council meeting at 7 p.m. in City Hall.

The committee will discuss ways to improve the intersection of Highways 204 and 82 inside the city. The meeting is open to the public.

**Weather**

**Tonight and Sunday**

**Tonight:** Scattered rain and snow showers. Snow level lowering to 3,000 feet. Partial clearing late. Cold with lows in the 20s. Evening northwest wind 5-10 mph becoming light and variable.

**Sunday:** Scattered rain and snow showers. Highs in the 40s.

**Extended**

**Monday:** Mostly sunny east and in the south. A chance of rain or snow showers in the east. Lows in the 20s in the mountains. 30s in the valleys. Highs in the 40s in the east mountains and 50-60 elsewhere.

**Tuesday:** Isolated showers in the east mountains. Otherwise mostly dry and warmer. Lows in the 20s in east mountains to 35-45 elsewhere.

**Mid week:** Partly sunny and warmer. Lows in the 30s in the mountains to the lower 40s in the valleys. Highs in the 60s in the mountains to the 70s in the valleys.

**Western Oregon**

**Sunday:** Partly sunny with a chance of showers. Highs in the mid 50s.

**Monday:** Partly sunny and warmer after areas of morning clouds. Lows in the upper 30s to mid 40s. Highs along the coast near 60. Highs inland in the mid to upper 60s north to lower 70s south.

**Tuesday:** Mostly cloudy with a chance of showers north. Partly cloudy after areas of morning clouds south. Lows near 40. Highs along the coast near 60. Highs inland in the mid to upper 60s north to 70s south.

**Wednesday:** Mostly cloudy with a chance of showers north. Partly cloudy after areas of morning clouds south. Lows near 40. Highs along the coast near 60. Highs inland in the mid to upper 60s north to lower 70s south.

**Important data showing precipitation today:**

- Year to date: 2.81
- Month to date: .28
- Mpls-St Paul: 52.45
- Nashville: 78.54
- New Orleans: 85.60
- New York City: 60.53
- Orlando: 88.67
- Philadelphia: 64.57
- Phoenix: 95.68
- Pittsburgh: 77.56
- Pocatello: 65.40
- Reno: 72.39
- Salt Lake City: 69.49
- San Francisco: 61.46
- Seattle: 48.37
- Spokane: 51.31
- Tampa-St Ptsbg: 89.28
- Washington, D.C.: 78.62
- Yakima: 55.26

**National Temperature Extremes**

- High Friday: 102 at Lake Havasu City, Ariz.
- Low today: 16 at Stanley, Idaho

**Sunrise, sunset**

- Sunset today: 8:08 p.m.
- Sunrise Sunday: 5:29 a.m.
- Sunrise Sunday: 5:29 a.m.
- Sunrise Monday: 5:26 a.m.
**PLEASE SIGN IN!**

Elgin TAC Meeting  
Tuesday, May 11, 1999  
7:00 p.m. Elgin City Hall

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Dana DeLurie</td>
<td>Union Co. Planning Dept.</td>
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<tr>
<td>Joe Garlitz</td>
<td>City of Elgin Recorder</td>
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<tr>
<td>John G. Sharp</td>
<td>P.O. Box 625, Elgin</td>
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<tr>
<td>D. Quek</td>
<td>P.O. Box 1115, Elgin</td>
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<td>Pat McMillan</td>
<td>P.O. Box 31, Elgin</td>
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<td>Betty Churchill</td>
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<td>John Stone</td>
<td>P.O. Box 582, Elgin or</td>
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<td>J.C. Branyan</td>
<td>P.O. Box 635, Elgin On</td>
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<tr>
<td>Jan P. Estes</td>
<td>P.O. Box 173, Elgin, O.</td>
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<td>Jerry Peter</td>
<td>Elgin Opera House Owner</td>
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<td>Bill Johnson</td>
<td>Elgin - Quick Mart Owner</td>
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Notes:
- S of 204 is collector
- S of 204 is collector
- S of 204 is collector
- S of 204 is collector
- S of 204 is collector
- S of 204 is collector
- S of 204 is collector
- Berm created by 204 is hard to negotiate
- May be difficult
- Wide road-uses shoulders for 50' ROW
Appendix C

CITY OF ELGIN

BICYCLE-PEDESTRIAN PLAN

A Comprehensive Land Use Plan Supplement

Prepared by Union County Planning Department

Tracy Allen
Jon Jinings
Hanley Jenkins, IL

Adopted:
August 13, 1996

Ordinance #113-96

This project is partially funded by a grant from the Transportation Growth Management (TGM) Program, a Joint Program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development. TGM grants rely on federal Intermodal Surface Transportation Efficiency Act and Oregon Lottery funds.
BICYCLE AND PEDESTRIAN PLAN FOR CITY OF ELGIN

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Section

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PLAN PURPOSE

I. INTRODUCTION
Bicycling and walking are ecological, energy efficient, and cost effective modes of transportation, which can help reduce traffic congestion, air and water pollution, road wear and the cost of road construction and repair. Urban bikeway and walkway networks address nicely the mobility and access needs of those who do not drive, including children too young to drive, people with income too low to own a car, many elderly people, and people with disabilities.

A. PURPOSE
This Plan addresses the Transportation Planning Rule bicycle and pedestrian requirements for the City of Elgin. The Plan identifies and directs opportunities for developing and improving bicycle and pedestrian facilities to assure that new streets and new development are designed in ways that provide safe, convenient, and direct bicycle and pedestrian access.

The Bicycle and Pedestrian Plan serves several purposes:

. Guide the development of bicycle and pedestrian facilities in the participating jurisdictions;

. Educate and inform about bicycle and pedestrian transportation; and

. Set standards for planning and construction bikeways and walkways.

The Plan is intended to be used by the people of Elgin as a tool to preserve and enhance the livable character of the community and the quality of the road network by increasing non-motorized transportation choices. Most existing land use and transportation patterns and land development codes are oriented toward automobiles as the dominant transportation mode, with little thought given to the needs of people who bicycle and walk as a means of transportation. Today, each household owns more cars, makes more trips, and travels more miles per year than ever before. This has undesirable consequences as urban areas grow. Traffic volumes increase. More traffic means increased congestion, noise, and air and water pollution. Livability of communities declines, and demand for expensive road improvements increases.

Walking for recreation is a popular activity, and 75% percent of us own bikes. Most of our trips are short trips, less than two miles from home. Yet most of us make even short trips by automobile because there aren't safe and easy ways to get from one place to another by walking or bike riding. If safe, convenient walkways and bikeways are provided people will choose
to walk and bicycle more and drive less for short trips around town.

B. POLICY FRAMEWORK AND RELATED DOCUMENTS
All levels of government recognize bicycling and walking as viable modes of transportation and encourage planning transportation systems to include safe and convenient bicycle and pedestrian facilities.

1. FEDERAL POLICY
The federal government signed the Intermodal Surface Transportation Efficiency Act (ISTEA) into law in December 1991. The ISTEA requires states to staff a bicycle and pedestrian coordinator and to plan for bicycles and pedestrians. It also makes funds available to states for a variety of bicycle and pedestrian projects.

2. STATE POLICY
Oregon is recognized as a leader in bicycle and pedestrian planning. The state provides specific policies and standards for developing bicycle and pedestrian facilities to help local governments reach goals and build the multi-modal transportation system.

a. Bicycle Bill
Oregon's statewide bicycle program began in 1971 when the "Oregon Bicycle Bill" passed into law (HB 1700, now ORS 366.514). The first of its kind in the country, it mandated a minimum one percent gas-tax be dedicated to construct, maintain and operate bicycle and pedestrian facilities.

b. Oregon Transportation Plan
The Oregon Transportation Plan (OTP) sets the general direction for transportation development statewide for the next 20 years. The OTP outlines a vision of a multi-modal transportation system, and sets project and program priorities for the allocation of resources. Specific plans for each transportation mode - aviation, highways, mass transit, bicycle and pedestrians, railroads, and transportation corridors - refine and extend the general provisions in the OTP. These specific plans also include two programs to reduce traffic deaths, and to promote connections.

c. The Oregon Bicycle and Pedestrian Plan, 1995 Draft
The Oregon Bicycle/Pedestrian Plan establishes statewide policies and standards for planning and developing safe, attractive transportation facilities that emphasize bicycling and walking.

d. Statewide Planning Goals
Statewide Planning Goals support bicycling and walking as sensible transportation choices, because they help reduce air
pollution, traffic congestion and consumption of petroleum resources; they reduce the consumption of land for roads and parking resulting in compact urban growth; and they have very low impact on land uses and natural systems.

e. Transportation Planning Rule 12

The Transportation Planning Rule (OAR Chapter 660, Division 12) adopted in April 1991, requires cities and counties to plan for non-automotive transportation choices including bicycling and walking. Rule provisions vary based on a jurisdiction's population. Small jurisdictions are defined as cities with population under 2,500; small counties are those with populations under 25,000. Except for the City of La Grande, eight of the nine jurisdictions in Union County are defined as small jurisdictions, and are eligible to apply for whole or partial exemption from the Rule.

The TPR 12 bicycle and pedestrian facility requirements are as follows:

**Safe and Convenient Bike and Pedestrian Access**

Facilities providing safe and convenient pedestrian and bicycle access shall be provided within and from new subdivisions, planned developments, shopping centers and industrial parks to nearby residential areas, transit stops, and neighborhood activity centers, such as schools, parks and shopping. This shall include:

(A) Sidewalks along arterials and collectors in urban areas;

(B) Bikeways along arterials and major collectors;

(C) Where appropriate, separate bike or pedestrian ways to minimize travel distances within and between the areas and developments listed above.

"Safe convenient and adequate" means bicycle and pedestrian routes facilities and improvements which: (A) are reasonably free from hazards particularly types or levels of automobile traffic which would interfere with or discourage pedestrian or cycle travel for short trips. (B) Provide a direct route of travel between destinations, such as between transit stop and a store; and, (C) meet the travel needs of cyclists and pedestrians considering the destination and length of trip. (045(3)(b)).

**Internal Pedestrian Circulation**

Internal pedestrian circulation shall be provided in new office parks, and commercial developments through clustering buildings, construction of pedestrian ways, skywalks, where appropriate, and similar techniques. (045(3)(d)).
Bicycle and Pedestrian Plan

Sidewalks and Bikeways
Sidewalks shall be provided along arterials and collectors in urban areas. (045)(3)(b)(A).

Bike Parking Facilities
Bicycle parking facilities shall be provided as part of new multifamily residential developments of four units or more, new retail, office institutional developments and all transit transfer stations and park and ride lots. (045(3)(a)).
II. EXISTING FACILITIES INVENTORY, NEEDS ANALYSIS, AND RECOMMENDED BICYCLE AND PEDESTRIAN FACILITY PROJECTS.

A. COMMUNITY PROFILE
Elgin is a small rural city, population 1,630, the third largest city in Union County, located in the Indian Valley between the Blue Mountains and the Wallowa Mountains. Elgin's economy is primarily based on wood products. The Boise Cascade lumber and plywood mills have long been the dominant employers in Elgin. The majority of households are families, many with both spouses in the work force. Half the wage earners live in or near Elgin, drive less than 10 minutes to work, while others commute 20 to 90 minutes or more to nearby towns. In 1990, 72% of Elgin's workers drove to work alone in an automobile, 4% carpooled, 1% bicycled, 9% walked to work, and 4% worked at home. The area's transportation network is designed for automobiles, essential for transportation in rural areas.

3. COMPREHENSIVE PLAN
The City of Elgin Comprehensive Plan supports the development and use of alternative types of energy efficient and economical transportation for local citizens. The City supports the use of bicycles and walking as transportation; it supports programs to improve transportation conditions for the disadvantaged; and cooperates with other local, state and federal agencies to help provide an efficient and economical transportation system.

The Comprehensive Plan projects that development will occur where access is most readily available. Areas with the highest level of improvements, e.g., paving, curbs and sidewalks, will generally be the most desired areas for living, develop faster, and be the most attractive in the community. Area liveability is usually increased where these improvements can be made, or where they are required in new development.

C. BICYCLE AND PEDESTRIAN PLANNING IN ELGIN
The City of Elgin has developed largely without curbs, gutters, sidewalks, or bike facilities. Most areas in Elgin do not have a storm drain system. However, Elgin does have good soil permeability and maintains barrow ditches and swales adjacent City streets for snow removal and drainage.

In the past, the citizens and City Council felt the City was too small and rural in nature, and financial resources were too limited to plan for alternative modes of transportation. The Street Plan (1980) mentions a possible community trail along the drainage crossing the north end of 15th Avenue which could connect residential areas to shopping, schools and other destinations. Another trail was suggested to extend east to the River, then follow the river south to the park and possibly the stampede grounds. However, no bicycle facilities presently exist in Elgin. The arterial streets have sidewalks in varying degrees

City of Elgin, August 23, 1995, p.5
Bicycle and Pedestrian Plan

of repair, but there are no inventoried sidewalks on the major and minor collector streets. The City receives State Highway Funds which at least one percent is earmarked for bicycle and/or pedestrian improvements to road right-of-ways. In 1995, Elgin received $_______ for this purpose.

Despite challenges there are excellent opportunities to improve bicycling and walking conditions and preserve and enhance the quality of life enjoyed in Elgin. The City is one mile to one and one half miles east-west which is small enough the schools, churches, stores, post office, community center, parks, and other destinations are within walking and biking distances. Elgin’s urban residential densities range from one to six dwellings per acre (maximum 8 dwellings per acre). The residential development pattern in Elgin includes concentrations of residences on 5,000 square foot lots interspersed with lower density development and undeveloped uses.

D. EXISTING STREET SYSTEM

The City of Elgin Street Plan (adopted 1980) recognizes the interrelationships between land use, transportation and public utility planning. City officials are directed to provide automobile, bicycle, and pedestrian access primarily through a network of major and minor collector streets. Street development and maintenance standards were based on functional classifications. The City agreed to provide separated automobile traffic lanes, bike lanes, and pedestrian sidewalks, as funds allow, to maximize safety and movement and decrease conflicts between the different transportation modes. All City streets are maintained by City crews. However, major City street construction projects are contracted to private road builders.

The City’s Subdivision Ordinance establishes minimum 80 foot rights-of-way and 44 foot surface widths for arterial street. These streets have the most significant bicycle and pedestrian facility needs because they carry high speed, high volume through-traffic.

Major and minor collector streets connect arterials and often have high traffic volumes and significant through traffic. The City’s Subdivision Ordinance requires collectors to have 60 foot right-of-ways and 40 foot surface improvements. These widths assure safe visibility and maneuverability needed to reduce chances for accidents. The Subdivision Ordinance states that collectors should be curbed and paved when constructed. Through traffic is discouraged on local neighborhood streets. Local streets also have 60 foot right-of-way width and 40 foot surface width requirements.

Elgin’s street grid was developed assuming vacant land would be developed with the most efficient land use at maximum allowable densities - 5,000 square foot lots for single family dwellings. However, less than 20% of developed residential lots are 5,000

City of Elgin, August 23, 1995, p.6
Bicycle and Pedestrian Plan

Street Plan identifies the following land uses and related activities which generate significant amounts of automobile, bicycle, and pedestrian traffic:

Elgin Elementary/Middle and the High School sites generate large amounts of both pedestrian and vehicular traffic, and the approach to them should be made as easy and safe as possible. Given the location of the schools near the center of the City, it is necessary to provide pedestrian crosswalks in appropriate locations. Motor vehicle/pedestrian conflicts can be minimized by providing pedestrian/bicycle access by means of designated paths.

Boise-Cascade Mill is probably the largest generator of vehicular traffic. There are very few slack days for traffic to and from the mill, as it usually operates three shifts per day, seven days per week. There is some pedestrian traffic to the mill, which could be separated from the highway traffic by a trail system along the north side of the highway.

The commercial area in the center of the City is a generator of both vehicular and pedestrian traffic. In addition to the core area, there is commercial development along both Highway 82 and 204. These areas are expected to expand in the future, and may require the location of additional crosswalk markings on the arterials and collectors.

Park and recreation uses are "destination" sites and should also be provided separate pedestrian/bicycle and vehicular access wherever possible.

NEEDS ANALYSIS

During the preparation of this plan, July 1, 1994 to June 30, 1995, the Elgin City Council served as the Citizen Involvement Committee (CIC). Three CIC meetings were held during the year. The purpose of the first one was to familiarize the committee with the planning principles, goals, objectives, and requirements of the plan. The second one focused on inventory results and facility design standards. At the third meeting we analyzed alternatives and made recommendations. The guidelines the committee used in recommending bicycle and pedestrian movements are based on the Oregon Transportation Planning Rule requirements which are discussed in the POLICY section of this Plan, and the Oregon Bicycle and Pedestrian Plan requirements are discussed in the STANDARDS section of this Plan.

Transportation Planning Rule (TPR) requires that cities provide safe, direct, continuous and well connected networks for...
bicycles and pedestrian travel. In general, the TPR requires sidewalks and bikeways along arterials and major collectors. Along minor collectors and local streets sidewalks and bikeways are provided as needed to connect other bike and pedestrian facilities and to provide access to important destinations. The TPR also directs local governments to adhere to the standards and guidelines established in ODOT’s Bicycle and Pedestrian Plan.

In urban areas the appropriate type of bicycle and pedestrian facility is determined by the street functional classification. The Elgin Bicycle and Pedestrian Plan employs urban facility standards modified for low density rural city streets without storm drain systems. In portions of Elgin where densities are very low, rural standards are recommended to meet existing and foreseeable urban development needs.

F. INVENTORY AND PROJECT RECOMMENDATIONS

1. State Hwy 82/Wallowa Lake Highway
   From Phillips Creek Bridge to 5th Avenue
   The Wallowa Lake Highway, a minor arterial, is Elgin’s main commercial street. In the summer of 1982, ODOT installed curbs and gutters, and completed a storm drain improvement project on Hwy 82 in downtown Elgin. The paved surface is 44 feet wide allowing two 14 foot travel lanes and two 8 foot parking lanes. There are 5 foot sidewalks adjacent the parking lanes on both sides of the street from Birch Street to Albay Street. A 5 foot sidewalk is provided on the west side only from the Phillips Creek Bridge to Birch Street, and another segment on the south side from Depot Street to 6th Avenue.

   Recommendations:
   Provide and maintain 5 foot sidewalks on both sides of Hwy 82 from Phillips Creek to 5th Avenue adjacent parking lanes.

<table>
<thead>
<tr>
<th>Project</th>
<th>From-To</th>
<th>Miles</th>
<th>Cost</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
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<td>1x5 ft sidewalk Phillips Cr-Birch</td>
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<tr>
<td>1x5 ft sidewalk Depot-5th</td>
<td>.15</td>
<td>$18,000</td>
<td>med/high</td>
<td></td>
</tr>
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</table>

2. State Hwy 204/Division
   From Hwy 82 to 17th Street
   Division is an east-west minor arterial which passes Stella Mayfield Elementary School and provides access to many businesses and the central business district. It has an 80 foot right-of-way width. The pavement is 44 feet wide with two 14 foot travel lanes and two 8 foot parking lanes. There are sidewalks without curbs and gutters on both sides
of Division Street which are in disrepair except in front of Stella Mayfield Elementary School.

Recommendations: Replace deteriorated sidewalks with 5 foot sidewalks on both sides of the street and paint crosswalks at 10th Avenue, 14th Avenue, and Hwy 82.

<table>
<thead>
<tr>
<th>Project</th>
<th>From-To</th>
<th>Miles</th>
<th>Cost</th>
<th>Priority</th>
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</thead>
<tbody>
<tr>
<td>2x5 ft sidewalks</td>
<td>Hwy 82-17th</td>
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<td>$105,300</td>
<td>high</td>
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<tr>
<td>Crosswalks marked, signed</td>
<td>Hwy 82, 10th,</td>
<td></td>
<td>$500</td>
<td>high</td>
</tr>
<tr>
<td></td>
<td>and 14th</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Birch Street
From Hwy 82 to 17th Street
Elgin High School is located on Birch Street, a minor collector frequently used by young people bicycling and walking to and from school. Birch Street has a 60 foot right-of-way width and a 20 foot paved surface which allows two 10 foot travel lanes. Sidewalks are not provided on Birch Street except directly in front of the high school.

Recommendations: Reconstruct Birch Street to widen it to 28 feet to provide two 14 foot shared travel lanes, and provide two 8 foot gravelled parking lanes. Install 5 foot sidewalks on both sides of the street separated from traffic by the 8 foot gravelled parking lanes or at least 8 foot wide drainage swales.

Option: Per the Elgin Subdivision Ordinance, consider installing curb and gutter, and paving 44 feet curb to curb, including two 14 foot travel lanes for shared automobile and bike use and two 8 foot parking lanes. Install two 5 foot sidewalks adjacent the parking lanes or separated from the road by narrow planting strips. Explore options to improve the drainage system in conjunction with other right-of-way improvements.

<table>
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<th>Miles</th>
<th>Cost</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
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<td>Widen pavement +8 ft asphalt</td>
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<td>.44</td>
<td>$28,080</td>
<td>high</td>
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<td>Parking lanes +16 ft gravel</td>
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<td>.44</td>
<td>$26,763</td>
<td>high</td>
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<td>2x5 ft sidewalks</td>
<td>Hwy 82-17th</td>
<td>.44</td>
<td>$105,300</td>
<td>high</td>
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</table>

City of Elgin, August 23, 1995, p.9
4. Cedar Street
From Hwy 82 to Elgin east City Limits
Cedar Street is a minor collector with a 60 foot right-of-way width. The 26 foot asphalt surface allows two 13 foot travel lanes. No curbs, gutters, or sidewalks are provided. Cedar Street from Hwy 82 to the east City Limits forms part of a popular bicycle and pedestrian loop when connected with Elgin Cemetery Road and Indian Creek Road.

Recommendations: Widen the paved surface to 28 feet to provide two 14 foot shared travel lanes. Provide two 8 foot gravelled parking lanes. Install two 5 foot sidewalks separated from traffic by the 8 foot gravelled parking lanes or drainage swales.

<table>
<thead>
<tr>
<th>Project</th>
<th>From-To</th>
<th>Miles</th>
<th>Cost</th>
<th>Priority</th>
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<tbody>
<tr>
<td>Widen pavement</td>
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<td>Hwy 82-east CL</td>
<td>.38</td>
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<td>2x5 ft sidewalks</td>
<td>Hwy 82-east CL</td>
<td>.38</td>
<td>$90,288</td>
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</tr>
</tbody>
</table>

5. D Street
From Palmer St to 15th Ave
This one block segment of D Street connects 15th Avenue and Palmer Street which together form an important north-south collector. The paved surface is about 20 feet wide, in poor condition, allowing two 10 foot travel lanes. No curbs, gutters or sidewalks are provided.

Recommendations: Widen the paved surface to 24 feet to provide two 12 foot shared travel lanes, and provide two 8 foot gravelled parking lanes. Consider installing a sidewalk on the west side of D Street separated from traffic by an 8 foot parking lane or drainage swale.

<table>
<thead>
<tr>
<th>Project</th>
<th>From-To</th>
<th>Miles</th>
<th>Cost</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
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<td>Palmer-15th</td>
<td>.24</td>
<td>$</td>
<td>h, m, l</td>
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<tr>
<td>Parking lanes</td>
<td>Palmer-15th</td>
<td>.24</td>
<td>$14,598</td>
<td>h, m, l</td>
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<tr>
<td>1x5 ft sidewalk</td>
<td>Palmer-15th</td>
<td>.24</td>
<td>$28,600</td>
<td>h, m, l</td>
</tr>
</tbody>
</table>
6. **Detroit Street**  
**From 10th Avenue to 15th Avenue**  
Detroit Street functions as an east-west minor collector. It has a 60 foot right-of-way and a 20 foot paved surface which allows two 10 foot travel lanes. Detroit Street is an important link in the bicycle and pedestrian network because it connects 15th Avenue and 10th Avenue at the Community Center and Tom McDowell Park. The existing road surface is aligned closer to the north side of the right-of-way. There are drainage swales on both sides of the road.

**Recommendations:** Widen the street surface to 24 feet and provide two 12 foot shared travel lanes. Provide two 8 foot gravelled parking lanes. Install a 5 foot sidewalk on the south side separated from traffic by an 8 foot parking lane and drainage swale.

<table>
<thead>
<tr>
<th>Project</th>
<th>From-To</th>
<th>Miles</th>
<th>Cost</th>
<th>Priority</th>
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</thead>
<tbody>
<tr>
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<td>Parking lanes +16 ft gravel</td>
<td>10th-15th</td>
<td>.24</td>
<td>$14,598</td>
<td>med/high</td>
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<td>1x5 ft sidewalk</td>
<td>10th-15th</td>
<td>.24</td>
<td>$28,800</td>
<td>med/high</td>
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</table>

7. **Hartford Lane**  
**From 10th Street to Palmer Street**  
Hartford Lane is a major collector which is frequently used for bicycling and walking. There are deep drainage ditches on both sides of the 60 foot right-of-way. The pavement is 20 feet wide with two 10 foot travel lanes. No sidewalks are provided.

**Recommendations:** Widen the road surface to 32 feet to provide two 12 foot shared travel lanes and two 4 foot paved shoulder bikeways. Provide one 8 foot gravelled parking lane on the north side. Install one 5 foot sidewalk on the north side separated from traffic by an 8 foot parking lane and/or drainage ditch.

**Option:** Per the Elgin Subdivision Ordinance, consider installing curb and gutter, paving 42 feet curb to curb, to provide two 12 foot travel lanes, two 5 foot bike lanes, and one 8 foot parking lane on the north side. Install one 5 foot sidewalk on the north side behind the parking lane. Explore options to improve the drainage facility in conjunction with other right-of-way improvements.
### Bicycle and Pedestrian Plan

<table>
<thead>
<tr>
<th>Project</th>
<th>From-To</th>
<th>Miles</th>
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<tr>
<td><strong>Option</strong></td>
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<tr>
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<td>.42</td>
<td>$5,000</td>
<td>h, m, l</td>
</tr>
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</table>

### 3. Palmer Street
**From Hartford to D Street**
Palmer Street is the northern extension of 15th Avenue, an important north-south collector. Palmer Street has a 60 foot right-of-way and a 20 foot wide gravel surface in poor condition, with deep drainage ditches on both sides.

**Recommendations:** Reconstruct the road to a 24 foot paved surface to provide two 12 travel lanes.

**Option:** Per the City’s Subdivision Ordinance, explore options to install paved 40 feet to provide two 12 foot travel lanes and two 8 foot shoulders. Consider installing a sidewalk on the westerly side of the street behind the drainage ditch to serve pedestrians. Consider improving the drainage system in conjunction with other right-of-way improvements.

<table>
<thead>
<tr>
<th>Project</th>
<th>From-To</th>
<th>Miles</th>
<th>Cost</th>
<th>Priority</th>
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</thead>
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<td>med/high</td>
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</table>

City of Elgin, August 23, 1995, p.12
9. 10th Avenue
From Hwy 204 to Hartford Lane

Tenth Avenue is a major collector with an 80 foot right-of-way which connects Division Street (Hwy 204) on the south with Hartford Lane on the north. The paved surface is 24 feet wide with two 12 foot travel lanes. No curbs, gutters, or sidewalks are provided. The Elgin Community Center, pool, and Tom McDowell Park, located on the west side of 10th Avenue, attract significant bicycle and pedestrian traffic.

Recommendations: Reconstruct the road to a 32 foot surface to provide two 12 travel lanes and two 4 foot paved shoulder bikeways. Provide two 8 foot gravel parking lanes. Install a 5 foot sidewalk on one or both sides of the street separated from traffic by an 8 foot (4 foot min.) planting strip and/or drainage swales. If only one sidewalk is provided, it should be located on the west side.

Option: Per the Elgin Subdivision Ordinance, consider installing curb and gutter, and paving 50 feet curb to curb, to provide two 12 foot travel lanes, two 5 foot bike lanes, and two 8 foot parking lanes. Install a 5 foot sidewalk on one or both sides of the street, separated from traffic by an 8 foot (4 foot min.) planting strip. If only one sidewalk is provided, it should be located on the west side. Improve the drainage system in conjunction with other right-of-way improvements.

<table>
<thead>
<tr>
<th>Project</th>
<th>From-To</th>
<th>Miles</th>
<th>Cost</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widen pavement +8 ft asphalt</td>
<td>Hwy 204-Hartford</td>
<td>.52</td>
<td>$32,950</td>
<td>high</td>
</tr>
<tr>
<td>Parking lanes +16 ft gravel</td>
<td>Hwy 204-Hartford</td>
<td>.52</td>
<td>$31,629</td>
<td>high</td>
</tr>
<tr>
<td>1x5 ft sidewalk</td>
<td>Hwy 204-Hartford</td>
<td>.52</td>
<td>$122,400</td>
<td>high</td>
</tr>
<tr>
<td>Option</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widen pavement +26 ft asphalt</td>
<td>Hwy 204-Hartford</td>
<td>.52</td>
<td>$107,100</td>
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</tr>
<tr>
<td>Curb, gutter</td>
<td>Hwy 204-Hartford</td>
<td>.52</td>
<td>$57,666</td>
<td>h, m; l</td>
</tr>
<tr>
<td>1x5 ft sidewalk</td>
<td>Hwy 204-Hartford</td>
<td>.52</td>
<td>$61,785</td>
<td>h, m, l</td>
</tr>
<tr>
<td>Storm drains</td>
<td>Hwy 204-Hartford</td>
<td>.52</td>
<td>$5,000</td>
<td>h, m, l</td>
</tr>
</tbody>
</table>
10. 14th Avenue
From Hwy 204/Division-Birch
Fourteenth Avenue provides access to the high school by connecting Division Street and Birch Street. This two-block section is frequently used by young people riding and walking to and from schools and stores. It functions as a minor collector, has a 60 foot right-of-way, and a 24 foot paved surface which allows two 12 foot travel lanes. No curb, gutter or sidewalks are provided.

Recommendations: Provide a 24 foot road surface to allow two 12 travel lanes, and provide two 8 foot gravel parking lanes. Install two 5 foot sidewalks separated from traffic by 8 foot gravel parking lanes and drainage swales.

<table>
<thead>
<tr>
<th>Project</th>
<th>From-To</th>
<th>Miles</th>
<th>Cost</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking lanes</td>
<td>Hwy 204-Birch</td>
<td>.11</td>
<td>$6,691</td>
<td>high</td>
</tr>
<tr>
<td>+16 gravel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2x5 ft sidewalks</td>
<td>Hwy 204-Birch</td>
<td>.11</td>
<td>$25,200</td>
<td>high</td>
</tr>
</tbody>
</table>

11. 15th Avenue
From D Street-Hwy 204/Division
Fifteenth Avenue is an important north-south minor collector which connects Division Street and Hartford Lane via Palmer Street. It is located in a primarily residential neighborhood. Established private yards encroach on the 50 to 60 foot public right-of-way. The paved surface is 20 to 24 feet wide which allows two 10 or 12 foot travel lanes. No curb, gutter, or sidewalks are provided.

Recommendations: Provide a 24 foot road surface to allow two 12 foot travel lanes, and provide two 8 foot gravel parking lanes.

Option: Per the City's Subdivision Ordinance, consider installing one 5 foot sidewalk to serve pedestrians on one side (west?) separated from traffic by an 8 foot parking lane, drainage swale, or planting strip.

<table>
<thead>
<tr>
<th>Project</th>
<th>From-To</th>
<th>Miles</th>
<th>Cost</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widen pavement</td>
<td>Hwy 204-D</td>
<td>.38</td>
<td>$12,000</td>
<td>med/high</td>
</tr>
<tr>
<td>+2 ft asphalt</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking lanes</td>
<td>Hwy 204-D</td>
<td>.38</td>
<td>$23,114</td>
<td>med/high</td>
</tr>
<tr>
<td>+16 ft gravel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option</td>
<td>Hwy 204-D</td>
<td>.38</td>
<td>$45,144</td>
<td>h, m, l</td>
</tr>
<tr>
<td>1x5 ft sidewalk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

City of Elgin, August 23, 1995, p.14
12. 17th Avenue
   From Hwy 204/Division-Birch
   Seventeenth Avenue between Division Street and Birch Street is frequently used by young people riding and walking to and from the high school and stores. Seventeenth Street also provides access from Hwy 204 (Division Street) to Boise Cascade Mill. This street functions as a minor collector. It has a 60 foot right-of-way width and a 24 foot paved surface which allows two 12 foot travel lanes. It does not have curbs, gutter, or sidewalks.

   Recommendations: Provide a 24 foot road surface to allow two 12 foot travel lanes, and provide one 8 foot gravel parking lane on the west side. Install two 5 foot sidewalks separated from traffic by 8 foot parking lane, drainage swale, or planting strip.

<table>
<thead>
<tr>
<th>Project</th>
<th>From-To</th>
<th>Miles</th>
<th>Cost</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking lane</td>
<td>Hwy 204-Birch</td>
<td>.11</td>
<td>$3,360</td>
<td>med/high</td>
</tr>
<tr>
<td>+8 gravel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2x5 ft sidewalk</td>
<td>Hwy 204-Birch</td>
<td>.11</td>
<td>$25,200</td>
<td>med/high</td>
</tr>
</tbody>
</table>

Bicycle and Pedestrian Plan

CITY OF ELGIN, UNION COUNTY, OREGON
BICYCLE AND PEDESTRIAN PLAN MAP - 1995

EXPLANATION

- Bike Lanes
  2(12t) 2(8p) 2(5b1) 1-2 (5mm)

- 14 ft Shared Lanes
  2(14t) 2(8p) 2(5mm)

- Shoulder Bikeway
  2(12t) 1(8p+5mm) 1(69mm)

- Shared Roadway
  2(12t) 2(8p) 1-2 (5mm)

- Existing Sidewalks

- Planned Sidewalks

City of Elgin, August 23, 1995, p.17
Table 1: Summary of Existing Facilities and Recommendations

<table>
<thead>
<tr>
<th>Street Name, Segment</th>
<th>Existing Geometry</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State Hwy 82 Wallow Lake Highway</strong></td>
<td>Minor Arterial Right-of-way: 80 Length: Pavement: 44 2(14t) 2(8p) 2(5sw) Sidewalks from Phillips Crk to 5th Ave.</td>
<td>No Change, except to provide 5 foot sidewalks on both sides of Hwy 82 to 5th Ave.</td>
</tr>
<tr>
<td>Birch to Albany on both sides. Phillips Crk-Birch Depot-5th Ave Downtown main street</td>
<td>Sidewalk on west side only. Sidewalk on south side only</td>
<td></td>
</tr>
<tr>
<td><strong>State Hwy 204 Weston-Elgin Hwy (Division) Wallowa Lk Hwy-17th Commercial strip, access to schools. Frequent bike and pedestrian use.</strong></td>
<td>Minor Arterial Right-of-way: 80 Length: Pavement: 44 2(14t) 2(8p) 2(5sw) Sidewalks are in poor condition.</td>
<td>Pavement: 44 2(14t) 2(8p) 2(5sw) Replace sidewalks</td>
</tr>
<tr>
<td><strong>Birch Street 17th-Wallowa Lk Hwy Access to high school Frequent bike and pedestrian use.</strong></td>
<td>Minor Collector Right-of-way: 60 Length: Pavement: 20+ 2(10t) 2(8p) gravel</td>
<td>Pavement: 28 2(14t) paved 2(5sw) provide two 5 ft sidewalks behind parking. Option See text.</td>
</tr>
</tbody>
</table>

Key: bl bike lane, p parking, t travel lane, sh shoulder bikeway, sw sidewalk, Pavement pavement width.
# Bicycle and Pedestrian Plan

Table 1: Summary of Existing Facilities and Recommendations

<table>
<thead>
<tr>
<th>Street Name, Segment</th>
<th>Existing Geometry</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>14th Avenue</td>
<td>Minor Collector</td>
<td>Pavement: 24 2(12t) 2(8p) gravel 2(5sw) Place sidewalks separated from traffic</td>
</tr>
<tr>
<td>15th Avenue</td>
<td>Minor Collector</td>
<td>Pavement: 24 2(12t) 2(8p) gravel Option See text.</td>
</tr>
<tr>
<td>17th Avenue</td>
<td>Minor Collector</td>
<td>Pavement: 24 1(8p) gravel W 2(5sw) Place sidewalks separated from traffic by 8 feet (4 ft min.) by parking, planting drainage swales.</td>
</tr>
</tbody>
</table>

Key: bl bike lane, p parking, t travel lane, sh shoulder bikeway, sw sidewalk. Pavement pavement width.
III. BIKEWAY AND WALKWAY PLANNING PRINCIPLES, OBJECTIVES, PLAN POLICIES AND DESIGN STANDARDS

The bikeway and walkway planning principles and design standards discussed below were derived in whole or part from the Oregon Bicycle and Pedestrian Plan, 1995 draft, which has been an invaluable aid in preparation of this plan.

A. PLANNING PRINCIPLES

1. INTRODUCTION

New national and statewide emphasis on increasing walking and bicycling as important modes of transportation require that we design and provide appropriate bicycling and pedestrian facilities that are safe, direct, convenient and attractive to users.

It is physically, financially and politically impractical to provide a new and separate bicycle and pedestrian network in developed urban areas. It is therefore necessary to reconfigure existing roads to accommodate bicycles and pedestrians.

In Oregon, a basic principle for planning bikeway and walkway networks is to build and reconfigure roads to serve all users, both motorized and non-motorized. Bicycling and walking should occur on the existing roadway system that already serves all destinations.

2. ARTERIAL AND COLLECTOR STREETS

The arterial and collector street network is important to pedestrian and bicycle circulation in urban areas because it serves the mobility and access needs of the entire community. Arterial streets carry mostly through traffic. Collector streets carry traffic to and from local streets and arterials. Arterials and collectors provide direct, continuous and convenient access to most destinations. However, problems need to be overcome before they can be effectively used. Many arterial and collector streets have very high traffic volumes and speeds that discourage people who might want to walk or bike. Local streets are quieter, but are often not as direct or convenient.

Arterial and collector streets can be modified to accommodate bicycles and pedestrians when they are newly built or reconstructed, or by renovating them with bikeways and walkways.

In developed urban areas there is often little opportunity to add bicycle and pedestrian facilities by widening roadways because right-of-ways are utilized. Therefore, it will often be necessary to rededicate existing roadway space from automobile to bicycle and pedestrian use. This can help reduce traffic speeds and make the streets more attractive, safe and pleasant for all users.
3. RURAL AND URBAN BICYCLE AND PEDESTRIAN FACILITIES
Union County's road network contains urban and rural areas with both paved and gravel semi-rural roads as well as city streets with and without curbs and sidewalks. The principles used to design bike and pedestrian facilities for urban and rural areas are summarized below.

a. Rural Areas
Rural areas include the unincorporated portion of the county. For small incorporated rural cities with low population densities rural standards may suffice for existing levels of urban development. However, as urban development increases, urban standards should be used.

Bikeways
On most rural county roads shoulder bikeways are appropriate. In general the standard shoulder widths recommended by ODOT for rural highways are adequate for bicycle travel. These standards take into account traffic volumes, traffic speeds, and other traffic operation considerations.

Walkways
In small rural cities with low population density 6 foot wide roadway shoulders may be used as interim pedestrian facilities. On rural county roads or state highways where residential and commercial uses abut the road, sidewalks may be needed. In a rural community, sidewalks or streets without curbs and gutters, on one or both sides of the street, will provide adequate pedestrian facilities and preserve the rural residential character of the street better than paving 6 foot shoulders.

b. Urban Areas
In urban areas the type of bicycle and pedestrian facilities is determined by the functional classification of the roadway.

Bikeways
Arterials and Major Collectors
On arterial and collector streets the appropriate facilities for bicycles are bike lanes. Bike lanes help define the road space, provide bicyclists a path free of obstructions, increase the comfort and confidence level of bicyclists riding in traffic, and signal to motorists that bicyclists have a right to the road.

Where it is not physically possible to provide bike lanes due to physical constraints such as existing buildings or environmentally sensitive areas, a 14 foot wide outside lane may be substituted. A 14 foot wide lane allows a motor vehicle to pass a bicycle without leaving the travel lane. The bike lane should resume where the constraint ends.
Where bike lanes cannot be provided, a safer bike and pedestrian environment can be achieved by reducing traffic speeds to 25 MPH or less using traffic calming techniques.

**Minor Collectors and Local Streets**

The appropriate facilities for bikes on minor collectors and local streets are shared roadways, because the low traffic speeds and volumes allow bicycles and automobiles to safely share the road.

Bike lanes are appropriate on minor collectors if traffic speed is above 25 MPH or traffic ADT is over 3000. Bike lanes on minor collectors are also appropriate to connect existing bike lanes or to extend bike lanes to destination points that generate high bicycle use, such as schools, parks and multi-family residential uses.

**Walkways**

Sidewalks are the appropriate pedestrian facilities in urban areas and should be provided on all urban streets. They provide a hard all-weather surface, physically separated from motor vehicle traffic as required by ADA regulations. Planting strips separate pedestrians from traffic and increase user comfort and safety.

**Arterials and Major Collectors**

Sidewalks should be provided on both sides of arterial and major collector streets in urban areas. In developing areas at the urban fringe or in small rural cities a paved 6 foot shoulder for shared pedestrian and bicycle use may be used as an interim pedestrian facility. This notion is based on rural standards. As urban development proceeds sidewalks should be provided.

**Minor Collectors and Local Streets**

Sidewalks should be provided continuous on one or both sides of all new minor collector and local streets. Often it isn’t possible to install sidewalks in neighborhoods which were developed without them. On minor collector and local streets which do not have sidewalks, and have very low traffic volumes and speeds, it may be appropriate for pedestrians to share the road with vehicles. When pedestrians must share the road, a safer pedestrian environment can be achieved by reducing traffic speeds to 25 MPH or less using traffic calming techniques.

**4. AASHTO GUIDELINES**

To establish design practices and standards for bicycle facilities the Oregon Department of Transportation adopted the American Association of State Highway and Transportation Official’s (AASHTO) manual "Guide for the Development of Bicycle Facilities 1991," with minor changes and supplements. The guide
Bicycle and Pedestrian Plan

is available from the American Association of State Highway and Transportation Officials, 444 N. Capitol Street, N.W., Suite 225, Washington, D.C. 20001.

Local bikeway projects funded by ODOT grants must conform to the ASSHTO guidelines as supplemented in the Oregon Bicycle and Pedestrian Plan. The Oregon Bicycle and Pedestrian Plan is available from ODOT's Bicycle and Pedestrian Program, 210 Transportation Building, Salem, OR 97310.

All traffic control devices must conform to the national "Manual on Uniform Traffic Control Devices" (MUTCD) as supplemented by the Oregon Traffic Control Devices Committee.

5. TRANSPORTATION PLANNING RULE, AND THE OREGON BICYCLE AND PEDESTRIAN PLAN

The Transportation Planning Rule (OAR 660 Chapter 12) requires local bicycle and pedestrian plans to comply with the Oregon Transportation Plan (OTP). The Oregon Bicycle and Pedestrian Plan is a refinement of the OTP that sets statewide standards for the design, construction, operation, and maintenance of safe and attractive bicycle and pedestrian facilities. The City of La Grande Bicycle and Pedestrian Plan is guided by the Oregon Bicycle and Pedestrian Plan and adheres to the statewide standards.

B. OBJECTIVES AND LOCAL PLAN POLICIES

The goal of this Plan is to integrate a county-wide network of safe, convenient and attractive bicycle and pedestrian facilities that will link state, county and city systems and enable people in urban and rural residential areas to access any destination within 5 miles of their homes by bike or foot.

The plan policies identify general guidance for future bicycle and pedestrian facilities. They are developed to implement specific Oregon Transportation Planning Rule requirements.

Land use plan policies and planning standards are implemented by land use regulation code provisions, i.e. zoning, partition and subdivision ordinances, which are specific, usually establishing specific standards for future development.

The plan policies, planning standards and code provisions are an assimilation of local experience and other local references -- i.e. Transportation Rule Implementation Project - City of Eugene, October 1992 and Recommendations for Pedestrian, Bicycle and Transit Friendly Development Ordinances - APA, February 1993 Draft.

The following Objectives and Plan Policies will be incorporated into the land use plan during implementation. These

City of Elgin, August 23, 1995, p.25
provisions are also intended to be used as a model for other jurisdictions when they are addressing federal and state bicycle and pedestrian transportation planning requirements.

**Objective 1**

Integrate bicycle and pedestrian planning into all transportation planning, design, construction and maintenance activities of ODOT, Union County and the eight incorporated cities.

**Plan Policies**

- Bicycle and pedestrian routes along road and street networks are preferred over separate pathways or accessways to provide safe, direct and convenient facilities.

- Separate bicycle and pedestrian pathways and accessways are reserved for situations where bicycle and pedestrian access would be enhanced and where street connections do not exist or are inappropriate.

- New residential streets will connect with existing street networks in order to provide more direct and convenient routes for automobiles, pedestrian and bicycle travel. Cul-de-sacs will be discouraged except where necessitated by environmental or existing development limitations.

Plan policies are adopted to satisfy the bicycle and pedestrian elements of the TPR 12.

Implementing ordinances, codes and standards are adopted to carry out the Plan Policies.

A Bicycle Coordinator and perpetual Bicycle Advisory Committee will coordinate the efforts of planning, public works, enforcement, and promotional activities as described in this Plan, and will be responsible for monitoring the continuing achievements of the Plan.

Develop dependable funding sources and actively seek additional sources.

**Objective 2**

Provide and maintain a network of safe and convenient pedestrian and bicycle access within and from new subdivisions, planned developments, shopping centers and industrial parks to nearby residential areas, and neighborhood activity centers, such as schools, parks and shopping.

**Plan Policies**

Provide bicycle facilities along all arterial and major collectors and sidewalks along all arterials and collector streets in urban areas.
Bicycle and Pedestrian Plan

Improve access and mobility for commuter and recreational bicyclists and foot travelers of all ages by removing hazards or barriers and minimizing travel distances.

Designate and develop bikeways and sidewalks connecting neighborhoods, schools, commercial, industrial and recreation centers.

Provide internal pedestrian circulation in new office parks, and commercial developments by clustering buildings, and constructing sidewalks.

Provide bicycle parking facilities as part of new multifamily residential developments of four units or more, new retail, office, and institutional developments.

Provide convenient and secure parking and commuter facilities at destinations.

Establish expenditure priorities for the minimum 1 percent State Highway Funds set aside by ORS 366.514 to construct, maintain and operate bicycle and pedestrian facilities.

Adopt design standards and policies that promote safe, convenient and pleasurable bicycle and pedestrian facilities to encourage bicycling and walking.

Provide uniform signing and marking of all bike and pedestrian facilities.

Identify and adopt management practices such as regular sweeping, patching and maintenance to preserve bikeways and sidewalks in a generally smooth, clean and safe condition.

Objective 3

Promote bicycling and walking as safe and convenient forms of transportation for all ages and all trip types by promoting bicycle and pedestrian safety education and enforcement programs.

Plan Policies

Build bicycle safety education programs to improve bicycle skills, observance of traffic laws, and promote overall safety for bicyclists and pedestrians of all ages.

Monitor and analyze bicycle accident data to formulate ways to improve bicycle safety.

Moderate hazards due to high traffic speeds and volumes to encourage bike and foot travel for short trips.
Objective 4

Increase bicycling and walking in urban areas to encourage 10% of trips by bike or foot.

Plan Policies
Collect and analyze data annually to increase bicycle usage and to improve the system’s safety and efficiency.

Establish benchmarks to measure progress.

C. BIKEWAY DESIGN STANDARDS

1. INTRODUCTION
Bicycles are legally classified as vehicles. They can and will be ridden, and should be expected on most public roadways in Oregon. New roadways in La Grande therefore should be designed and constructed to accommodate both automobile and bicycle traffic. Road improvements for automobiles should be planned to enhance bicycle travel whenever possible, and should not create barriers and hazards for bike travel.

La Grande’s urban and rural areas contain both paved and gravel semi-rural roads as well as city streets with and without curbs and sidewalks. The following standards recognize this variety and address both new construction and improvements on existing roadways. The design standards are meant to give bicyclists space on the roadway where they can travel with convenience and safety; to allow bicyclists to emulate automobile drivers and blend into the traffic flow. Attention is given to minimizing conflicts with motorists and pedestrians. In all cases, it is important that bikeways be incorporated into other road work to both minimize cost and to create an integrated system where all modes – motorized and non-motorized – are considered.

2. TYPES OF BICYCLE FACILITIES
There are four types of bicycle facilities: 1. shared roadways, 2. wide outside lane, 3. shoulder bikeway, and 4. bike lanes. Each facility design is discussed below.

a. Shared Roadway
On a shared roadway bicycles and automobiles share the same travel lanes. An automobile driver usually crosses over into the adjacent travel lane to pass a bicycle.

Design Criteria
There are no specific bicycle standards or treatments for shared roadways; they are simply the roads as constructed for automobiles. Shared roadways are appropriate on urban and rural minor collectors and local roads which have low traffic volumes and speeds.
Shared roadways are suitable in urban areas on streets with speed limits of 25 MPH or less, or traffic volumes of 3,000 ADT or less. In rural areas, the suitability of a shared roadway decreases as traffic speeds increase, especially on roads with poor sight distance.

Oregon state law establishes 25 MPH as the speed limit for residential streets and 20 MPH in business districts. However, typical residential and commercial streets allow 35-45 MPH speeds and volumes which are higher than their functional classification would normally allow. Traffic speeds and volumes may be reduced using relatively low cost "traffic calming" techniques such as curb extensions and diagonal diverters.

b. Wide Outside Lanes
A wide outside lane may be used where shoulder bikeways or bike lanes are warranted but cannot be provided due to physical constraints.

**Design Criteria**
A wide outside lane should be 14 feet wide but no more than 16 feet wide. A 14 foot wide outside lane allows an average size automobile to pass a bicycle without crossing over into the adjacent travel lane. Lane widths greater than 14 feet encourage the undesirable operation of two automobiles in one lane. In this situation, it is best to stripe a bike lane or shoulder bikeway. The pavement width is normally measured from curb face to lane stripe with adjustments made for drainage grates, parking, and longitudinal ridges between pavement and gutter sections.

c. Shoulder Bikeway
Smooth paved roadway shoulders on rural roadways provide a suitable area for bicycles, safe from conflicts with faster moving traffic. The majority of rural bicycle travel in unincorporated Union County will be accommodated on shared roadways or roadway shoulders.

**Design Criteria**
In rural areas the suitability of a shared roadway decreases as traffic speeds increase, especially on roads with poor sight distance. Where bicycle use or demand is expected to be high, roads should be widened to include shoulder bikeways or bike lanes. If traffic speeds are greater than 45 MPH and the ADT above 2000, bike lanes are recommended.

Paved shoulders are provided on rural roadways for a variety of safety, operational, and maintenance reasons, including emergency stopping, improved sight distance, structural support of the paved surface, and other maintenance and operation considerations. In general, the shoulder widths recommended for rural roadways and highways in the ODOT Highway Design Manual will serve bicycles well.
The standard width for shoulder bikeways is 6 feet. This provides ample width for bicycles, allows bicyclists to ride far enough from the edge of the pavement to avoid debris, and far enough from passing vehicles to avoid conflicts. Where there are physical width limitations, a minimum 4 foot shoulder may be adequate. Shoulders against a curb face must have a 5 foot minimum width, measured from lane stripe to curb face, the face of a guard rail, or other roadside barrier. On climbing lanes, a 6 foot shoulder (5 foot minimum) is needed to give uphill bicyclists the additional space needed to maneuver.

Whenever a highway or roadway is constructed, widened or overlain, all gravel driveways should be paved back a minimum 15 feet to prevent loose gravel from tracking onto the roadway shoulders.

**ODOT's Standard Shoulder Widths for Rural Highways**

<table>
<thead>
<tr>
<th>Traffic Volume</th>
<th>Rural Arterial</th>
<th>Collector</th>
<th>Rural Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT under 250</td>
<td>4 ft</td>
<td>2 ft</td>
<td>2 ft</td>
</tr>
<tr>
<td>ADT 250-400</td>
<td>4 ft</td>
<td>2 ft</td>
<td>2 ft</td>
</tr>
<tr>
<td>ADT 400-DHV *100</td>
<td>6 ft</td>
<td>4 ft</td>
<td>4 ft</td>
</tr>
<tr>
<td>DHV 100-200</td>
<td>6 ft</td>
<td>6 ft</td>
<td>6 ft</td>
</tr>
<tr>
<td>DHV 200-400</td>
<td>8 ft</td>
<td>8 ft</td>
<td>8 ft</td>
</tr>
<tr>
<td>DHV over 400</td>
<td>8 ft</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*DHV (Design Volume) is the expected traffic volume in the peak design hour (usually commuter times). DHV can vary from 13% to 25% of ADT. Source: Oregon Bicycle and Pedestrian Plan, 1995 draft.*

Many paved county roads are 24 feet wide or less without a fog line. If present, fog lines are striped 10 or 11 feet from the center line. The remaining 2 feet of pavement should not be considered a shoulder bikeway (minimum width is 4 feet for a shoulder bikeway). These are considered shared roadways because most bicyclists will ride on or near the fog line.

Where existing gravel shoulders have sufficient width and base to support shoulder bikeways, minor excavation and the addition of 3 to 4 inch asphalt mat is often all that is required to provide shoulder bikeways. It is better to construct shoulder widening projects in conjunction with pavement overlays for the following reasons:

- The top lift of asphalt will add structural strength.
- The final lift will provide a smooth, seamless joint.
Bicycle and Pedestrian Plan

The overall cost will generally be less per ton of material because labor and equipment can be used more efficiently.

Traffic will be disrupted only once for both operations (widen the shoulder and overlay the pavement).

**Pavement Design**

When shoulder bikeways are constructed as part of a reconstruction project the pavement structural design should be the same as for the roadway. On shoulder widening projects that primarily benefit bicycles, consider building to a lesser thickness to reduce costs. Two to three inches of aggregate and two to four inches of asphalt over the existing roadway shoulders may be adequate if the following conditions are met:

- There are no planned widening projects for the road section in the foreseeable future.
- The existing shoulder area and roadbed are stable and there is adequate drainage or adequate drainage can be provided without major excavation and grading work.
- The existing travel lanes have adequate width and are in stable condition.
- The horizontal curvature is not excessive, so that the wheels of large vehicles do not track on the shoulder area. On roads that have generally good horizontal alignment, it may be feasible to build only the inside curves to full depth.
- The existing and projected ADT and heavy truck traffic is not considered excessive (e.g., under 10%).

The thickness of base material and pavement will depend upon local conditions. Engineering judgment should be used. On short sections where travel lanes must be reconstructed or widened, the road pavement should be constructed to normal full-depth base design standards.

When paved shoulder bikeways are added to an existing roadway to accommodate bicycles where no overlay project is scheduled, a saw-cut one foot inside the existing edge of the pavement allows a good tight joint, eliminates a ragged joint at the edge of the existing pavement.

d. **Bike Lanes**

A bike lane is a well marked travel lane on the roadway designated for preferential use by bicycles. Bike lanes are appropriate on urban arterials and major collectors. They may
Design Criteria

Bike lanes are one-way facilities that carry bicycle traffic in the same direction as adjacent motor vehicle traffic.

The standard bike lane width is 6 feet, wide enough for a bicyclist to ride far enough from the curb to avoid debris and drainage grates and far enough from adjacent traffic to avoid conflicts. Bicyclists riding three or four feet from the curb are more visible to passing traffic than bicyclists who hug the curb.

The minimum width for a bike lane is 4 feet on open shoulders, or 5 feet from the face of a curb, guard rail or parked cars. Bike lanes wider than 6 feet may be mistaken for a motor vehicle travel or parking lane.

A bike lane must be marked with an 8-inch wide lane stripe and pavement stencils to mark it for preferential use by bicycles.

If parking is permitted the bike lane should always be placed between the parked cars and the travel lane and be a minimum 5 feet wide.

Bike lanes on one-way streets should be on the right side of the roadway except where a bike lane on the left will decrease the number of conflicts (e.g., conflicts with right-turn lanes, driveway entrances). Bike lanes should only be located on the left side of one-way street if it is possible to safely reenter the traffic flow at the ends of the section.

A contra-flow bike lane on a one-way street is permitted in the December 1994, draft Oregon Bike and Pedestrian Plan, page 112, in some situations including the following:

1. The contra-flow bike lane is short and provides direct access to a high use destination.
2. Bicyclists can safely and conveniently reenter the traffic stream at either end of the section.
3. Bicyclists already use the street.
4. There is sufficient street width to accommodate full-dimension bike lanes.
5. The contra-flow bike lane would be placed on the right hand side of the street (to drivers' left) and must be separated from the oncoming traffic by a double yellow
line. This indicates that the bicyclists are riding on the street legally, in a dedicated travel lane.

3. ADDITIONAL BIKEWAY DESIGN CONSIDERATIONS

a. Signalized Intersections
At controlled intersections along roadways designated for bicycles, the traffic signal timing and detection devices should be responsive to bicycles. Bicyclists can usually cross an intersection in the same time allowed for automobiles. On multiline streets it is important to use longer signal intervals.

b. Drainage Grates
Drainage grate inlets and utility covers pose potential problems for bicycles. When new roadways are designed and constructed all grates and covers should be kept out of the bikeway. It is important that grates and utility covers be installed flush with the roadway surface, even after the road is resurfaced.

Existing parallel bar drainage grates with bar spacing wide enough to catch bicycle wheels can cause serious damage to a bicycle wheel or frame and/or injure the rider. The grates should be replaced with bicycle-safe and hydraulically efficient ones. As a short-term safety measure steel cross bars should be welded perpendicular to the parallel bars. Simply flagging parallel grates with pavement markings doesn’t make them safe for bikes.

c. Railroad Crossings
Railroad highway grade crossings should be at right angles to the rails. The greater the crossing deviates from 90 degrees, the greater the chances of a bicycle front wheel being caught in the flangeway causing the rider to fall. It is also important for the roadway approach to be the same elevation as the rails. The angles, elevations, materials, and signs used for railroad crossings should conform to AASHTO standards.

d. Community Path System
A system of community trails and paths can contribute to the bikeway and walkway network if carefully designed and developed. Refer to the The Oregon Bicycle and Pedestrian Plan for standards and guidelines.

e. Touring Routes
Bicycle touring may be an important regional recreation activity. The cities, county and chambers of commerce are encouraged to work together to develop guides, maps, and brochures to promote recreational bicycling opportunities.
D. WALKWAY DESIGN STANDARDS

1. TYPES OF WALKWAY FACILITIES

Walkways, usually sidewalks, are designed and constructed to provide safe, convenient, and attractive places for people to walk separated from traffic. Walkways include sidewalks, paths, and roadway shoulders.

a. Sidewalks

In urban areas sidewalks are recommended for pedestrians. Curbs and gutters help drain the road and separate pedestrians from traffic. However, curb and gutter can add substantially to the cost of providing sidewalks in areas without storm drain systems. There are many situations in Eastern Oregon where sidewalks are needed but the cost of curb, gutter, and drainage cannot be justified, or where curbs don’t fit the rural character of the community.

**Design Criteria**

Ideally a sidewalk should be 6 feet wide, but in most situations a 5 foot sidewalk is adequate. This width allows two people to walk side by side, or to pass a third person without leaving the sidewalk surface. Sidewalk width does not include the curb.

The useable 5 foot sidewalk space must be unobstructed from street furniture, trees, planters, mail boxes, light poles, signs, or other obstructions.

A sidewalk directly adjacent a travel lane should be 6 feet wide. In commercial areas and other areas with high foot traffic an 8 foot sidewalk is recommended. It is best to buffer pedestrians from traffic by placing a planting strip, bike lane, or parking lane adjacent the sidewalk.

Vertical clearance under signs, trees, and other vertical obstructions should be 8 feet, minimum 7 feet.

Sidewalks on bridges should match the width of the approach sidewalk, but should not be less than 5 feet. Raised sidewalks on bridges with design speeds greater than 40 MPH require a fence or other vertical barrier at curb line.

In small cities with open drainage systems, sidewalks without curb and gutter may be installed separated from traffic behind drainage swales or drainage ditches. These sidewalks should be built to the same standard as curbed sidewalks.

City of Elgin, August 23, 1995, p.34
Portland Cement Concrete (PCC) is the best sidewalk material. It provides a smooth durable all weather surface that is easy to grade and repair. Asphaltic Concrete (AC) may be used, but it is susceptible to plant root damage, requires more maintenance, and is less durable than PCC.

b. Paths
In developing urban areas within an Urban Growth Boundary a path along rural roads may be adequate. For example, a path to a rural school may serve pedestrians where sidewalks, curbs, and gutters are not warranted.

Design Criteria
Paths can be either paved or unpaved. In general the standard width of an unpaved path is the same as for sidewalks. As a rule, an unpaved path should not be constructed where a sidewalk is more appropriate. The unpaved surface must be packed hard enough for wheelchair use. Recycled pavement grindings, if available, are usually inexpensive and easy to grade and pack. Paved paths are surfaced with the same materials used for sidewalks.

c. Roadway Shoulders
Along sections of rural roads where few residences or businesses abut the roadway, the roadway shoulder widths recommended by ODOT may be adequate to accommodate pedestrians.

Design Criteria
Paved shoulders are recommended as pedestrian facilities primarily on quiet sections of rural roads, not as urban
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pedestrian facilities. However, in low density rural
communities a 6 foot paved shoulder may serve pedestrian
needs in the interim. Note that roadway shoulders do not
satisfy ADA requirement for pedestrian facilities which are
physically separated from motor vehicle traffic. On rural
county roads or state highways where residential and
commercial uses abut the road, sidewalks may be needed.
Sidewalks without curb and gutter, provided on one or both
sides of the road will provide adequate pedestrian
facilities and preserve the rural residential character of
the community better than paving 6 foot shoulders.

E. ADDITIONAL PLANNING CONSIDERATIONS

1. AMERICANS WITH DISABILITIES ACT (ADA)

The American with Disabilities Act (ADA) requires that
transportation facilities accommodate disabled persons.
For most practical purposes wheelchair users and vision-impaired
people are the pedestrian facility user groups whose needs
require special attention. ADA requires that pedestrian
facilities be physically separated from motor vehicle traffic.

Sidewalk standards used by the jurisdictions in Union County are
based on ODOT's standards and meet or exceed minimum ADA
requirements.

a. Width

ADA requires a minimum 3 foot wide sidewalk; ODOT's standard 6
foot wide sidewalk exceeds this requirement.

b. Grade

ADA requires that facilities have 5% or less grade. A maximum
grade of 12:1 (8.33%) is acceptable for a rise not more than 2.5
feet if a level landing at least five feet long is provided at
each end. It would be better to extend the length of the rise to
achieve a flatter grade of 5%.

Often when roads are built in hilly terrain, and the adjacent
residential and commercial land uses warrant sidewalks, they will
probably have to be built to the grade of the adjacent road.

c. Crossings

The allowable cross-slope for sidewalks and paths is 2%. At
driveway approaches and curb cuts a minimum 3 foot wide area
should be maintained at 2%.

d. Facilities for the Visually Impaired

Pedestrian facilities should be designed so visually impaired
people can track through intersections. It is important to
install crosswalks so they form a 90 degree angle with the curb,
because visually impaired pedestrians are conditioned to depart
the curb at 90 degrees and go straight to the opposite side. If
angles other than 90 degrees are used, then the pavement marking material should be detectable to the visually impaired using the long cane method. Most recommended practices for sidewalk construction satisfy these requirements.

2. PLANTING STRIPS
Planting strips separate pedestrians on sidewalks from noisy fast moving traffic, adding to the safety, convenience and enjoyment of walking. A planting strip should be at least 4 feet wide. Wider planting strips allow room for landscaping, street furniture, utilities, and provide a place to store snow removal during winter. Planting strips help improve wheelchair access because sidewalks can be keep at a constant 2% slope (or less) if driveway slopes are built into the planting strip.

3. PEDESTRIAN STREET CROSSINGS
A system of sidewalks is not complete without safe and convenient places to cross the street. Streets can become barriers to pedestrians without safe, convenient crossings to reduce the risk of automobile-pedestrian accidents.

a. Illumination
Many walkway crossings are not well lit. At many locations, improved lighting can increase pedestrian crossing safety at night.

b. Signage
Pedestrian crossing signs, such as advance warning signs (W11-2) and pedestrian crossing signs (W11-A2), located at the crossing can benefit pedestrians. Regulatory signs at intersections reinforce the message that motorists must yield to pedestrians (ORS 17-5). These signs should only be placed at warranted locations because if too many signs are used they may be missed or ignored.

c. Crosswalks
Crosswalks are marked or unmarked areas on the street surface used by people to cross a road. Crosswalks are intended to channel pedestrian movement to designated areas and reduce pedestrian conflicts with motorists. Combined, illumination, signage, and marked crosswalks increase pedestrian safety.

d. Curb Extensions
Curb extensions can reduce the crossing distance for pedestrians on roads and should be considered at all intersections where on-street parking is allowed. On arterial and collector streets, space must be provided for existing or planned bike lanes. Mid-block curb extensions may be constructed where there are pedestrian generators on both sides of the road, i.e., schools, stores, or multi-family dwellings where significant foot traffic translates into many street crossings. Curb extensions are illustrated in the subsection on Traffic Calming.

City of Elgin, August 23, 1995, p.37
To address these concerns for bicyclists, the paths of through bicyclists and right turning drivers should merge and cross prior to the intersection for the following reasons:

- Their paths cross and potential conflicts occur prior to the intersection;
- The different travel speeds allow a vehicle driver to pass a bicyclist rather than ride side-by-side; and
- All users are encouraged to follow the rules of the road requiring through vehicles to proceed to the left of right-turning vehicles.

For pedestrian safety and convenience, the pedestrian crossing must be clearly visible to the approaching right-turning vehicles. Where needed, curb extensions and pedestrian refuges should be provided to increase visibility and decrease the total crossing distance.

F. BIKEWAY SIGNING, MARKING, AND RESTRIPIING

1. INTRODUCTION

As previously mentioned, all traffic control devises must conform to the national "Manual on Uniform Traffic Control Devices" (MUTCD) as supplemented by the Oregon Traffic Control Devices Committee. It is very important that signing and marking of bikeways and walkways is uniform and consistent if the facilities are to command the respect of the public and be safe for users. To provide uniformity and continuity, all jurisdictions in Union County will adopt the statewide traffic control standards.

2. BIKEWAY SIGNING AND MARKING

Standards for bikeway signing and marking are provided in the Oregon Bicycle and Pedestrian Plan, and the MUTCD, and are summarized below.

There are three groups of signs: regulatory, warning and guidance. Regulatory signs inform bicyclists, motorists and other users of traffic laws or regulations. Warning signs inform bicyclists and other users of potential hazardous conditions such as turns and curves, intersections, stops, hills, slippery surfaces, and railroad tracks. Guidance signs direct bicyclists and other users along an established bikeway.

a. Shared Roadways and Shoulder Bikeways

Signs aren’t usually required on shared roadways and shoulder bikeways. Bicyclists should be expected on all urban local streets which are mostly shared roadways. Roadway shoulders that meet ODOT standards have adequate width and surface to serve bicyclists.
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On narrow rural roads heavily used by bicyclists it may be helpful to install bike warning signs (W11-1) with the rider "ON ROADWAY" or "ON BRIDGE ROADWAY." These signs should be used where there is insufficient shoulder width for a significant distance. This signing should be placed in advance of the roadway condition. If the roadway condition is continuous, an Additional rider "NEXT XX MILES" may be used.

Figure 2: Sign W11-1 with riders
Source: Oregon Bicycle and Pedestrian Plan, 1995 draft.

Directional signs are used when bicycles follow a route different from automobiles for reasons of safety, convenience, or because bicycle are banned from a section of roadway. The detour route should have obvious advantages over the other route.

No special markings are used on shared roadways. A normal 4 inch fog line stripe is used to mark shoulder bikeways.

b. Bike Lanes
Signing and Marking
Official marking of bike lanes on urban arterials and collectors, and on appropriate suburban and rural roadways, creates an exclusive or preferential travel lane for bicycles.

Bike lanes are differentiated from the automobile travel lane by an 8 inch white bike lane stripe, and by stenciling a bicycle symbol and directional arrows on the bike lane pavement.

If parking is allowed next to the bike lane, the parking area should be defined by parking space markings or a solid 4 inch wide stripe.

Normally, bike lanes are not striped adjacent to diagonal parking. Where there is ample roadway width and parking spaces are long enough for large vehicles a bike lane may be
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located behind angled parking. A 4 inch stripe is used to separate the bike lane from the parking.

Bicycle stencils should be placed after most intersections to alert drivers and bicyclists entering the roadway that bike lanes are designated for bicycle use. Stencils should be placed after every intersection where a parking lane is placed between the bike lane and the curb. Avoid placing stencils where automobiles frequently cross the bike lane, such as driveways, and the area immediately past intersections.

Extra stencils should be placed on long sections of roadway with no intersections. To determine the stencil spacing, multiply the travel speed (in MPH) by 40. For example, in a 35 MPH zone stencils would be placed approximately every 1400 feet. Stencils can be placed closer together if necessary.

Where parking is restricted, install "NO PARKING" signs (R7-9 and R7-9a) if problems with parking occur, or paint curbs yellow to indicate that parking is prohibited.

Figure 3: Typical bike lane markings
Source: Oregon Bicycle and Pedestrian Plan, 1995 draft.
For right turn lanes at intersections, the short through bike lane segment should be striped with two 8 inch stripes to the left of the right-turn lane and connect to the proceeding bike lane with a dashed line, using 8x24 inch segments on 15 foot centers. This allows turning motorists to cross the bike lanes. A stencil must be placed at the beginning of the through bike lane. Sign R4-4, "BEGIN RIGHT TURN LANE, YIELD TO BIKES," must be placed at the beginning of the taper (see ODOT Bicycle and Pedestrian Plan for standard taper rates).

Figure 4: Right turn bike lane
Source: Oregon Bicycle and Pedestrian Plan, 1995 draft.

c. Multi-Use Paths
   Signing and Striping
   Multi-use paths should be signed with appropriate regulatory, warning and directional signs. Refer to the Oregon Bicycle and Pedestrian Plan.

d. Review of Existing Bikeway Signing and Marking
   Many older bikeway signs are now obsolete. It is necessary to periodically inventory and review existing bikeway signs and markings to upgrade and standardized them. In most cases this results in a net decrease in the number of signs.

3. BIKE LANE RESTRIPING GUIDELINES
   As noted, many roadways in the urban areas of Union County were constructed without accommodations for bicycles. Few roads include bike lanes. However, bike lanes can be provided to remove barriers and encourage bicycle travel by retrofitting existing roadways using the following methods:
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Mark and sign existing shoulders as bike lanes. Bike lane standards are listed above and outlined in the Oregon Bicycle and Pedestrian Plan.

Physically widen the road to add bike lanes. Standards are outlined in the Oregon Bicycle and Pedestrian Plan.

Restripe the existing road to add bike lanes. On many roadways it is necessary to use the existing road surface to accommodate bike lanes.

Three options for modifying existing roads to accommodate bike lanes or wide outside lanes are discussed below: 1. reduce travel lane widths; 2. reduce number of travel lanes; and 3. reconsider the need for parking.

a. Reduce Travel Lane Widths
Current urban roadway width standards are 12 foot travel lanes, 14 foot center turns lanes, 6 foot bike lanes, and 8 foot parking lanes. The reduced lanes widths presented below are within ASSHTO guidelines. However, review by a traffic engineer is advised. The need for full-width travel lanes decreases with traffic speed.

- In 25 MPH speed zones, travel lanes may be reduced to 10 or 10.5 feet;
- In 30 to 40 MPH speed zones, 11 foot travel lanes and 12 foot center turn lanes may be adequate; and
- In 45 MPH or greater speed zones, maintain a 12 foot outside travel lane, and if traffic volumes are high, maintain a 14 foot center turn lane.

b. Reduce Number of Travel Lanes
Many one-way couplets were originally two-way streets. In some cases traffic can be handled with one less lane.

c. Reconsider the Need for Parking
A roadways primary function is to move people and goods not to store stationary vehicles. When parking is removed safety and road capacity are generally improved. Restricting parking will require negotiations with city councils and affected businesses and residents. To stave off potential conflicts, careful research is needed before making a proposal. This includes:

- Counting the number of businesses and residences and the availability of both on-street and off-street parking.
- Selecting which side would be less affected by removal. It will usually be the side with fewer businesses and residences or the side with residences rather than businesses in a mixed-use neighborhood.
- Proposing alternatives such as-
Allow parking for church or school activities on adjacent lots during services or special events;
Businesses share parking; or
Construct special parking spaces for residents or businesses with no other options.

**Figure 5: Providing parking when there are no reasonable alternatives.** Source: Oregon Bicycle and Pedestrian Plan, 1995 draft.

### Remove Parking on One Side Only
It may be necessary to remove parking from one side of the street to provide bike lanes.

### Changing from Diagonal to Parallel Parking
Diagonal parking takes up an inordinate amount of roadway width relative to the number of parking spaces provided. It can be hazardous as drivers backing out often can’t see oncoming traffic. Changing to parallel parking reduces parking spaces by less than one-half.

### Prohibit Employee Parking
Most businesses cite the fear of losing potential customers as the main reason to retain on-street parking. Many cities have had successes with ordinances prohibiting employees parking on the street. This could help increase the number of parking spaces available for customers, even if the number of parking spaces is reduced. Note that one parking space occupied by an employee for eight hours is the equivalent of 16 customers parking for half an hour each, or 32 customers for 15 minutes.
d. Other Considerations
Obviously not all existing roadway conditions and options for retrofitting roads for bicycles are discussed here. The examples listed provide options to combine and use in unique and creative ways to modify existing roads for bike lanes. It is important to have a traffic engineer review proposals which reduce roadway widths below the current urban standards.

Adding bike lanes can increase safety because automobile travel lanes are farther from curbs, traffic lanes are better defined, and parking is reduced. Adding bike lanes often improve sight distances and increase radii at intersections and driveways.

Restriping travel lanes relocates automobile traffic lanes which can help extend the pavement life as traffic is no longer driving in the same well worn ruts.

G. BICYCLE PARKING STANDARDS

1. INTRODUCTION
The Transportation Planning Rule requires jurisdictions to adopt bicycle parking standards. OAR 660-12-045(3)(a) requires local governments to adopt land use or subdivision regulations for urban areas and rural communities to require: (a) bicycle parking facilities as part of new multi-family residential developments of four units or more, new retail, office and institutional developments.

Safe and convenient parking facilities are essential to all modes of transportation, including bicycles. Any bicycle trip includes parking. The lack of secure and convenient places to park bicycles discourages their use as transportation. The same consideration should be given to bicyclists as is given to automobile drivers who expect to find parking at their destinations.

2. TYPES OF BIKE PARKING
There are two types of bike parking, Class 1 and Class 2:

a. Class 1, long-term parking should provide complete security and protection from weather. It is intended for situations where a bicycle is left unattended for extended periods of time. For example, apartment complexes, places of employment, schools, libraries, entertainment centers, and shopping centers.

b. Class 2, short-term parking, provides racks that allow the bicycle frame and both wheels to be locked to the rack, but is not necessarily protected from the weather.
3. **BICYCLE RACKS**

Bicycle racks for required bicycle parking must be designed so that they:

- Do not bend wheels or damage other bicycle parts;
- Accommodate the high security U-shaped locks; and
- Accommodate locks securing the frame and both wheels.

![Bike Rack Diagram](image)

**BIKE-ROOT**

*Figure 6: Preferred bike racks*  
*Source: Oregon Bicycle and Pedestrian Plan, 1995 draft.*

4. **BICYCLE PARKING SPACE DIMENSIONS**

The following dimensions assure that bicycle racks will be convenient to use and bicycles may be securely locked, safeguarded from theft or accidental damage:

- Bicycle parking spaces should be at least 6 feet long and 2 feet wide and overhead clearance in covered spaces should be at least 7 feet;
- A 5 foot aisle should be provided beside and between rows of bike racks; and
- Bicycle racks should be securely anchored to the surface or a structure.

5. **COVERED BICYCLE PARKING REQUIREMENTS**

Covered long term bicycle parking is critical in inclement weather for multifamily residential uses, for employees, and other commuters. Covered parking is not so important for short utilitarian or casual trips.

The requirement for covered bike parking can be met in a number of ways including building or roof overhangs, awnings, lockers, and...
or bicycle storage spaces within buildings. Covered parking should be visible for security purposes. The following requirements apply to covered bicycle parking:

- All of the required bicycle parking for residential, school and places of employment should be covered.
- 50% of required bicycle parking for commercial uses should be covered.
- If motor vehicle parking is covered, required bicycle parking should also be covered.
- If 10 or more bicycle parking spaces are required, then at least 50% of the bicycle parking spaces should be covered.

6. **BICYCLE PARKING LOCATION**

   Required bicycle parking should be located in well lighted, secure locations within 50 feet of a main entrance to a building, but not further from the entrance than the closest automobile parking space. A highly visible location with significant pedestrian traffic reduces the risk of theft. Care must be taken to avoid conflicts with pedestrian traffic.

   Short term bike parking for customers may be located up front; long term parking for employees should be covered and may be located farther from an entrance.

   In Central Business Districts efforts should be made to provide bicycle parking on the street or in established parking lots rather than on sidewalks. Bike parking on sidewalks encourages riding on the sidewalks and reduces the available sidewalk width. Care must be taken to protect on-street bike parking from automobiles.

   Bicycle parking may be provided within the public right-of-way in areas without building setbacks, subject to approval of local officials and provided it meets other bicycle parking requirements. Bicycle parking within a public right-of-way should allow 6 feet clearance around parked bikes to allow pedestrians to pass.

7. **NUMBER OF PARKING SPACES**

   The required number of bicycle parking spaces should be based on easily measured criteria such as, square feet of buildings, number of residential units, number of classrooms, etc. Employment and retail centers are encouraged to voluntarily provide additional parking to satisfy the needs of their customers and employees.
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8. SIGNAGE
Bicycle parking facilities may be underused if they are not identified with appropriate signs, particularly when parking locations are not visible from the main building entrance. Signs indicating the bicycle parking location should be installed.

9. PARKING FEES
Bicycle parking should be provided free of cost to bicyclists with only a nominal fee for key deposit for locker use.

H. TRAFFIC CALMING TECHNIQUES

1. INTRODUCTION
Well designed local streets are intended to provide only low volume, low speed traffic access to neighborhoods. However, citizens often complain about excessive traffic speeds and volumes on neighborhood streets.

Traffic calming involves reducing traffic speeds and volumes on neighborhood streets. Reduced traffic speeds and flows allow bicycles and pedestrians to share the road. Streets are safer, quieter and easier for people of all ages to cross. In general, traffic calming involves designing and redesigning streets so local traffic moves at slower speeds, and through traffic is discouraged.

Several traffic calming techniques useful for reducing traffic speeds and discouraging through traffic on neighborhood streets are summarized below. There are many other techniques; design details are discussed in other publications such as, FHWA-PD-03-028, Case Study No. 19, Traffic Calming, Auto Restricted Zones and Other Traffic Management Techniques - Their Effects on Bicycling and Walking, and in the Oregon Bicycle and Pedestrian Plan, 1995 draft.

2. REDUCE TRAFFIC SPEEDS
Many traffic calming techniques used to control traffic on local streets physically constrict the roadway, while others create an illusion of less space.

a. Physical Constraints and Illusion of Less Space

. Narrow local streets tend to reduce traffic speeds and cost less to construct and maintain.

. Narrower travel lanes make many drivers slow down to adjust to the available lane width.

City of Elgin, August 23, 1995, p.49
Speed humps (not speed bumps) cause drivers to slow to the intended speed as they proceed over the hump with minimal discomfort.

Curb extensions restrict the street width and provide pedestrians a shorter crossing distance.

Creating vertical lines by bringing buildings closer to the roadway edge, or by adding trees, make the street appear narrower than it is.

3. DISCOURAGING THROUGH TRAFFIC ON LOCAL STREETS

Techniques that limit access to local streets for through vehicles have advantages but may require some out-of-direction travel for some residents.

One-way curb extensions allow motor vehicles in or out of a street, but not both. However, bicycles and pedestrians are allowed through travel in both directions.

Diverters and cul-de-sacs prohibit all movements into certain segment of the roadway. Cul-de-sacs restrict access and may conflict with other transportation goals, such as an open grid system, and should be used judiciously. Cul-de-sacs must provide bicycle and pedestrian access.
IV. IMPLEMENTATION

A. COORDINATION & MAINTENANCE

The success of any plan depends on proper coordination between affected parties. To properly implement the policies and standards identified in this document coordination among affected parties will need to be ongoing.

Facility projects identified in this plan have been developed according to the Oregon Department of Transportation (ODOT) guidelines. ODOT should actively communicate with all local jurisdictions to inform them about State improvement projects in their areas. Opportunities may exist for local projects to be developed in conjunction with State projects. It may also be possible for jurisdictions within the La Grande-Wallowa Lake Transportation Corridor to have certain projects performed by ODOT as part of their Corridor Management Plan.

The Union County Planning Department which has supplied staff and resources for the creation of this plan shall continue to encourage the adoption of this material and to offer technical support. This Department has acted as a nucleus for this planning effort and will continue to work with local communities and State Agencies on an as needed basis.

Local incorporated jurisdictions are now responsible for implementing their own bicycle and pedestrian facility plans. Most jurisdictions are not adequately staffed, therefore County and State agencies if requested must be available to aid in this process.

Internal coordination between local Public Works and Road Departments and other offices will be essential during implementation. All departments must have a firm understanding of the location and magnitude of each improvement project. Their role must be identified prior to starting any projects.

Many identified bikeway projects can be accomplished by restriping and/or minor widening of the existing roadway surface. Integrating these projects into the jurisdictions regular improvement schedule can be an orderly and cost effective way to complete these projects. For example, roads identified to include bicycle lanes can be reconfigured during annual striping rather than receiving the traditional striping. Roadways which are scheduled to be paved or resurfaced may be widened to properly accommodate bicycle and pedestrian traffic. Communication between agencies will ensure that the projects have been identified and properly funded.

When facilities have been constructed or improvements have been completed the final step is coordinating operation and maintenance. Union County’s seasonal conditions require many
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roads be sanded or gravelled in the late fall and winter and many areas are subject to high water or run off in the spring and early summer months. These conditions dictate that debris will accumulate along roadways and will inevitably end up on the bikeways or shoulders, directly in the path of the bicyclist and pedestrians. This unwanted material often includes other items such as larger rocks, broken glass and woody debris. All of these items represent a hazard to bicyclists and pedestrians.

The presence of vegetation on, in or near the bicycle or pedestrian facility will also discourage the use of these alternate forms of transportation. Tree branches which are allowed to extend into the bike-way or walkway will provide a constant nuisance. Such branches can also create conflicts as bicyclists are encouraged to swerve out into the travel lane to avoid them. Vegetation near intersections can reduce vision and create hazardous conditions for automobile users, bicyclists and pedestrians alike. The roots of trees and other types of large vegetation can also run under the facilities which will cause cracking and splitting.

The occurrence of relatively cold winters and warm summers presents a wide temperature range which is hard on road surfaces and sidewalks. Given time, these surfaces will begin to crack and/or fray which will seriously compromise the integrity of the facility.

If nothing is done to remedy these conditions bicycle and pedestrian traffic will be reduced or will be moved back into the travel lanes. Either of these situations is in direct conflict with the purpose of establishing facilities for bicycle and pedestrian mobility.

Fortunately the development of a comprehensive maintenance program in coordination with the applicable Public Works Department can ensure that the above described scenarios do not occur. Probably the simplest and most necessary component of a maintenance program would be a regular cleaning schedule. Most jurisdictions currently have some type of sweeping program. Sweeping the high use bike lanes and shoulders should be incorporated into the existing street programs. A program which identifies bike lanes and shoulders to be swept at least as frequently as streets will be essential. It may also be beneficial to plan to sweep bicycle routes after large storms which may deposit mud and other debris on the bicycle routes.

Vegetation removal and reduction can focus on a component of the maintenance program. Targeting identified problem areas for regular pruning is necessary to provide safe and efficient opportunities for bicycle and pedestrian mobility. Incorporating leaf and woody debris removal into this program would help to eliminate other potential hazards. Removing problem trees will also help to maintain the condition of the facility. Utilizing a
root barrier (12 inch recommended) when constructing new facilities will help to supplement this effort.

The edges of paved areas are typically very susceptible to deterioration. Since this is the portion of the roadway which is utilized for bicycle and pedestrian activity it is important they are maintained in an acceptable condition. Chip sealing and oiling needs to be extended across the entire roadway so the ability to utilize shoulders for alternate sources of transportation is not jeopardized. This action will also ensure that the surface of the roadway is smooth and accommodating and that noticeable inconsistencies between travel lanes and other portions are rare. Items such as manhole covers and drainage gates should be improved so that they match the surface of the roadway with a minimum margin of error (no more than 3/4" is recommended). Where this can not be accomplished, edges should be tapered to provide a transition area in the roadway surface.

Maintenance work which is limited to one area or spot on the roadway surface may also prove to be detrimental unless precautionary measures are taken. If possible, the improvement project should extend across the entire roadway to maintain a consistent surface. If this is not possible, fill or patch material should be properly compacted and excess or loose materials should be swept away before they are able to stray onto a bikeway or shoulder and cause conflicts. Rolling is preferred to utilizing a grader blade although a grader having smooth tires will work acceptably. Maintenance projects which occur directly on the shoulder or in the bike lane should leave a smooth surface. Eliminating sharp edges is also important.

Ideally each jurisdiction would be capable of creating a position for a Bicycle/Pedestrian Coordinator. This position would oversee the development and maintenance of the program. Acting as a liaison between involved agencies the coordinator would have primary responsibility to ensure that facilities are planned, funded, constructed, maintained and used. This position would also work with the public on awareness and educational items. Lacking such an individual to work exclusively and extensively with bicycle and pedestrian elements, a Bicycle/Pedestrian Advisory Committee can play a key role in the implementation of the bicycle/pedestrian program.

The committee can identify current or potential conflicts between transportation system users due to a lack of signing, maintenance and/or high levels of traffic. Holding meetings in an open forum can solicit public input. The committee can provide support to local law enforcement officers who are required to issue tickets for violations related to bicycle use and provide the public with educational information about bicycling standards and the location of bicycle and pedestrian routes. In addition, the Bicycle/Pedestrian Advisory Committee can work to encourage recreational uses.
Bicycle and Pedestrian Plan

Promoting riding and/or walking as recreational activities can be achieved through a number of ways. Identifying routes that are conducive to this type of activity and being able to provide information on their location and condition will encourage these activities. Working with the public to increase awareness of such opportunities will also increase recreational uses. People who ride or walk recreationally are that much more likely to utilize these same sources for transportation.

B. PRIORITIZATION

Specific bikeway and walkway projects identified in this plan have been designated a high, medium or low priority status. This determination has been made based on public input and other factors relating to levels of current use, safety and funding availability.

C. COST ESTIMATES

The project cost estimates have been calculated using a variety of information. Shoulder additions have been estimated assuming they will be built to County or City road standards and have been calculated based on the following figures:

4 foot shoulders
Estimate: $2.80 - $4.00/Linear Foot x 5280 Feet
$14,784 - $21,120/mile one side
$27,568 - $42,240/mile both sides

6 foot shoulders
Estimate: $4.00 - $6.00/Linear Foot x 5280 Feet
$22,176 - $31,680/mile one side
$44,352 - $63,360/mile both sides

These cost figures were based on a road right-of-way being able to accommodate surface widening with minimal fill.

County roads needing widening have been designated a "chaos factor" of 2 while City streets were given a "chaos factor" of 1.5. This factor is meant to take into account the reality that the majority of County roads will need substantial barrow pit filling so that they can be improved. City streets where given a lower chaos factor because less filling and compacting will be necessary to complete the widening. These factors also account for all labor, material and hopefully, all unforeseen circumstances which will be part of construction. Examples are as follows:

County Road:
Widen roadway 6 feet for a distance of 1000 feet (fill needed)
$6.00 multiplied by 1000 feet = $6,000.00 (one side)
$6,000.00 multiplied by a chaos factor of 2 = $12,000.00
$12,000.00 is the estimated expense of the improvement for one side

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City Street:
Widen roadway 6 feet for a distance of 1000 feet (fill needed)
$6.00 multiplied by 1000 feet = $6,000.00 (one side)
$6,000.00 multiplied by a chaos factor of 1.5 = $9,000.00
$9,000.00 is the estimated expense of the improvement for one side

These figures are estimates and can not be considered to represent the true cost of the improvement projects. This method of calculating costs has been reviewed by representatives of the Union County Road Department. The analysis concluded that although the figures may not be correct, they should by no means be under stated.

The expense of striping the road surface to delineate bicycle lanes and shoulder bikeways has been determined with more precision. Information gathered from the Oregon Department of Transportation identifies the following costs for painting lines:

- 4" Solid Line - $180.00/mile approximately $.034/foot
- 8" Solid Line - $384.00/mile approximately $.073/foot
- 4" Skip Line - $70.00/mile

ODOT estimates striping projects at cost plus 10%. This method was used to calculate project expenses. The cost for an eight-inch solid line was utilized.

Sidewalk construction costs have also been estimated with relative precision. Information provided the City of La Grande Public Works Department identifies the City's low bid for sidewalks at $4.50 per square foot. This figure has been used to calculate project expenses. Curb installation cost the City of La Grande $21.00 per foot. Storm drains have been estimated at $1400.00 per catch basin, $2500.00 per man hole into which the catch basin drains and $30.00 per foot for pipe (8").

D. FUNDING

Finding funding sources will be critical to the implementation of this plan. Programs such as the federal Intermodal Surface Transportation Efficiency Act (ISTEA) and the State Highway Fund are potential sources.

ISTEA was passed in 1991 to facilitate and encourage the development of transportational facilities which are not dependant on the automobile. Along with the passage of this act vast sums of money were dedicated to supporting transportation enhancements. These enhancements have been defined as follows:

" with respect to any projects or the area to be served by the project, provision of facilities for pedestrians and bicycles, acquisition of scenic easements and scenic or historic sights, scenic or historic highway programs, landscaping and other scenic"
beautification, historic preservation, rehabilitation and operation of historic transportation buildings, structures or facilities (including historic railroad facilities and canals), preservation of abandoned railway corridors (including the conservation and use thereof for pedestrian and bicycle trails), control and removal of outdoor advertising, archaeological planning and research, and mitigation of water pollution due to highway runoff."

-[23 USC 101]

To be eligible for ISTEA funding a project must meet one of three tests. A project must:

1. Have a functional relationship to an existing or planned transportation facility (a bicycle facility is a good example of this). OR

2. Be related in proximity (ex. removing illegal billboards in the viewshed of a scenic highway) OR

3. Have an impact on an existing transportation facility (ex. if constructing a system of pedestrian ways reduces auto use in an area, that is an impact-related enhancement).

The State Highway Fund may also be a source of financing. ORS 366.514 states that out of the funds received by any County or City from this source reasonable amounts shall be expended as necessary to provide foot paths and bicycle paths. One percent of the State Highway Funds received in one fiscal year is the minimum amount a jurisdiction can spend on these types of facilities. However, Cities or Counties in which one percent of received highway funding is less than $250.00 (cities) or $1500.00 (counties) are exempt from this requirement.

Bicycle and pedestrian projects which are completed with this funding source are divided into four categories.

Category 1 describes the construction of bikeways associated with new, reconstructed or relocated highways. The cost of these types of improvements is usually quite small when compared to the cost of the overall project.

Category 2 describes projects which maintain and improve existing facilities. Examples of a category 2 project would be the replacement of old signs and the establishment of a regular maintenance and sweeping schedule.

Category 3 describes bikeway projects which occur within the State Highway right-of-way. Widening the road surface to provide bike lanes or shoulder bikeways are examples of category 3 projects. The establishment of a separated multi-use path within the right-of-way would also fall into this category.
Category 4 is the name given to local assistance grants which jurisdictions are eligible to apply for. In this category applications can be made for construction projects with 80% state grants up to $50,000. Bicycle plan development with 50% state grants up to $20,000 and Bicycle map development with 50% state grants up to $10,000.

The Oregon Community Development Block Grant Program is also a possible source of state funding for bicycle projects. The Oregon Special Works Fund is another. Education and safety programs may be partially funded by the Oregon Traffic Safety Division.

Some projects for jurisdictions such as Union County, La Grande, Imbler and Elgin may be eligible to be included in the Oregon Department of Transportation’s Corridor Management Plan for the La Grande-Wallowa Lake Transporational Corridor. The intent of this management plan is to analyze all types of transportation within the corridor and to encourage alternate sources of transportation which are not dependent on the automobile. The inclusion of some of these projects into ODOT’s improvement program may shift the responsibly from the affected jurisdiction.

In addition, private citizens, businesses and developers may all be persuaded to encourage the use of alternate sources of transportation and perhaps even fund the construction of facilities or donate materials and/or equipment. Abandoned railroad lines, utility easements and many other types of corridors present opportunities to establish bicycle and pedestrian facilities. Jurisdictions need to be constantly on the look out for potential facilities.

E. EDUCATION & ENFORCEMENT

Along with providing facilities for bicycle and pedestrian mobility the public needs to be educated about their use. First of all, the public needs to understand where such facilities are located, so they can choose safe routes and reduce conflicts with the other system users.

Educating the public how to use these facilities is also extremely necessary. This aspect is commonly overlooked. Bicyclists who are turned onto the roadway with little or no regulations and an equally deficient understanding of how to effectively utilize the facilities are a potential threat to themselves and other system users.

Failing to educate the public about location and proper use can have several adverse effects. Facilities which are constructed but not used are of no benefit to anyone. Misuse of the facilities can create an animosity between motorists and bicyclists which discourage bicycle use and encourage conflict between the two users.
Several tools are available to educate the public about bicycling opportunities and pedestrian mobility. One item which may be easily prepared and cost effective to distribute are INFORMATION PACKAGES. These packages should include a map of the particular jurisdiction showing the locations and types of facilities which are offered. The map may also identify recreational or scenic routes and supply language which suggests which route or type of route would be most appropriate. Other beneficial information would be the location of local services and the names of local contacts. This information will prove useful to both local users and those from out of the area. The final item is an informational listing of safety tips and bicycle/pedestrian etiquette. This material will act to inform and remind the users how they should act to reduce the potential for injury to themselves and others and to reduce the potential for conflict.

In addition to the information packets, jurisdictions should strive to establish TRAINING CLASSES. Bicyclists need to be taught to interact with motorists. The use of the facilities in a safe and efficient manner can be demonstrated through these types of classes. This can help to encourage individuals who had previously been reluctant to use the system because of a lack of experience or confidence. While schools are the ideal place to begin these classes, the education does not have to be, and should not be, limited to children. Churches, community centers, health and recreational centers, community events and skills fairs are only a few of a long list of locations and activities which can present opportunities for bicycle/pedestrian education. Several types of programs have been developed with a variety of age groups and skill levels in mind. There are also videos on bicycle rules and safety precautions available from the State of Oregon.

The creation of COMMUTER PROGRAMS can also be beneficial in encouraging people to utilize the bicycle and pedestrian facilities. Sponsoring "bike-to-work" events has had large amounts of success throughout the nation. These types of activities are very beneficial because most people have never ridden a bike to work and may not have gotten on a bicycle for utility reasons since childhood. They need advice and encouragement. They also need to feel secure that they will not be the only ones doing it.

Just as education is necessary, enforcement of bicycle rules is equally important. Bicycles are considered vehicles and must act accordingly on the roadway. A brochure detailing the rules of riding on Oregon's Highways may be obtained from the Department of Motor Vehicles. The Oregon Bicycle Plan identifies 32 statutes relating to bicycle use and ORS 814.400 specifically states that "everyone riding a bicycle or an animal on a public way is subject to the same provisions applicable to and has the same rights and duties as the driver of another vehicle..."
Requiring bicyclists to obey the rules designed for them has a farther reaching effect than simply issuing citations. Statistics show that many bicycle/automobile accidents are the result of a bicyclist failing to yield at a stop sign or weaving in and out of traffic with reckless abandon. These activities and similar traffic infractions place both the cyclist and the motorist in danger. These are also the type of activities which enrage motorists and discourages their support for construction of bicycle and pedestrian facilities. Police officers must be willing and able to enforce bicycle laws. They must receive the support of the community in doing so.
APPENDIX A: GLOSSARY OF TERMS AND ABBREVIATIONS

AASHTO—American Association of State Highway and Transportation Officials. Their publication, Guide for Development of New Bicycle Facilities, provides the basic facility construction guidelines and specifications for this plan.

Accessway—An interconnecting paved pathway that provides pedestrian and/or bicycle passage between blocks running from street to street.


ADT—Average daily trips, a measure of traffic volume.

Arterial—A through road that connects major traffic generators. Arterials are designated by the Transportation Plan/Comprehensive Plan and the various City Comprehensive Plan.

BADT—Bicycle average daily trips measured during the months of June through September.

Bicycle—in the strictest sense a bicycle is a human-powered land vehicle with two tandem wheels, a steering handle, a saddle seat, and pedals by which it is propelled. In legal terms, the definition is expanded to include other velocipedes: (1) designed to operate on the ground on wheels, (2) propelled solely by human power, upon which any person or persons may ride, and (3) with every wheel more than 14 inches in diameter. This takes in the broader range of bicycle-type vehicle (recumbents, tricycle, etc.) while excluding such vehicles as pushcarts. Bicycles are legally classified as vehicles that may be ridden on public roadways in Oregon.

Bicycle Facilities—General term denoting improvements and provisions made by public agencies to accommodate or encourage bicycling, including parking facilities, all bikeways, and shared roadways not specifically designated for bicycle use.

Bicycle Parking Facilities—Space and improvements dedicated for securing bicycles including but not limited to marked spaces, structures including lockers, racks and enclosures and areas providing maneuvering space for access to parking spaces and improvements.

Bike Lane—A portion of the roadway which has been designated by striping, signing, and pavement marking for preferential or exclusive use by bicyclists.

Bike Lane Stripe—An 8-inch wide line separating a bike lane from a travel lane.
Bicycle Route—A segment of bikeway system designated with appropriate directional and information markers by the jurisdiction having authority.

Bikeway—Any road, path, or way which in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use by bicycles or are shared with other transportation modes.

CBD—Central Business District—A traditional downtown area usually characterized by established businesses fronting the street, sidewalks, slow traffic speeds, on-street parking and a compact grid system.

Clearance, Lateral—Width required for safe passage of a bicycle as measured in a horizontal plane.

Clearance, Vertical—Height necessary for the safe passage of a bicycle as measured in a vertical plane.

Collector—A branch road that feeds into an arterial from the local roads. Collectors are designated by Union County Comprehensive Plan and Transportation Plan and the respective City Comprehensive Plans.

Commuter Parking—Long-term parking, such as at work or school, where the bicycle must be left unattended for the greater part of the day.

Commuter/Utility Bicyclist—Riders who regularly travel to and from a specific destination, usually as quickly and directly as possible, for very practical purposes, such as to purchase or transport goods and services or to travel to and from work or school.

Convenience Parking—Short-term parking, such as at a store or park, where the bicycle is left for a brief time.

Crosswalk—The portion of a roadway designated for pedestrian crossing. They may be marked or unmarked. Unmarked crosswalks are a natural extension of the shoulder, curb line or sidewalk.

Direct Route—The shortest reasonable route between two points. A route is direct if it does not involve significant out of direction travel which could be avoided. Out of direction travel is significant if it is more than 50% longer that the straight line distance between two points.

Fog Line—A 4-inch white stripe delineating the edge of the roadway and separating it from the shoulder.

Grade (percent)—The rise (+) or fall (−) of a roadway measured in feet per 100 feet of length, expressed as a percentage.

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Grade Separation  Vertical separation of travelways through the use of a structure so the traffic crosses without interference.

Highway  A general term denoting a public way for purposes of travel, including the entire area within the right-of-way.

ISTEA  The Intermodal Surface Transportation Efficiency Act.

Local Street  A street designated to provide access to and from residences or businesses.

Main Entrance  The principle building entrance or entrances. A main entrance door is not a door that is locked during normal business hours.

Motor Vehicles  A vehicle that is self propelled or designed for self-propulsion.

Multi-Use Path  A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way.

MUTCD  Abbreviation for Manual on Uniform Traffic Control Devices approved by the Federal Highway Administration as a national standard for placement and selection of all traffic control devices on or adjacent to all roadways open to public travel.

MVC  Motor Vehicle Code which contains the rules of the road that motorists and cyclists must follow.

Mountain Bike  A bicycle generally characterized by rugged construction, wide tires, extra bottom bracket clearance, low gears, and stable handling - attributes that enhance its rideability on rough and steep terrain.

Mountain Bike Route  A rough or unpaved bikeway upon which an average cyclist using a normal road bike would have difficulty.

OAR  Oregon Administrative Rule, A rule written by an affected government agency, intended to clarify the intent of an ORS.

ODOT  Oregon Department of Transportation

ORS  Oregon Revised Statute. ORS 366.514, the "Oregon Bicycle Bill," is the law describing funding and development of bikeways.

Pavement Marking  Painted or applied line(s) or legend placed on any bikeway surface for regulating, guiding or warning traffic.

Pedestrian  A person whose mode of transportation is on foot. A person walking a bicycle becomes a pedestrian.
Bicycle and Pedestrian Facilities

Any facility provided for the benefit of pedestrian travel, including walkways, crosswalks, signs, signals, illumination and benches.

Pedestrian Scale Lighting
Light standards or placements no greater than 14 feet in height located along walkways.

Public Building Entrance
An entrance to a building intended for use by members of the general public, such as customers, clients and visitors. Also, employee or resident entrances used by more than 50 employees or residents per day.

Racing
Bicycle racing is a specialized sport. Race courses may use public roadways with the approval of appropriate government agencies. For more information on bicycle racing in Oregon, please contact the Bikeway/Pedestrian Program Manager, to obtain the "Guidelines for Administration of Bicycle Racing on Oregon Roads."

Recreational Cyclist
An individual who enjoys local bike rides for pleasure or fitness. The destination is of secondary importance.

Right-of-Way
A general term denoting land, property or interest therein, usually in a strip, acquired for or devoted to transportation purposes.

Roadway
The portion of the highway for vehicle use.

Shared Roadway
A type of bikeway where bicyclists and motor vehicles share the same roadway.

Shoulder
A portion of a highway contiguous to the roadway that is primarily used by pedestrians, bicyclists and stopped vehicles for emergency use.

Shy Distance
The distance between the edge of a travelway and a fixed object.

Sidewalk
The portion of the roadway or street designated for preferential or exclusive use by pedestrians.

Sight Distance
A measurement of a vehicle operator’s visibility, unobstructed, along the normal path to the farthest visible point of the roadway surface.

Skew Angle
The angle formed between a roadway, bikeway, or walkway and an intersecting roadway, bikeway, walkway or railroad line, measured away from the perpendicular.

Touring
An extended bicycle trip requiring some advance planning to identify destination, accommodations, services and routes.

TPR
The Transportation Planning Rule (OAR 660-12).

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Traffic Control Devices: Signs, signals or other fixtures, whether permanent or temporary, placed on or adjacent to the travelway by authority of public body having jurisdiction to regulate or guide traffic.

Traffic Volume: The number of vehicles that pass a given point for a given amount of time, usually expressed as Average Daily Trips (ADT).

Travelway: Any way, path, road or other travel facility used by any and all modes of transportation.

UGB - Urban Growth Boundary defines the area near an incorporated city, that is deemed suitable and necessary for urban uses.

Vehicle: Any device in, upon or by which any person or property is or may be driven or drawn upon a public highway. A bicycle is a vehicle.

Walkway: A transportation facility built for use by pedestrians, including persons in wheel chairs. Walkways include sidewalks, paths and paved shoulders.

Wide Outside Lane: A wider than normal curbside travel lane that is provided for ease of bicycle operation where there is insufficient room for a bike lane or shoulder bikeway.
APPENDIX B: LAND USE REGULATION CODE PROVISIONS

TPR Requirements for Urban Areas and Rural Communities [OAR 660-12-045 (3)(a)]

(3) (a) Bicycle parking facilities as a part of new multi-family residential developments (9+ units), new retail, office and institutional developments.

A. Discussion

Two types of bicycle parking are needed: long-term parking for employees and residents and short-term parking for visitors and customers. Long-term parking needs to be especially secure and protected because it may be unattended for hours at a time or overnight and possibly even longer. However, it does not need to be located any closer to a building entrance than auto parking. Short-term parking does not need to be as secure, bicycles will not be left unattended for long periods of time. To be convenient, short-term bicycle parking does need to be located near a building entrance.

Bicycle parking requirements need to address two distinct needs. Generally, long-term bicycle parking should be provided for one out of ten employees.

The need for the second type of bicycle parking, short-term, will vary from use to use. For example, an industrial use will not receive many visitors or customers, and therefore would not need a large amount of short-term parking of any kind. Retail uses, on the other hand, can expect to receive a large amount of short-term traffic and should provide for greater amounts of short-term parking. The recommended bicycle parking requirements are based on these concepts.

B. CODE PROVISIONS

Standards for Commercial, Professional and Public Zones, and Commercial Uses in Residential Zones

1. Number of Parking Spaces Required

- Integrate bicycle parking space requirements with auto parking space requirements - i.e., one space per multi-family residential unit, one space per 5,000 square feet of retail show room floor, one space per five employees and one space per five persons for places of assembly - churches, granges, etc.

- Shared bicycle parking areas shall be encouraged where all of the bicycle standards can be satisfied for the collective uses.
- The only exempt uses from meeting bicycle parking standards would be seasonal or part-time uses, i.e., fruit stands, fireworks stands and others.

2. **Bicycle Parking Facilities**

(Short-term sheltering from precipitation is not a necessary requirement in Union County with an average annual precipitation of 16 inches in the Grande Ronde Valley)

- Covered long-term bicycle parking will be provided for multi-family, residential, schools and places of employment

- Appropriate security methods will be adopted as a part of new construction or redevelopment for both long-term and short-term bicycle parking.

- Bicycle parking areas will be well-lighted, secure locations within 50 feet of the primary building entrance for new buildings and 100 feet for redevelopment. Require pedestrian access from bicycle parking area to building entrance. Bicycle parking area shall be as close as the closest auto parking area.

- Each bicycle parking space shall be a minimum six feet length, two feet width, seven feet clearance and at least five feet between rows.

- For buildings with multiple entrances, required short-term bicycle parking shall be distributed proportionally at the various public entrances. Required long-term public parking shall also be located at the employee entrance, if applicable.

- Bicycle parking may be provided within a building, but the location must be easily accessible for bicycles.

- In areas of demonstrated, anticipated or desired high bicycle use, additional bicycle parking, in exchange for required motor vehicle parking, may be authorized by the decisionmaker.

- Employee and residential bicycle parking shall offer a high level of security, i.e., bicycle lockers or a locked cage or room with locking facilities inside, to provide safe, long-term parking.

- Bicycle parking may be provided within the public right-of-way in areas without building setbacks, subject to approval of the appropriate local official and provided it meets the other bicycle parking requirements.
Bicycle and Pedestrian Plan

- Bicycle parking facilities shall be separated from motor vehicle parking and maneuvering areas by a barrier or sufficient distance to prevent damage to the parked bicycles.

- If ten or more bicycles spaces are required, then at least 50 percent of the bicycle spaces must be covered.

- Vertical or upright bicycle storage structures are exempted from the parking space length standard.

- Each required bicycle parking space must be accessible without moving another bicycle.

- Bicycle parking facilities shall offer security in the form of either a lockable enclosure in which the bicycle can be stored or a stationary object (i.e., a "rack") upon which the bicycle can be locked.

- All bicycle racks, lockers, or other facilities shall be securely anchored to the ground or to a structure.

- Lighting shall be provided in a bicycle parking area so that all facilities are thoroughly illuminated and visible from adjacent sidewalks or motor vehicle parking lots during all hours of use. Bicycle parking shall be at least as well-lit as motor vehicle parking.

- Areas set aside for required bicycle parking must be clearly marked and reserved for bicycle parking only.

- Where bicycle parking facilities are not directly visible and obvious from the public right(s)-of-way, entry and directional signs shall be provided to direct bicyclists from the public right-of-way to the bicycle parking facility. Directions to employee parking facilities may be signed or supplied by the employer as appropriate.

- Outdoor bicycle parking facilities shall be surfaced in the same manner as the motor vehicle parking areas or with a minimum of one inch thickness of hard surfacing (i.e., asphalt, concrete, pavers, or similar material). This surface will be maintained in a smooth, durable, and well-drained condition.

TPR Requirements for Urban Areas and Rural Communities [OAR 660-12-045 (3) (b), (c) & (d)]

(3) (b) Safe and convenient pedestrian and bicycle access within and from new subdivisions, planned developments, shopping areas and industrial parks to nearby residential areas, neighborhood activity centers including:

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Bicycle and Pedestrian:

(A) Sidewalks along arterial and collectors in urban areas;
(B) Bikeways along arterials and major collectors;
(C) Where appropriate, separate bicycle and pedestrian ways to minimize travel distances within and between areas; and

(3) (c) "Safe, convenient and adequate" mean facilities that -

(A) Are reasonably free from hazards, particularly automobile traffic that would discourage short trips;
(B) Provide direct routes of travel between uses; and
(C) Meet cyclists and pedestrian travel needs considering length of trip destination.

A. DISCUSSION

While the TPR does not explicitly require sidewalks on local urban streets, they should be required by local ordinances. Sidewalks are critical to home-based pedestrian trips and transit. Without sidewalks, pedestrians must walk either in the road or on the roadway shoulder. These conditions make walking unsafe and inconvenient and discourage walking trips.

B. CODE PROVISIONS

Future Street Extensions

- All streets, alleys, bicycle and pedestrian pathways shall connect to other streets within the development and to existing and planned streets outside the development. Streets shall terminate at other streets or at parks, schools or other public land within a neighborhood.

- Local roads shall align and connect with other roads when crossing collectors and arterials.

- Cul-de-sacs, dead end streets or alleys, and flag lots shall only be permitted when the following conditions are met:

(a) One or more of following conditions prevent a required street connection: excess slope (20% or more); presence of a wetland or other body of water which cannot be bridged or crossed; existing development on adjacent property prevents a street connection, presence of a freeway or railroad;

(b) A street pattern which either meets standards for connection and spacing or requires less deviation from standards than possible;

(c) An accessway is provided consistent with the standards for Accessways;

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(d) Cul-de-sacs shall be as short as possible and shall not exceed 400 feet in length.

- Where a subdivision or partition includes or is adjacent to land likely to be divided and developed in the future; streets, bicycle paths and pedestrian ways shall continue through the full length of the subdivision or partition and be planned for the adjacent land where necessary to provide for convenient pedestrian and bicycle access to other transportation routes, businesses and residential services areas.

- Where subdivision lots or partition parcels can be redivided the location of lot and parcel lines and other layout details shall be such that future division may be readily made without interfering with the orderly extension of adjacent streets, bicycle paths or pedestrian ways. Any building restrictions within future transportation locations shall be made a matter of record for the purpose of future land divisions.

- Where determined necessary by the decisionmaking body for public safety and convenience, the land developer may be required to publicly dedicate accessways (1) to connect to cul-de-sacs, (2) to pass through oddly shaped or unusually long blocks, (3) to provide for networks of public pedestrian and bicycle paths, or (4) to provide access to other transportation routes, businesses, residential or services areas.

- New construction or reconstruction of major collector and arterial streets will include bicycle facilities as prescribed by the BP Plan.

- Bikeways and sidewalks shall be installed along the frontage of all new streets during the construction of arterial and collector roads, where so designated in the comprehensive land use plan during reconstruction of arterial and collector roads and streets, and construction of local streets in other than single-family residential developments.

- On local streets in areas planned for single family residential development, sidewalks shall be constructed during home construction. The land divider may file an agreement as assurance of completion of all sidewalks within two years of final plat. The agreement may be in the form of a bank’s letter of credit, surety bond or other acceptable surety and must cover 100% of the cost of the sidewalks. Sureties covering stages or portions of improvements may be released as such portion is completed to the satisfaction of the City Council or authorized agent.

- Where lack of public right-of-way width prevents inclusion of sidewalks within the public right-of-way, an easement may be required to provide for all or part of one or both sidewalks.

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- When a sidewalk in good repair is required and does not exist
  an applicant for a building permit shall, prior to obtaining the
  building permit, or in conjunction with the issuance of a
  building permit, obtain a permit to construction a sidewalk for
  the full frontage of the lot or parcel. No final inspection or
  certificate of occupancy shall be issued for said building permit
  until there exists such a sidewalk in accordance with the
  requirements of the permit to construct the sidewalk.

- Sidewalks are not required along freeways and other fully
  access controlled highways.

- The provisions of sidewalks may be waived in residential zones
  where the street serves fewer than five potential dwelling units
  and cannot be continued or extended to other properties.

- To ensure access between a development site and an existing
  developed facility such as a commercial center, school, park or
  trail system, the decisionmaking body may require off-site
  pedestrian improvements concurrent with development where need
  for the access and its costs can be shown to be roughly
  proportional to the traffic created by the development.

- Structures are not allowed in any dedicated sidewalk areas
  which will obstruct movements of the sidewalk. The minimum areas
  of obstructions must meet ADA standards. All structures placed
  in the sidewalk are allowed only with permission of the City or
  County.

- Sidewalks shall be designed to parallel streets in line and
  grade and shall avoid unnecessary meandering and elevation
  changes except as necessary to avoid significant trees or
  traverse topographic barriers.

- Sidewalks shall be constructed to meet the following minimum
  widths:

<table>
<thead>
<tr>
<th>Land Use Designation/Sidewalk Type</th>
<th>Residential/Industrial</th>
<th>Commercial/Institutional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Type</td>
<td>Curb</td>
<td>Setback</td>
</tr>
<tr>
<td>Local</td>
<td>6 ft</td>
<td>5 ft</td>
</tr>
<tr>
<td>Collector</td>
<td>7 ft</td>
<td>6 ft</td>
</tr>
<tr>
<td>Arterial</td>
<td>7 ft</td>
<td>6 ft</td>
</tr>
</tbody>
</table>

* Curb sidewalks shall maintain a minimum unobstructed width
  two feet less than the required sidewalk width. (Example -
  A mailbox may be located within two feet of the curb)
* A setback sidewalk shall be separated from the curb by a planting strip of at least four feet in width. The planting strip may be paved in neighborhood commercial areas.

* Bike lanes and shoulder bikeways along collectors and arterials shall be six feet wide and shall be provided for each direction of travel allowed on the street.

* Sidewalk and bicycle path lighting shall be provided in conjunction with new road construction and new development.

* Wheelchair ramps and other facilities shall be provided as required by the Americans with Disabilities Act (ADA). The lower lip of the wheelchair ramp shall be flush with the roadway surface.

* Bikeways shall be designed and constructed consistent with the design standards in the Oregon Bicycle Plan, 1992 and AASHTO's "Guide for the Development of Bicycle Facilities, 1991".

- Adequate overhead clearance on sidewalks, pedestrian paths and bicycle paths shall be eight feet for all signs projecting over such routes except where a marquee projects more than two-thirds of the distance from the property line to the curb or street side of the bicycle way, the minimum clearance shall be 12 feet.

- Vegetation shall not overhang or encroach upon a sidewalk, pedestrian path or bicycle path lower than nine feet. The city may require the person(s) responsible for encroachment into clearance areas to trim, prune or remove all trees, shrubs, plants and vegetation.

- Sidewalks along collector and arterial streets shall be set back from the curb where possible. On low-volume, residential collector streets, a five foot wide, curb-side sidewalk may be acceptable. On high-volume collector streets if the sidewalk is built adjacent to the curb, it shall be a minimum of seven feet wide. Greater width, up to 10 feet, may be required where higher pedestrian volumes, shared use with bicycles, or other pertinent factors require a safer and move convenient facility.

**Vacating Public Right-of-Way**

When vacating improved or unimproved public right-of-way, pedestrian and bicycle easements shall be established for public safety and convenience where determined necessary.

**Accessways [045 (3)(b)(C)]**

A. **DISCUSSION**

explain how an accessway is different from bicycle/pedestrian routes.

City of Elgin, August 23, 1995 - APPENDICES
B. CODE PROVISIONS

Accessways shall be provided in the following situations:

a. In residential areas and industrial parks where addition of a walkway/bikeway would reduce walking or cycling distance to a school, shopping center, or neighborhood park by 400 feet and by at least 50% over other available pedestrian routes and a street connection is not feasible.

b. For schools, commercial uses where addition of a walkway/bikeway would reduce walking or cycling distance to an existing or planned transit stop, school, shopping center, or neighborhood park by 200 feet and by at least 50% over other available pedestrian routes.

For purposes of (a) and (b) other available pedestrian routes include sidewalks and walkways including walkways within shopping centers, planned developments and industrial parks. (Routes may be across parking lots on adjoining properties if the route is open to public pedestrian use, hard surface, unobstructed, e.g. not through landscaped areas unless step stones are provided.)

c. For cul-de-sacs or dead end streets except when the review authority determines based on evidence in the record that construction of a separate accessway is infeasible or inappropriate. Such evidence may include but is not limited to:

1. When other federal, state or local requirements prevent construction of an accessway;

2. When the nature of abutting existing development makes construction of an accessway impractical;

3. When the walkway/bikeway would cross a natural area with significant natural habitat and construction would be incompatible with protection of natural values;

4. When the accessway would cross land designated for water quality, flood control or flood hazard and the accessway is incompatible with the designated use;

5. When the accessway would cross topography where slopes exceed 30% or where path grade would exceed 12% slope except when construction or a crossing structure is found to be feasible; or,

6. When a cul-de-sac or dead end street abuts rural resource land in farm or forest use at an urban growth boundary except where the adjoining land is designated as an urban reserve area.
Accessways shall be provided to adjacent developments when feasible. Development patterns must not preclude eventual site-to-site connections even if infeasible at the time of development.

(3) (d) Provide internal pedestrian circulation in new office parks and new commercial developments by clustering buildings; constructing pedestrian ways, skywalks, where appropriate; and similar techniques.

A. DISCUSSION

Walkways should be provided for the following:

- New office parks and commercial developments.
- Recommended for institutional development and public buildings.
- To each street abutting the property, not including limited access freeways.
- For every 300 feet of street frontage or for every eight rows of vehicle parking.
- To any bikeway or walkway along a frontage of the site which is not bordered by a street.

B. CODE PROVISIONS

- Walkways shall connect building entrances to one another and from building entrances to public street entrances.
- Onsite walkways shall connect with walkways, sidewalks, bikepaths, alleyways and other bicycle or pedestrian connections on adjacent properties used or planned for commercial, multi-family, institutional or park use.
- Walkways and driveways shall provide a direct connection to walkways and driveways on adjacent developments.
- Potential pedestrian connections between the proposed development and existing or future development on adjacent properties other than connections via the street system shall be identified. The development application shall designate these connections on the proposed site plan or findings shall be submitted demonstrating that the connection is infeasible.
- Rights-of-way or public easements shall be provided for all required walkways which provide a direct connection to adjacent properties.
- Accessways shall be located to provide a reasonably direct connection between likely pedestrian destinations. A reasonably direct connection is a route which minimizes cut of direction travel for most of the people likely to use the walkway/bikeway considering terrain, safety and likely destinations.

- The length of an accessway shall not exceed 400 feet.

- Accessways shall be as short as possible and, where possible, straight enough to allow one end of the accessway to be seen from the other.

- Stairways shall be at least five feet wide with a handrail on both sides.

- Accessways shall be lighted either by street lights on adjacent streets or pedestrian scale lighting along the accessway. Lighting shall not shine into adjacent residences.

Fencing along accessways shall meet one of the following standards:

- Accessways shall be fenced from adjoining residential properties with at least a five foot high chain link or similarly constructed fence without a top rail; or,

- Residences along accessways which are 200 feet or longer shall have the building fronts oriented to the accessway and shall treat the yard along the accessway as the front yard. Fences along such accessways shall not exceed three and one-half feet in height; or,

- For purposes of fencing only, accessways will be treated as a front yard.

Pedestrian walkways shall be directly linked to entrances and the internal circulation of the building. The onsite pedestrian circulation system shall directly connect the street to the main entrance of the primary structure on the site.

- Walkways shall be at least five feet in paved unobstructed width. Walkways bordering parking spaces shall be at least seven feet wide unless concrete bumpers, bollards, or curbing and landscaping or other similar improvements are provided which prevent parked vehicles from obstructing the walkway.

- Pedestrian scale lighting fixtures shall be provided along all walkways. Onsite pedestrian walkways must be lighted to a level where the system can be used at night by employees, residents and customers.
- Stairs or ramps shall be provided where necessary to provide a direct route. Walkways without stairs shall have a maximum slope of eight percent and a maximum cross slope of two percent. Where walkways provide principal access to building entrances maximum slope is limited to five percent to meet ADA standards.

- Where the pedestrian system crosses driveways, parking areas and loading areas, the system must be clearly identifiable through the use of elevation changes, speed bumps, a different paving material or other similar method.

- Walkways on private property that provide direct links between publicly owned pedestrian routes shall be placed in public easements or be dedicated to the public.
APPENDIX C: TRANSPORTATION PLANNING RULE; OAR CHAPTER 650, DIVISION 12

650-12-000 Purpose

The purpose of this division is to implement Statewide Planning Goal 12 (Transportation). It is also the purpose of this division to explain how local governments and state agencies responsible for transportation planning demonstrate compliance with other statewide planning goals and to identify how transportation facilities are provided on rural lands consistent with the goals. The division sets requirements for coordination among affected levels of government in preparation, adoption, refinement, implementation, and amendment of transportation system plans. Transportation system plans adopted pursuant to this division fulfill the requirements for public facilities planning required under ORS 197.112(2)(e), Goal 11 and OAR Chapter 650, Division 11, as they relate to transportation facilities. Through measures designed to reduce reliance on the automobile, the rule is also intended to assure that the planned transportation system supports a pattern of travel and land use in urban areas which will avoid the air pollution, traffic and livability problems faced by other areas of the country. The rules in this Division are not intended to make local government determinations 'land use decisions' under ORS 197.015(10). The rules recognize, however, that, under existing statutory and case law, many determinations relating to the adoption and implementation of transportation plans will be land use decisions.

650-12-005 Definitions

For the purposes of this division, the definitions in ORS 197.015, the Statewide Planning Goals and OAR Chapter 650 shall apply. In addition the definitions listed below shall apply.

(1) Access Management: means measures regulating access to streets, roads and highways from public roads and private driveways. Measures may include but are not limited to restrictions on the string of driveways, restrictions on the type and amount of access to roadways, and use of physical controls, such as signs and channelization including roundabouts, to reduce impacts of approaching road traffic on the main facility.

(2) Affected local government: means a city, county or metropolitan service district that is directly impacted by a proposed transportation facility or improvement.

(3) Constructed transportation facility: means those proposed transportation facilities and improvements which are consistent with the accommodation comprehensive plan and have approved funding for construction in a public facilities plan of the regional highway transportation improvement program.

(4) Demand Management: means actions which are intended to change travel behavior in order to improve performance of transportation facilities and to reduce need for additional road capacity. Methods may include but are not limited to the use of alternative modes, ride-sharing and vanpool programs, and trip reduction ordinances.

(5) Major: means, in general, those facilities or developments which, considering the size of the urban or rural area and the range of use, capacity or service level of similar facilities or developments in the area, are either larger than average, serve more than neighborhood needs or have significant land use or traffic impacts on more than the immediate neighborhood.

'Major' as it modifies transit corridors, stops, transfer stations and new transportation facilities means those facilities which are most important to the functioning of the system or which provide a high level, volume or frequency of service.

'Major' as it modifies industrial, institutional and retail development means such developments which are larger than average, serve more than neighborhood needs or which have traffic impacts on more than the immediate neighborhood.

Application of the term 'major' will vary from area to area depending upon the scale of transportation improvements, transit facilities and development which occur in the area. A facility considered to be major in a smaller or less densely developed area may, because of the relative significance and impact of the facility or development, not be considered a major facility in a larger or more densely developed area with larger or more intense development or facilities.

(6) Metropolitan Planning Organization (MPO), an organization located within the State of Oregon and designated by the Governor to coordinate transportation planning in an urbanized area of the state including such designations made subsequent to the adoption of the rule. The Longview-Kenosha-MCP is not considered an MPO for the purposes of this rule.

(7) ODOT: means the Oregon Department of Transportation.

(8) Parking spaces: means one or all street space designated for automobile parking in areas planned for industrial, commercial, institutional or public uses. The following are not considered parking spaces for the purposes of 600-12-042(5)(c): park and ride lots, handicapped parking, and parking spaces for car pools and vanpools.

(9) Planning Period: means the twenty year period beginning with the date of adoption of a TSP to implement the requirements of this rule.

(10) Preliminary Design: means an engineering design which includes in detail the location and
11. Refinement Plan: an amendment to the transportation system plan, which resolves, at a systems level, determinations on function, mode or general location which were deferred during transportation system planning because detailed information needed to make those determinations could not reasonably be obtained during that process.

12. Roads: means streets, roads and highways.

13. Transit-oriented development (TOD): means a mix of residential, retail and office uses and a supporting network of roads, bicycle and pedestrian ways focused on a major transit stop designed to support a high level of transit use. The key features of transit oriented development include:
   
   (a) a mixed use center at the transit stop, oriented principally to transit riders and pedestrians and bicycle travel from the surrounding area;
   
   (b) high density of residential development proximate to the transit stop sufficient to support transit operation and neighborhood commercial uses within the TOD;
   
   (c) a network of roads, and bicycle and pedestrian paths to support high levels of pedestrian access within the TOD and high levels of transit use.

14. Transportation facilities: means any physical facility that moves or assists in the movement of people and goods including facilities identified in 660-12-020 but excluding electricity, sewage and water systems.

15. Transportation system management measures: means techniques for increasing the efficiency, safety, capacity or level of service of a transportation facility without increasing its size. Examples include, but are not limited to, traffic signal improvements, traffic control devices including installing medians and parking removal, channelization, access management, ramp metering, and restricting for high occupancy vehicle (HOV) lanes.

16. Transportation Needs: Local means estimates of the movement of people and goods consistent with acknowledged comprehensive plan and the requirements of this rule. Needs are typically based on projections of future travel demand resulting from a continuation of current trends as modified by policy objectives, including those expressed in Goal 12 and this rule, especially those for avoiding principal reliance on any one mode of transportation.

17. Transportation Needs: Regional means needs for movement of people and goods within communities and portions of counties and the need to provide access to local destinations.

18. Transportation Needs: State means needs for movement of people and goods between and through communities and accessibility to regional destinations within a specific urban area or associated group of counties.

19. Transportation Needs: State means needs for movement of people and goods between and through regions of the state and between the state and other states.

20. Transportation Project Development: means implementing the transportation system plan (TSP) by determining the precise location, alignment, and preliminary design of improvements included in the TSP based on site-specific engineering and environmental studies.

21. Transportation Service: means a service for moving people and goods, such as intercity bus service and passenger rail service.

22. Transportation System Plan (TSP): means a plan for one or more transportation facilities that are planned, developed, operated and maintained in a coordinated manner to supply continuity of movement between modes, and within and between geographic and jurisdictional areas.

23. Urban Area: means lands within an urban growth boundary or two or more contiguous urban growth boundaries.

660-12-010 Transportation Planning

(1) As described in this division, transportation planning shall be divided into two phases: transportation system planning and 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.

(2) It is not the purpose of this division to cause duplication of or to support existing applicable transportation plans and programs. Where all or part of an acknowledged comprehensive plan, TSP, ORS 197, 191.18 or other special district, capital improvement program, regional transportation plan, or similar plan or combination of plans meets all or some of the requirements of this division, those plans or programs may be incorporated by reference into the TSP required by this division. Only those referenced portions of such documents shall be considered to be a part of the TSP and shall be subject to the administrative procedures of this division and ORS Chapter 197.

660-12-015 Preparation and Coordination of Transportation System Plans

(1) ODOT shall prepare, adopt and amend a state TSP in accordance with ORS 197.18, its program for state agency coordination certified under ORS 197.18 and OAR 660-12-030, 025, 055, 060 and 070. The state TSP shall identify a system of transportation facilities and
services adequate to meet identified state transportation needs.

(a) The state TSP shall include the state transportation policy plan, mode systems plans and transportation facility plans as set forth in OAR 731, Division 15.

(b) State transportation project plans shall be compatible with acknowledged comprehensive plans as provided for in OAR 731, Division 15. Disagreements between ODOT and affected local governments shall be resolved in the manner established in that division.

(2) MPOs and counties shall prepare and amend regional TSPs in compliance with this division. MPOs shall prepare regional TSPs for facilities of regional significance within their jurisdiction. Counties shall prepare regional TSPs for all other areas and facilities.

(a) Regional TSPs shall establish a system of transportation facilities and services adequate to meet identified regional transportation needs and shall be consistent with adopted elements of the state TSP.

(b) Where elements of the state TSP have not been adopted, the MPO or county shall coordinate the preparation of the regional TSP with ODOT to assure that state transportation needs are accommodated.

(c) Regional TSPs prepared by MPOs other than metropolitan service districts shall be adopted by the counties and cities within the jurisdiction of the MPO. Metropolitan service districts shall adopt a regional TSP for areas within their jurisdiction.

(d) Regional TSPs prepared by counties shall be adopted by the county.

(3) Cities and counties shall prepare, adopt and amend local TSPs for lands within their planning jurisdiction in compliance with this division.

(a) Local TSPs shall establish a system of transportation facilities and services adequate to meet identified local transportation needs and shall be consistent with regional TSPs and adopted elements of the state TSP.

(b) Where the regional TSP or elements of the state TSP have not been adopted, the city or county shall coordinate the preparation of the local TSP with the regional transportation planning body and ODOT to assure that regional and state transportation needs are accommodated.

(c) Cities and counties shall adopt regional and local TSPs required by the division as part of their comprehensive plans. Transportation financing programs required by OAR 660-12-040 may be adopted as a funding document to the comprehensive plan.

(4) The preparation of TSPs shall be coordinated with affected state and federal agencies, local governments, special districts, and private providers of transportation services.

(5) All transit transportation, airport and port districts shall participate in the development of TSPs for those transportation facilities and services they provide. These districts shall prepare and adopt plans for transportation facilities and services they provide. Such plans shall be consistent with and adequate to carry out identified portions of applicable regional and local TSPs. Cooperative agreements executed under ORS 197.185(2) shall include the requirement that mass transit, transportation, airport and port districts adopt a plan consistent with the requirements of this section.

(7) Where conflicts are identified between proposed regional TSPs and acknowledged comprehensive plans, representatives of affected local governments shall meet to discuss means to resolve the conflicts. These may include:

(a) Changing the draft TSP to eliminate the conflicts;

(b) Amending acknowledged comprehensive plan provisions to eliminate the conflicts;

(8) For MPOs which are not metropolitan service districts, if conflicts persist between regional TSPs and acknowledged comprehensive plans, after efforts to achieve compatibility, an affected local government may petition the Commission to resolve the dispute.

660-12-020 Elements of Transportation System Plans

(1) A TSP shall establish a coordinated network of transportation facilities adequate to serve state, regional and local transportation needs.

(2) The TSP shall include the following elements:

(a) A determination of transportation needs as provided in 660-12-030.

(b) A road plan for a network of arterials and collectors. Functional classifications of roads in regional and local TSPs shall be consistent with functional classifications of roads in state and regional TSPs and shall provide for continuity between adjacent jurisdictions.

(c) A public transportation plan which

(A) Describes public transportation services for the transportation disadvantaged and identifies service inadequacies;

(B) Describes intercity bus and passenger rail service and identifies the location of terminals;

(C) For areas within an urban growth boundary which have public transit service, identifies existing and planned transit trunk routes, exclusive transit ways, terminals and major transit stops, and park and ride stations;

(D) For areas within an urban area containing a population greater than 75,000 persons not currently
served by transit, evaluates the feasibility of developing a public transit system or buildout. Where a transit system is determined to be feasible, the plan shall meet the requirements of subsection (2)(c)(i) of this section.

(d) A bicycle and pedestrian plan for a network of bicycle and pedestrian routes throughout the planning area. The network and list of facility improvements shall be consistent with the requirements of ORS 660.514.

(e) An air, rail, water and pipeline transportation plan which identifies where public use airports, mainline and branchline railroads and railroad facilities, port facilities, and major regional pipelines and terminals are located or planned within the planning area. For airports, the planning area shall include all areas within airport imaginary surfaces and other areas covered by state or federal regulations.

(f) For areas within an urban area containing a population greater than 25,000 persons a plan for transportation system management and demand management.

(g) A parking plan in MPO areas as provided in 660-12-045(3)(c).

(h) Policies and land use regulations for implementing the TSP as provided in 660-12-045.

(i) For areas within an urban growth boundary containing a population greater than 2500 persons, a transportation financing program as provided in 660-12-045.

(3) Each element identified in subsection (2)(b)-(d) of this section shall contain:

(a) An inventory and general assessment of existing and committed transportation facilities and services by function, type, capacity and condition.

(A) The transportation capacity analysis shall include information on:

(i) The capacities of existing and committed facilities;

(ii) The degree to which those capacities have been reached or surpassed on existing facilities, and;

(iii) The assumptions upon which these capacities are based.

(B) For state and regional facilities, the transportation capacity analysis shall be consistent with standards of facility performance considered acceptable by the affected state or regional transportation agency.

(C) The transportation facility condition analysis shall describe the general physical and operational condition of each transportation facility (e.g. very good, good, fair, poor, very poor).

(b) A system of planned transportation facilities services and major improvements. The system shall include a description of the type of function classification of planned facilities and services and the planned capacities and levels of service.

(c) A description of the location of planned facilities services and major improvements, establishing the general corridor within which the facilities, services or improvements may be sited. The plan shall include a map showing the general location of proposed transportation improvements, a description of facility parameters such as minimum and maximum road right of way width and the number and size of lanes, and any other additional description that is appropriate.

(d) Identification of the provider of each transportation facility or service.

660-12-025 Complying with the Goals in Preparing Transportation System Plans: Refinement Plans

(1) Except as provided in subsection (3) of this section, adoption of a TSP shall constitute the land use decision regarding the need for transportation facilities, services, and major improvements and their function, mode, and general location.

(2) Findings of compliance with applicable statewide, planning goals and acknowledged comprehensive plan policies and land use regulations shall be developed in conjunction with the adoption of the TSP.

(3) A local government or MPO may defer decisions regarding function, general location and mode of a refinement plan if findings are adopted which:

(a) Identify the transportation need for which decisions regarding function, general location or mode are being deferred;

(b) Demonstrate why information required to make final determinations regarding function, general location, or mode cannot reasonably be made available within the time allowed for preparation of the TSP;

(c) Explain how deferral does not invalidate the assumptions upon which the TSP is based or prejudice implementation of the remainder of the TSP;

(d) Describe the nature of the findings which will be needed to resolve issues deferred to a refinement plan; and

(e) Demonstrate that the refinement effort will be completed within three years of initiation at the periodic review following adoption of the TSP.

(4) Where a Corridor Environmental Impact Statement (EIS) is prepared pursuant to the requirement of the National Environmental Policy Act of 1969, the development of the refinement plan shall be
coordinated with the preparation of the Corridor ES. The retirement plan shall be adopted prior to the issuance of the final ES.

660-12-030 Determination of Transportation Needs

(1) The TSP shall identify transportation needs relevant to the planning area and the scale of the transportation network being planned including:

(a) State, regional, and local transportation needs.

(b) Needs of the transportation disadvantaged.

(c) Needs for movement of goods and services to support industrial and commercial development planned for pursuant to OAR 600-09 and Goal 9 (Economic Development).

(2) Counties or MPOs preparing regional TSPs shall rely on the analysis of state transportation needs in adopted elements of the state TSP. Local governments preparing local TSPs shall rely on the analyses of state and regional transportation needs in adopted elements of the state TSP and adopted regional TSPs.

(c) Within urban growth boundaries, the determination of local and regional transportation needs shall be based upon:

(a) Population and employment forecasts and distributions which are consistent with the acknowledged comprehensive plan, including more policies which implement Goal 14, including Goal 14's requirement to encourage urban development on urban lands prior to conversion of urbanizable lands. Forecasts and distributions shall be for 20 years and, if desired, for longer periods.

(b) Measures adopted pursuant to 660-12-045 to encourage reduced reliance on the automobile.

(5) In MPO areas, calculation of local and regional transportation needs also shall be based upon accomplishment of the requirement in 660-12-035(4) to reduce reliance on the automobile.

660-12-035 Evaluation and Selection of Transportation System Alternatives

(1) The TSP shall be based upon evaluation of potential impacts of system alternatives that can reasonably be expected to meet the identified transportation needs in a safe manner and at a reasonable cost with available technology. The following shall be evaluated as components of system alternatives:

(a) Improvements to existing facilities or services.

(b) New facilities and services, including different types or combinations of modes that could reasonably serve identified transportation needs.

(c) Transportation system management measures.

(d) Demand management measures.

(e) A no-build system alternative required by the National Environmental Policy Act of 1969 or other laws.

(2) Local governments in MPO areas of larger than 1,000,000 population shall and other governments may also evaluate alternative land use designations, densities and design standards to meet local and regional transportation needs. Local governments preparing such a strategy shall consider:

(a) Increasing residential densities and establishing minimum residential densities within one-quarter mile of transit lines, major regional employment areas and major regional retail shopping areas.

(b) Increasing densities (i.e. minimum floor area ratios) in new commercial office and retail developments.

(c) Designating lands for neighborhood shopping centers within convenient walking and cycling distance of residential areas.

(d) Designing land uses to provide a better balance between jobs and housing considering:

(A) The total number of jobs and total of number of housing units expected in the area or subarea;

(B) The availability of affordable housing in the area or subarea; and,

(C) Provision of housing opportunities in close proximity to employment areas.

(e) Establishing maximum parking limits for office and institutional developments consistent with 660-12-045(5)(c) which reduce the amount of parking available at such developments.

(3) The following standards shall be used to evaluate and select alternatives:

(a) The transportation system shall support urban and rural development by providing types and levels of transportation facilities and services appropriate to serve the land uses identified in the acknowledged comprehensive plan.

(b) The transportation system shall be consistent with state and federal standards for protection of air, land and water quality including the State Implementation Plan under the Federal Clean Air Act and the State Water Quality Management Plan.

(c) The transportation system shall minimize adverse economic, social, environmental and energy consequences.

(d) The transportation system shall minimize conflicts and facilitate connections between modes of transportation.
(a) The transportation system shall avoid principal reliance on any one mode of transportation and shall reduce principal reliance on the automobile. In MPO areas, this shall be accomplished by selecting transportation alternatives which meet the requirements in 600-12-035(4)

(4) In MPO areas, regional and local TSPs shall be designed to achieve the following objectives for reducing automobile vehicle miles travelled (VMT) per capita for the MPO area:

(a) No increase within 10 years of adoption of a plan as required by OAR 660-12-055(1);

(b) A 10% reduction within 20 years of adoption of a plan as required by OAR 660-12-055(1); and,

(c) Through subsequent planning efforts, a 20% reduction within 30 years of adoption of a plan as required by OAR 660-12-055(1).

(5) Regional TSPs shall specify measurable objectives for each of the following and demonstrate how the combination selected will accomplish the objectives in subsection 4:

(a) An increase in the modal share of non-automobile trips (e.g., transit, bicycle, pedestrians), for example, a doubling of the modal share of non-automobile trips;

(b) An increase in average automobile occupancy (i.e., persons per vehicle) during, for example, an increase to an average of 1.5 persons per vehicle; and,

(c) Where appropriate, a decrease in the number or length of automobile vehicle trips per capita due to demand management programs, realigning of land uses or other means.

(6) Regional and local TSPs shall include interim benchmarks to assure satisfactory progress towards meeting the requirements of this section at five year intervals over the planning period. MPOs and local governments shall evaluate progress in meeting interim benchmarks at five year intervals from adoption of the regional and local TSPs. Where interim benchmarks are not met, the relevant TSP shall be amended to include new or additional efforts adequate to meet the requirements of this section.

(7) The Commission shall, at five year intervals from the adoption of this rule, evaluate the results of efforts to achieve the reduction in VMT and the effectiveness of the standard in achieving the objective of reducing reliance on the automobile.

(8) Where existing and committed transportation facilities and services have adequate capacity to sustain the land uses in the acknowledged comprehensive plan, the local government shall not be required to evaluate alternatives as provided in this section.

600-12-040 Transportation Financing Program

(1) For areas within an urban growth boundary containing a population greater than 2,500 persons, the TSP shall include a transportation financing program.

(2) A transportation financing program shall include:

(a) A list of planned transportation facilities and major improvements;

(b) A general estimate of the timing for planned transportation facilities and major improvements;

(c) Determination of rough cost estimates for the transportation facilities and major improvements identified in the TSP.

(3) The determination of rough cost estimates is intended to provide an estimate of the fiscal requirements to support the land uses in the acknowledged comprehensive plan and allow jurisdictions to assess the adequacy of existing and possible alternative funding mechanisms. In addition to including rough cost estimates for each transportation facility and major improvement, the transportation planning plan shall include a discussion of the facility provider’s existing funding mechanisms and the viability of these and possible new mechanisms to fund the development of each transportation facility and major improvement. These funding mechanisms may also be described in terms of general guidelines or local policies.

(4) Anticipated timing and financing provisions in the transportation planning program are not considered land use decisions as specified in ORS 197.712(4)(e) and, therefore, cannot be the basis of appeal under ORS 197.610(1) and 2(2) or ORS 197.835(4).

(5) The transportation planning program shall implement comprehensive plan policies which provide for phasing of major improvements to encourage infill and redevelopers of urban lands prior to facilities which would cause premature development of urbanizable areas or conversion of rural lands to urban uses.

600-12-045 Implementation of the Transportation System Plan

(1) Each local government shall amend its land use regulations to implement the TSP.

(a) The following transportation facilities, services, and improvements need not be subject to land use regulations except as necessary to implement the TSP and, under ordinary circumstances do not have a significant impact on land use:

(A) Operation, maintenance, and repair of existing transportation facilities identified in the TSP, such as transit, bicycle, pedestrian, bus, arterial and local facilities, and major regional transportation terminals.
Changes in frequency of transit, rail and airport services.

In the event that a transportation facility, service or improvement concerns the application of a comprehensive plan provision or land use regulation, it may be allowed without further land use review if it is permitted outright or if it is subject to standards that do not require interpretation or the exercise of factual, policy or legal judgment.

Local governments shall adopt land use or subdivision regulations, consistent with applicable federal and state requirements, to protect transportation facilities, corridors and sites for their identified functions. Such regulations shall include:

- Access control measures, for example, anyway and public road spacing, median control and signal spacing standards, which are consistent with the functional classification of roads and consistent with limiting development on rural lands to rural uses and densities;
- Standards to protect future operation of roads, transitways and major transit corridors;
- Measures to protect public use airports by controlling land uses within airport noise corridors and imaginary surfaces, and by limiting physical hazards to air navigation;
- A process for coordinated review of future land use decisions affecting transportation facilities, corridors or sites;
- A process to apply conditions to development proposals in order to minimize impacts and protect transportation facilities, corridors or sites;
- Regulations to provide notice to public agencies providing transportation facilities and services, MTO and GOOF.

Subdivision and partition applications

Other applications which affect private access to roads; and

Other applications within airport noise corridors and imaginary surfaces which affect airport operations.

Regulations assuring that amendments to land use designations, densities, and design standards are consistent with the functions, capacities and levels of service of facilities identified in the TSP.

Local governments shall adopt land use or subdivision regulations for urban areas and rural communities to require:

- Bicycle parking facilities as part of new multi-family residential developments of four units or more, new retail, office and institutional developments, and all transit transfer stations and parks and recreation.
- Facilities providing safe and convenient access to bicycle access throughout and from new subdivisions, planned developments, shopping centers, and industrial parks to nearby residential areas, transit stations, and neighborhoods activity centers, such as schools, parks and shopping. This shall include:
  - Sidewalks along arterials and collectors in urban areas;
  - Bikeways along arterials and major collectors;
  - Where appropriate, separate bike or pedestrian ways to minimize travel distances within and between the areas and developments listed above;
  - For purposes of subsection (b) "safe, convenient and adequate" means bicycle and pedestrian routes, facilities and improvements which:
    - Are reasonably free from hazards, particularly types or levels of automobile traffic which would interfere with or discourage pedestrian or cycle travel for short trips;
    - Provide a direct route of travel between destinations such as between a transit stop and a home;
    - Meet travel needs of cyclists and pedestrians considering destination and length of trip;
    - Provision of internal pedestrian circulation in new office parks and commercial developments through clustering of buildings, construction of pedestrian ways, skywalks, where appropriate, and similar techniques;
    - To support transit in urban areas containing a population greater than 25,000 where the area is already served by a public transit system or where a determination has been made that a public transit
system is feasible, local governments shall adopt land use and subdivision regulations to require:

(a) Design of transit routes and transit facilities to support transit use through provision of bus stops, busways and shelters, optimum bus geometrics, on-road parking restrictions and similar facilities, as appropriate

(b) New retail, office and institutional buildings at or near existing or planned transit stops to provide preferential access to transit through the following measures:

(A) Orienting building entrances to the transit stop or station;

(B) Clustering buildings around transit stops and;

(C) Locating buildings as close as possible to transit stops

(c) New industrial and commercial developments to provide preferential parking for carpools and vanpools

(c) An opportunity for existing development to redevelop a portion of existing parking areas for transit oriented uses, including bus stops and plazas, bus shelters, park and ride stations, transit oriented developments, and similar facilities, where appropriate

(e) Road systems for new development which can be adequately served by transit, including provision of pedestrian access to existing and identified future transit routes. This shall include, where appropriate, separate bicycle and pedestrian ways to minimize travel distances

(f) Along existing or planned transit routes, designation of types and densities of land uses adequate to support transit.

(g) In MPO areas, local governments shall adopt land use and subdivision regulations to reduce reliance on the automobile which:

(a) Allow transit oriented developments (TODs) on land along transit routes;

(b) Implements a demand management program to meet the measurable standards set in the TSP in response to OAR 12-035(4)

(c) Implements a parking plan which

(A) Achieves a 10% reduction in the number of parking spaces per capita in the MPO area over the planning period. This may be accomplished through a combination of restrictions on development of new parking spaces and requirements not existing parking spaces be redeveloped into other uses;

(B) Aids in achieving the measurable standards set in the TSP in response to OAR 12-035(4). (C) Includes land use and subdivision regulations setting minimum and maximum parking requirements;

(D) Is consistent with demand management programs, transit-oriented development requirements and planned transit service

(e) Require at major industrial, institutional, retail and office developments to provide either a transit stop on site or connection to a transit stop along a transit trunk route when the transit operator requires such an improvement.

(f) In developing a bicycle and pedestrian circulation plan as required by OAR 12-020(2)(c), local governments shall identify improvements to facilitate bicycle and pedestrian travel to meet local travel needs in developed areas. Appropriate improvements should provide for more direct, convenient and safer bicycle and pedestrian travel within and between residential areas and neighborhood activity centers (i.e., schools, shopping, transit stops). Specific measures include, for example, constructing walkways between cul-de-sacs and adjacent roads, providing walkways between buildings, and providing direct access between adjacent uses.

660-12-050 Transportation Project Development

(1) For projects identified by ODOT pursuant to OAR 373, Division 15, project development shall occur in the manner set forth in that Division.

(2) Regional TSPs shall provide for coordinated project development among affected local governments. The process shall include:

(a) Designation of a lead agency to prepare and coordinate project development

(b) A process for citizen involvement, including public notice and hearing, if project development involves land use decision-making. The process shall include notice to affected transportation facility and service providers, MPOs, and ODOT

(c) A process for developing and adopting findings of compliance with applicable statewide planning goals, if any. This shall include a process to allow amendments to acknowledged comprehensive plans where such amendments are necessary to accommodate the project

(d) A process for developing and adopting findings of compliance with applicable acknowledged comprehensive plan policies and land use regulations of individual local governments, if any. This shall include a process to allow amendments to acknowledged comprehensive plans or land use regulations where such amendments are necessary to accommodate the project

(e) Project development involves land use decision-making in the manner set forth in the TSP in response to OAR 12-035.
transportation improvements on rural lands

(1) The section identifies transportation facilities, services and improvements which may be permitted on rural lands consistent with goals 3, 4, 11 and 14 without a goal exception.

(2) For the purposes of this section, the following definitions apply:

(a) Access road means low volume public or private road that provides access to property and travel within a built and committed area.

(b) Local service roads means collector and minor arterial roads not including state highway of regional or statewide significance.

(c) Local travel means travel within a built and committed area or between two transportation facilities in a built and committed area and a nearby urban area or rural community.

(d) State highways of regional or statewide significance means highways identified in CCOI's highway plan as interstate highways, access Oregon highways and highways of regional or statewide significance.

(e) Major road improvement means a major realignment; addition of travel lanes; and new interchanges and interchanges. Major road improvements do not include replacement of an existing interchange or the replacement of one or more intersections with another intersection to correct a safety deficiency, or the creation of an intersection for a log haul road.

(f) Realignment means replacement of an existing road segment where the replaced road segment is either abandoned or modified to function as an access road. New road segments which do not meet this definition are considered new roads for purposes of this section.

(3) The following transportation facilities and improvements are consistent with goals 3 and 4 and may be sited on rural agricultural and forest lands:

(a) On land zoned for agricultural use, transportation facilities and improvements permitted outright or conditionally under ORS 825.233 (1) or (2) of ORS 215.263 (1) or (2); and,

(b) On land zoned for forest use, transportation facilities and improvements permitted outright or conditionally under OAR 660, Division 6.

(4) The following transportation facilities and improvements are consistent with goals 11 and 14 and may be located on rural lands:

(a) Maintenance or repair of an existing transportation facility;

(b) Reconstruction, surfacing, minor widening or realignment of an existing road, but not including the addition of travel lanes;

(c) Replacement of bridges;

(d) Replacement of docks and other facilities without significantly increasing the capacity of those facilities;

(e) Climbing and passing lanes;

(f) New access roads in built and committed exception areas.
with applicable requirements remain outstanding at the project development phase. Issues may include, but are
not limited to, compliance with regulations protecting or regulating development within farmlands and other
hazard areas, designated Great Basin Resource Areas, scenic and coastal shoreline areas, and the Wallowa River
Greenway. Where project development involves land
use decisionmaking, all unresolved issues of compliance
with applicable acknowledged comprehensive plan
policies and land use regulations shall be addressed and
findings of compliance adopted prior to project
approval. To the extent compliance has already been
determined during transportation system planning,
including adoption of a refinement plan, affected local
governments may rely on and reference the earlier
findings of compliance with applicable standards.

(4) Where an Environmental Impact Statement
(EIS) is prepared pursuant to the National Environmental
Policy Act of 1969, project development shall be
coordinated with the preparation of the EIS. All
unresolved issues of compliance with applicable
acknowledged comprehensive plan policies and land
use regulations shall be addressed and findings of
compliance adopted prior to issuance of the final EIS.

(5) If a local government decides not to build a
project authorized by the TSP, it must evaluate whether
the needs that the project would serve could otherwise
be satisfied in a manner consistent with the TSP.
Identified needs cannot be met consistent with the TSP.
the local government shall initiate a plan amendment to
change the TSP or the comprehensive plan to assure
that there is an adequate transportation system to meet
transit needs.

(6) Transportation project development may be
done concurrently with preparation of the TSP or a
refinement plan.

660-12-055 Timing of Adoption and Update of
Transportation System Plans; Exemptions

(1) MPOs shall complete regional TSPs for their
planning areas within four years following the effective
date of this division. For those areas within an MPO,
cities and counties shall adopt local TSPs and
implementing measures within one year following
completion of the regional TSP. Urban areas designated
as MPOs subsequent to the adoption of this rule shall
adopt TSPs in compliance with applicable requirements
of this rule within three years of designation.

(2) For areas outside an MPO, cities and counties
that complete and adopt regional and local TSPs and
implementing measures within five years of the effective
date of this division.

(3) Within two years of adoption of this rule
division cities and counties that, for urban areas of
15,000 or more people and each subsequent
amendment of amendments required by
160.344(2)(4)(d)(e) and (5)(d)

(4) As and counties shall update their TSPs and
implementing measures as necessary to comply with the
division of each periodic review subsequent to initial
compliance with this division. This shall include a
re-evaluation of the land use designations, density
and design standards in the following circumstances:

(c) If the interim benchmarks established pursuant
to 660-12-055(6) have not been achieved, or,

(b) If a refinement plan has not been adopted
consistent with the requirements of 660-12-055(2).

(5) The director may grant a whole or partial
exemption from the requirements of this division to cities
under 2,500 population outside MPO areas and counties
under 25,000 population. Eligible jurisdictions may, within
five years following the adoption of this rule or at
subsequent periodic reviews, request that the director
approve an exemption from all or part of the
requirements in this division until the jurisdiction's next
periodic review.

(c) The director's decision to approve an
exemption shall be based upon the following factors:

(A) Whether the existing and committed
transportation system is generally adequate to meet
likely transportation needs.

(B) Whether the new development or population
growth is anticipated in the planning area over the next
ten years.

(C) Whether the new transportation facility is
proposed which would affect the planning area.

(D) Whether deferral of planning requirements
would conflict with accommodating state or regional
transportation needs, and

(E) Consultation with the Oregon Department of
Transportation on the need for transportation planning
in the area, including measures needed to protect existing
transportation facilities.

(b) The director's decision to grant an exemption
under this section is appealable to the Commission as
provided in OAR 660-02-020 (Delegation of Authority
Rule).

(g) Portions of TSPs and implementing measures
adopted as part of comprehensive plans prior to the
respective jurisdiction's periodic review shall be
reviewed pursuant to OAR 660, Division 18, Post
Acknowledgement Procedures.

660-12-060 Plan and Land Use Regulation
Amendments

(1) Amendments to functional plans
acknowledging comprehensive plans, and land use
regulations which significantly affect a transportation
plan, shall assure that allowed land uses are consistent
with the identified function, capacity, and level of
(g) Temporary improvements in association with construction projects, such as temporary roads and detours.

(h) Bicycle, footpath, and recreation trails.

(i) Turn refuges at existing street intersections.

(j) Transportation system management measures, including medians which limit or prevent turning movements, but not including the creation of additional travel lanes or median turn lanes.

(k) Streets and bridges on far or forest lands for the purpose of managing land for farm or forest uses.

(l) Railroad mainlines and branchlines.

(m) Pipelines.

(n) Navigation channels.

(o) Personal use airports and extensions or alterations of public use airports that do not permit service to a larger class of airplanes.

(p) Access to transportation facilities, such as weigh stations, maintenance stations, truck pullouts, and safety rest areas.

(q) New local service roads and extensions of existing local service roads on far or forest lands as provided in subsection (5) of this section.

(r) Major road improvements to state highways of regional and statewide significance as provided in subsection (3) of this section.

(s) Other transportation facilities, services and improvements serving local needs as provided in subsection (7) of this section.

(t) New local service roads including extensions of existing local service roads shall comply with the following standards:

(a) Only two lanes of traffic shall be accommodated.

(b) Intersections and private accesses shall be limited to be consistent with rural uses and densities.

(c) Major realignments shall not be permitted.

(d) New local service roads shall be permitted only to connect built and committed areas or to reduce local access to and local traffic on a state highway. Access to farm and forest lands shall be limited.

(e) Major road improvements to state highways of regional and statewide significance shall comply with the following standards:

(i) Analyses shall be conducted to the minimum level capable and shall not exceed that which would be conducted with the minimum land dedication of the highway considering traffic at buildout of nearby rural lands.

(f) Local travel may be accommodated to the extent that it is not feasible to meet such needs on other existing roads or through improvements to other existing roads, including construction of local access roads in built and committed areas.

(g) New interchanges or intersections may be allowed only in the following circumstances:

(A) To connect to other state highways of regional or statewide significance;

(B) To replace existing interchanges or intersections; or

(C) To reduce and consolidate direct road accesses consistent with (a) and (b) above.

(h) Direct private access to new facilities shall not be permitted.

(i) Median turn lanes shall comply with the following standards:

(A) The median turn lane is needed to correct a safety problem which cannot practically be corrected through other measures such as:

(i) Limited left turn refuges;

(ii) Construction of extension of local service roads as otherwise permitted by this section;

(iii) Median barriers; and

(iv) Reconstruction of existing road access or purchase of access rights.

(j) Realignments may be made consistent with the function and operation of the facility considering traffic on affected roads and accesses at buildout of nearby rural lands; and

(k) Realignments shall not create new parcels of land that are provided direct access to the highway.

(l) A bypass of all or part of an urban growth boundary shall be permitted only if planned, designed, and operated to limit use for traffic between locations within the urban growth boundary to be less than a third of the average daily traffic on the bypass.

(m) Other transportation facilities, services or improvements serve local needs if:

(A) The facility, service or improvement serves the rural land uses identified in the acknowledged comprehensive plan and

(B) The facility, service or improvement provides travel access and a level of service which is adequate but which does not exceed that required to serve travel needs in the rural area over the planning period. Travel-
heads in the rural area includes travel that would result from development otherwise anticipated to occur in the rural area consistent with plan policies including those which encourage new development to locate within urban growth boundaries.

660-12-070 Exceptions for Transportation Improvements on Rural Land

(1) Transportation facilities and improvements which do not meet the requirements of 660-12-065 require an exception to be filed on rural lands.

(2) Where an exception to Goals 3, 4, 11, or 14 is required, the exception shall be taken pursuant to CRS 197.732(1)(c), Goal 2, CAR 660, Division 4 and this division.

(3) An exception adopted as part of a TSP or retirement plan shall, at a minimum, adequately address:

(a) The general location shall be specified as a corridor within which the proposed facility or improvement is to be located, including the outer limits of the proposed location. Specific sites or areas within the corridor may be excluded from the exception to avoid or lessen likely adverse impacts.

(b) The size, design and capacity of the proposed facility or improvement shall be described generally, but in sufficient detail to allow a general understanding of the likely impacts of the proposed facility or improvement. Measures limiting the size, design or capacity may be specified in the discussion of the proposed use in order to simplify the analysis of the effects of the proposed use.

(c) The adopted exception shall include a process and standards to guide the selection of the precise design and location within the corridor and consistent with the general description of the proposed facility or improvement. For example, where a general location or corridor crosses a river, the exception would specify that a bridge crossing would be built but would defer to development decisions about precise location and design of the bridge within the selected corridor subject to requirements to minimize impacts on riparian vegetation, habitat values, etc.

(d) Land use regulations implementing the exception may include standards for specific mitigation measures to offset unavoidable environmental, economic, social or energy impacts of the proposed facility or improvement or the assured compatibility with adjacent uses.

(4) To address Goal 2, Part 1(c)(1) the exception shall demonstrate that there is a transportation need consistent with and compatible with the requirements of 660-12-065 which cannot reasonably be accommodated through the adoption of the following measures not requiring an exception:

(a) Alternative modes of transportation.

(b) Traffic management measures.

(c) Improvements to existing transportation facilities.

(5) To address Goal 2, Part 1(c)(2), the exception shall demonstrate that non-exception locations cannot reasonably accommodate the proposed transportation improvement or facility.

(6) To determine the reasonableness of alternatives to an exception under subsections (4) and (5) of this section, cost, operational feasibility, economic allocation and other relevant factors shall be addressed. The thresholds chosen to judge whether an alternative method or location cannot reasonably accommodate the proposed transportation need or facility must be justified in the exception.

(7) To address Goal 2, Part 1(c)(3), the exception shall:

(c) Compare the economic, social, environmental, and energy consequences of the proposed location and other alternative locations requiring exceptions.

(b) Determine 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. A proposed exception location would fail to meet this requirement only if the affected local government concludes that the impacts associated with it are significantly more adverse than the other identified exception sites.

(c) The evaluation of the consequences of general locations or corridors need not be site-specific, but may be generalized consistent with the requirements of 660-12-070(3).

(8) To address Goal 2, Part 1(c)(4), the exception shall:

(c) 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 nonfarm or highway oriented development on area made more accessible by the transportation improvement.

(b) Adopt as part of the exception, facility design and land use measures which minimize accessibility of rural lands from the proposed transportation facility or improvement and support continued rural use of surrounding lands.
ALTERNATIVE 1

Restripe to angle parking

Eliminate parking

Move centerline of roadway as far east as possible

Trans. roadway back to existing centerline

Transition roadway back to existing centerline
ALTERNATIVE 3

May need minor right-of-way take
Provide for adequate truck turning radius
Build roadway to design standards to accommodate truck traffic
Upgrade pavement to accommodate truck traffic
No truck traffic
Provide for adequate truck turning radius

UNION COUNTY

Baltimore

(Wallowa Ave.)

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ALTERNATIVE 4

UNION COUNTY

BALTIMORE

(WALLOWA AVE.)

Upgrade pavement to accommodate truck traffic

Upgrade pavement to accommodate truck traffic

6th Street - one way
north between Hwy 82 and Division St

7th Street - one way
south between Hwy 82 and Division St

Minor right-of-way take

Improve turning radius
for NB left turn and EB right turn truck movements

SEE MAP IN 39 DAD

SEE MAP IN 39 ISAC

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY

UNION COUNTY

(498x435) NEI/4 SE1/4 SEC.15 T.IN. R.39E. W.M.
ALTERNATIVE 7

Paint solid centerline

Provide traffic control signs

Install traffic signal tied to railroad crossing

Round corners to accommodate truck turning radii

Provide truck route signs

Reconstruct local streets to handle heavy truck traffic

Turning Movements

1) Tollgate to Wallowa County – use signed truck route xxxxx
2) Tollgate to La Grande – use loop to the south ooooo
3) La Grande to Tollgate – use loop to the north ———
4) La Grande to Wallowa County – use Highway 82 \-----
5) Wallowa County to Tollgate – use signed truck route ———
6) Wallowa County to La Grande – use Highway 82 \-----
ALTERNATIVE 7

TRANSPORTATION SUBCOMMITTEE RECOMMENDATION

➢ Paint a solid centerline on Highway 82 on the corner of Albany and 8th Streets

➢ Round the following corners to accommodate the turning radii of semi trucks:
   1) 8th/Albany (east side)
   2) 7th/Albany (both sides)
   3) 7th/Division (both sides)
   4) 7th/Alder (west side)

➢ Provide signs to direct drivers utilizing the truck route (To 204, etc.) and provide signs for traffic control (stop signs, etc.)

➢ Install a traffic signal at the intersection of Oregon Highways 82 and 204 (8th and Division) tied to the railroad crossing

➢ Reconstruct local streets, including any improvements to the road base, to handle heavy truck traffic on the following road segments:
   1) Alder between 7th and 8th
   2) 7th between Division and Alder
Appendix E

City of Elgin
Checklist for Proposed Development

Does the property abut Oregon Highways 82 or 204, or does the property abut a local street? ____________________________________________

If property abuts a state highway, then the next step is to contact the Oregon Department of Transportation, District 13 Office at (541) 963-8406. Contacts are Mike Buchanan, District Manager or Mike Barry, Assistant District Manager. A letter is required from ODOT to the City of Elgin concerning your property, identifying any access concerns. Potential access requirements shall be considered as part of site plan or administrative review.

In what zone is the property located? ____________________________________________

Is the proposed use listed in the Elgin Zoning Ordinance under outright uses or conditional uses for the applicable zone? ____________________________________________

If the proposed use is listed as a conditional use, are there any specific review criteria that must be satisfied before approval can be granted? ____________________________________________

Does the proposed use require a site plan? ____________________________________________

Will the siting of the proposed use meet the applicable zone’s development standards, such as setbacks, height limitations, etc? ____________________________________________

Will the proposed use involve the construction of 40 homes, 80 apartment units, or 1,000 feet or more of gross floor area? ____________________________________________

If yes, then a traffic impact study may be required to gauge the impact on the transportation system.

Is the property located at the Urban Growth Boundary (UGB) and/or City Limit? ____________________________________________

If yes, then you may be directed by the Elgin City Recorder to contact the Union County Planning Department at (541) 963-1014 or 1001 4th Street, Suite C, La Grande, OR 97850.