



**Polk County**

**Transportation Systems  
Plan**

**December 2009**

# **Polk County Transportation Systems Plan**

The 2009 Polk County Transportation Systems Plan was adopted by the Polk County Board of Commissioners on December 2, 2009.

Polk County Board of Commissioners:

Tom Ritchey, Chairman

Mike Propes

Ron Dodge

This project is partially funded by a grant from the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development. This TGM grant is financed, in part, by federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), local government, and State of Oregon funds. The contents of this document do not necessarily reflect the views or policies of the State of Oregon.

# Acknowledgments

The following people are acknowledged for their contributions to this document and to the transportation systems planning process in Polk County:

## **Polk County Board of Commissioners**

Tom Ritchey - Chairman  
Mike Propes  
Ron Dodge

## **Polk County Planning Commission**

Robert Slyh - Chairman  
John Condon                      Jim Morrison  
Bill Farmer                      Michael Schilling  
Lee Herzberg                      Wayne Simmons

## **Citizen Advisory Committee**

Don Duhrkopf                      Leon Fisher  
Scott Erickson                      Al Ketchum

## **Technical Advisory Committee**

Naomi Zwerdling, ODOT	Dan Fricke, ODOT
Dorothy Upton, ODOT	Chris Bailey, ODOT
Bob Melbo, ODOT	Gary Fish, DLCD
Ray Jackson, MPO & SKATS	Jason Locke, City of Dallas
Mike Danko, City of Independence	Mark Fancey, City of Monmouth
Frank Brown, Polk County Connector	Glenn Gross, City of Salem
Cecilia DeSantis Urbani, City of Salem	Julie Warncke, City of Salem
David Baltz, City of Salem	Suzanne Dufner, City of Falls City
Marjorie Mattson, City of Willamina	

## **Polk County Community Development Department**

Austin McGuigan ..... Director  
Dana Gibson ..... Assistant Planner

**Polk County Public Works Department**

Ken Husby, PE ..... Director and County Engineer  
Fred Lowe ..... Engineering/Survey Technician II

**Polk County Information Technology Department**

Dean Anderson ..... Director  
Robert Gumtow ..... Senior GIS Programmer/Coordinator  
Christi Pontier ..... GIS Survey Technician

**Mid-Willamette Valley Council of Governments**

Jim Jacks ..... Senior Planner  
Denise VanDyke ..... Secretary  
Lesley Hegewald ..... Associate Planner, GIS

# Table of Contents

---

<b>Executive Summary</b> .....	<b>1</b>
<b>Introduction</b> .....	<b>1-1</b>
Purpose .....	1-1
General.....	1-1
Transportation Systems .....	1-1
Relationship to Other Plans .....	1-3
<b>Population and Employment</b> .....	<b>2-1</b>
<b>Transportation Goals and Policies</b> .....	<b>3-1</b>
<b>Regulatory Framework and Relationship to Other Plans</b> .....	<b>4-1</b>
Summaries of Relevant Plans and Regulations .....	4-1
Transportation Permit Requirements.....	4-13
<b>Road Plan</b> .....	<b>5-1</b>
Existing Transportation System and Current Needs.....	5-1
Road Network and Standards .....	5-9
<b>Bicycle and Pedestrian Element</b> .....	<b>6-1</b>
Network .....	6-1
Future Needs and Facilities .....	6-2
<b>Air, Rail, Water, and Transmission Lines Element</b> .....	<b>7-1</b>
Air .....	7-1
Rail.....	7-2
Water .....	7-4
Transmission Lines (Pipelines) .....	7-4
<b>Public Transportation Element</b> .....	<b>8-1</b>
Inventory.....	8-2
Constraints and Opportunities .....	8-6
<b>Transportation Forecast and Deficiencies</b> .....	<b>9-1</b>
Traffic Volumes.....	9-1
Crashes.....	9-4
Pavement Type/Conditions.....	9-11
Intersections.....	9-11
Bridges.....	9-11
Impacts from Future Development.....	9-14

**Proposed System Improvements ..... 10-1**  
    Facility Improvement Projects..... 10-1  
    Outstanding Actions, Next Steps, and Future Plan Refinements ..... 10-10  
**Finance Plan ..... 11-1**  
**Appendix A - Definitions and Acronyms.**  
**Appendix B - Document Listing.**  
**Appendix C - Inventory Materials.**  
**Appendix D - Proposed Zoning Amendments.**  
**Appendix E - Citizen Involvement.**

# List of Tables

---

Table 1 - Population Projections - 2008-2030..... 2-2

Table 2 - Covered Employment 1996 and 2007 ..... 2-4

Table 3 - Projected Employment by Industry 2006 and 2016..... 2-5

Table 4 - Number of Acres by Zoning Designation ..... 4-6

Table 5 – Polk County Road System Mileage by Functional Classification..... 5-2

Table 6 - Functional Classifications Polk County Road System ..... 5-7

Table 7 - Polk County Road Standards ..... 5-10

Table 8 - Average Daily Traffic Highest Volume County Roads ..... 9-2

Table 9 – Traffic Crashes, All Roads in Polk County ..... 9-5

Table 10 – Weight Limited Bridges ..... 9-12

Table 11 – Deficient Bridges..... 9-12

Table 12 – Polk County Road and Intersection Improvement Projects ..... 10-2

Table 13 – Polk County Bridge Improvement Projects..... 10-3

Table 14 – Polk County Bikeway System Improvements..... 10-9

Table 15 – Potential Joint Funded Interchange Projects ..... 10-10

Table 16 - Outstanding Actions, Steps, or Refinements..... 10-11

Table 17 – Ten-Year Revenue History..... 11-10

Table 18 – Revenue Projection..... 11-11

# List of Figures

---

Figure 1 - Polk County Comprehensive Plan Map..... 4-7

Figure 2 - Polk County Zoning Map ..... 4-9

Figure 3 - Polk County Functional Classifications..... 5-5

Figure 4 - Polk County Bicycle Facilities ..... 6-5

Figure 5 - High Crash Areas..... 9-9

Figure 6 - Polk County Bridges ..... 9-13

Figure 7 - Existing and Proposed Road System North of Dallas Preferred Alternative ..... 9-17

Figure 8 - Existing and Proposed Road System South of Dallas Preferred Alternative ..... 9-19

Figure 9 - OR22/OR51 Interchange ..... 9-21

Figure 10 - Frontage and Backage Road Options 50<sup>th</sup> Avenue to Doaks Ferry Road..... 9-23

Figure 11 - Polk County Road and Bridge Improvements ..... 10-5

Figure 12 - Polk County Transportation Projects ..... 10-7



# Executive Summary

---

The purpose of the Polk County Transportation System Plan (TSP) is to design and implement an integrated multimodal transportation plan that meets the needs of county residents and businesses, as well as those of the region and the state for a 20-year period. This plan provides a balanced transportation system that includes the automobile, bicycle, rail, transit, air, water, walking, and transmission systems such as pipelines. It is anticipated the TSP will be updated in about 10-years.

The road network which will serve the county for the next 20 years is essentially in place. The road system in the county is a mixture of state highways, rural county roads, urban city streets, state forest roads, state park roads, and Bureau of Land Management (BLM) roads. The primary transportation mode in the county is vehicular travel on state highways. The significant state highways are Oregon Highways 18, 22 and 99W. Many vehicular trips in the county start or end in one of the county's six cities on city streets and use state highways to travel to a destination.

The county will continue to support rail service in the county which serves business and industry, and the Independence State Airport in the City of Independence.

The county's primary east-west highway is Oregon Highway 22 / 18 which the state has designated as an expressway from Salem to the Grand Ronde area. Associated with the expressway designation is the Oregon Highway 22 / 99W interchange which was completed in the mid-2000's, and the Fort Hill interchange which was completed in 2009. Another interchange is scheduled to be constructed west of the Oregon Highway 18 / Oregon Highway 22 intersection and east of Spirit Mountain Casino and Hotel to address safety and congestion in that area.

The county has a strong history of maintaining and improving its road system. Improvements to the transportation system include maintenance and repairs to the county's 120 bridges, selected bike / pedestrian segments, road projects to improve intersections, re-align selected segments, straighten 90 degree corners, and participate in joint county-state projects wherein intersections of county roads and state highways will be improved or changed to be grade-separated interchanges. An example of the latter is the Expressway Management Plan which is incorporated into the 2009 Polk County Transportation Systems Plan and calls for the at-grade intersection of Oregon Highway 22 / Oregon Highway 51 to be a grade-separated interchange with county frontage and backage roads to support the interchange.

The federal, state and local funds received by the county for transportation maintenance and projects are sufficient to address all the needs when the revenues from House Bill 2001 (2009 Legislature) and a local road bond are counted. On a year-to-year basis the county will prioritize maintenance needs and projects through the capital improvement program process in the annual fiscal year budget.

# Introduction

---

## Purpose

The purpose of the Polk County Transportation System Plan (TSP) is to design and implement an integrated multimodal transportation plan that meets the needs of the county residents and the residents of the region and state. This plan provides a balanced transportation system that includes the automobile, bicycle, rail, transit, air, walking, and transmission systems such as pipelines. It reflects existing land use plans, policies and regulations that affect the transportation system and includes a finance element. The TSP also meets the requirements of Oregon Administrative Rule (OAR) Chapter 660-12, the Transportation Planning Rule, which implements Oregon Statewide Planning Goal 12, Transportation. When adopted, this plan fulfills the requirement for public facilities planning required under Oregon Revised Statute (ORS) 197.712(2)(e), Goal 11, Public Facilities and Services, and OAR 660, Division 11, Public Facility Planning, as they relate to transportation facilities. Additionally, it becomes the transportation element of the county's Comprehensive Plan.

## General

Polk County is a 745 square mile rural area located in the Willamette Valley. Its east border is defined by the Willamette River, and the west border is located along the coastal mountain range. The county's principal industries are agriculture, forest products, and education. The July 1, 2008 population estimate by the Oregon Center for Population Research and Census was 68,235. The county's two largest employment generators are Spirit Mountain Casino and Hotel in the Grand Ronde area, and Western Oregon University in Monmouth.

The county contains six cities: Dallas, Falls City, Independence, Monmouth, and portions of Salem and Willamina. Dallas (15,360 population as of July 1, 2008) and West Salem (22,477 population as of July 1, 2007) are the largest cities; although the twin cities of Independence and Monmouth combine for a population of 17,595 (as of July 1, 2008).

## Transportation Systems

The road system in the county is a mixture of state highways, rural county roads, urban city streets, state forest roads, state park roads, and Bureau of Land Management (BLM) roads. The most significant state roads are Oregon Highway 18 and 22. They are Access Oregon Highways (AOH) of statewide significance. Oregon Highway 18 traverses the upper northwest corner of the county, while Oregon Highway 22 bisects the width of the county generally running east-west, from the state capital in Salem to just east of the Fort Hill area where it combines with Oregon Highway 18. Oregon Highway 18 continues to US 101 on the coast. A regional federal highway, Oregon Highway 99W, proceeds north-south through the county and the City of Monmouth. A district state highway, Oregon Highway 51, proceeds south from Oregon Highway 22 to Independence where it then turns west through the cities of Independence and Monmouth to an intersection with Oregon Highway 223 (Kings Valley Highway), south of

Dallas. Oregon Highway 223 is a generally north-south route from Benton County through Dallas to a connection with Oregon Highway 22 northwest of Dallas. Oregon Highway 221 (Wallace Road) is another district state highway and it proceeds generally north from West Salem to Dayton in Yamhill County.

The county is responsible for almost 500 miles of roads. Of these, almost half the miles are paved. The roads are well maintained, although some gravel surface degradation occurs on hilly segments in the dry summer months when effective grading operations are impractical. Generally, the roads are equally spread throughout the county, with the exception of the sparsely populated and hilly southwest quadrant.

Another 180 miles of roads are located within the cities. With some exceptions, roads within the city limits and urban growth boundaries are under the jurisdiction of the respective city.

The combined forest, parks, and Bureau of Land Management road systems have approximately 517 miles, nearly the same mileage as the city and county jurisdictions.

The county road system contains 120 bridges. Overall, they are in good condition. A ferry at Buena Vista, with an annual ridership of about 1,000 vehicles, operates from April to October, Wednesday through Sunday, and connects to the Marion County road system. Another ferry, the Wheatland Ferry, connects Yamhill and Marion Counties across the Willamette River about 5 miles north of the Polk County boundary and connects the Polk County road system to the Marion County road system. It operates daily except for Thanksgiving and Christmas Days.

Over the years, the Willamette River has lost its significance as a transportation system, and its use today is primarily recreational. Although waterborne transportation is not expected to become a major form of multimodal transportation, it is possible that private operators may find opportunities for limited travel along the Willamette River. In the past the, U.S. Army Corps of Engineers dredged the River but dredging ceased in the late 1970s. As commercial use declined the Corps was not able to show in a cost / benefit analysis that continued dredging was justified. The county supported past efforts to study dredging of the River to provide for greater use, but to no avail. The Willamette Queen, an 87 foot sternwheeler, operates from Riverfront Park in downtown Salem providing excursions on the Willamette River.

The Hampton Railway operates between Willamina and Fort Hill (approximately 5.3 miles). The Willamette and Pacific Railroad's Westside Branch, runs from Monroe in Benton County to Newberg in Yamhill County. Roughly following Oregon Highway 99W, this branch intersects with the Willamette & Pacific Railroad (the former Willamette Valley railroad) in Independence, and the Dallas branch at Gerlinger (south of Rickreall Road).

The general aviation airport at Independence, natural gas pipelines, bicycle and pedestrian facilities at various locations round out the county's transportation network.

Although the Polk County Transportation Systems Plan (TSP) examines some short-term needs, its primary intent is to study and prepare for the long term (20 years) to ensure a system that will accommodate growth within the existing land management structure. To maintain the TSP as a

“living document,” it is anticipated it will be reviewed at 10-year intervals, with the next review in 2019.

## **Relationship to Other Plans**

The Polk County TSP is consistent with the state plans as expressed in the Oregon Transportation Plan, the Oregon Highway Plan (1999), the Oregon Bicycle and Pedestrian Plan (1995), the Oregon Public Transportation Plan (1997), the Oregon Rail Freight and Passenger Plan (2001), the Oregon Transportation Safety Action Plan (2006), the Oregon Continuous Aviation System Plan, the Willamette Valley Transportation Strategy, the Rickreall Junction Facility Plan and the Expressway Management Plan (Oregon Highway 22 from Salem to Grand Ronde). The cities of Salem and Independence updated their TSPs in 2007. Dallas updated its TSP in 2008 and Monmouth updated its TSP in 2009. The city and county transportation plans are coordinated and consistent.

# Population and Employment

---

**Table 1** shows population projections for Polk County and the cities within the county. Overall, the population of Polk County is projected to grow from 68,235, as of July 1, 2008, to 117,557 residents in 2030. The projection for the total population in the county was developed by the Oregon Office of Economic Analysis (OEA) and published in 2004. The projection represents growth of approximately 72 percent for the period, which translates into an average annual growth rate of 2.5 percent. Most of that growth is expected to occur in the county's four most populous cities, Dallas, Independence, Monmouth and West Salem. The projection for each of the cities and the unincorporated portion of the county was developed by the county in coordination with the cities in the county.

The smallest percent change is projected for the unincorporated portion of the county consistent with the statewide planning goals, state statutes, administrative rules, and the Polk County Comprehensive Plan which are intended to focus growth in urban areas.

The major demographic trend occurring during the 20-year period will be a continued increase in the number of elderly persons within the population. This trend, which began during the 1990s, will continue and is attributable both to the aging of the "baby boom" generation as well as the attractiveness of Oregon, and the mid-Willamette Valley, as a retirement destination.

Pursuant to Oregon Revised Statute (ORS) 195.036, these population projections were developed in coordination with all the cities in the county. Under ORS 195.036, it is the county's responsibility to establish and maintain these population forecasts.

**Table 1**  
**Population Projections**  
**Polk County and Cities within Polk County**  
**2008 - 2030**

Location	2008	2010	2015	2020	2025	2030	Percent of Total 2008	Percent of Total 2030	Percent Change 2008-2030	AAGR 1996-2020
Polk County	68,235	72,845	83,338	95,594	107,118	117,557	100%	100%	72%	2.50%
Dallas	15,360	16,706	21,022	25,216	28,957	31,154	22.5%	26.5%	103%	3.26%
Falls City	965	983	1,083	1,195	1,285	1,352	1.4%	1.2%	40%	1.50%
Independence	8,030	8,588	9,859	11,319	12,995	14,919	12.8%	12.7%	86%	2.80%
Monmouth	9,565	10,069	11,448	13,015	14,798	16,824	14.0%	14.3%	76%	2.60%
Salem (Polk County Portion)	22,477	24,406	26,925	30,892	34,515	38,496	32.9%	32.8%	71%	2.50%
Willamina (Polk County Portion)	720	801	917	1,052	1,178	1,293	1.1%	1.1%	80%	2.60%
Unincorporated	11,118	11,291	12,084	12,905	13,390	13,519	16.3%	11.5%	22%	0.90%

*Source: Population estimates for 2008 were developed by the Oregon Center for Population Research and Census, 2008.*

- Dallas: projection is the remainder after the other cities had been projected and was acceptable to the cities, and after the unincorporated Polk County portion had been determined.
- Falls City: projection decreases from 1.4% of county total in 2008 to 1.35% in 2010, 1.30% in 2015, 1.25% in 2020, 1.20% in 2025 to 1.15% in 2030.
- Independence: projection uses the 2.8%/year from the city's 2008 comprehensive plan update and UGB expansion.
- Monmouth: projection is based on the city's request for 2.6%/year.
- West Salem: projection includes only the portion of the city in Polk County and is from Marion County's September 2008 draft projections, medium projection (p. 52) for Marion County and all the cities in Marion County, including west Salem.
- Willamina: projection includes only the portion of the city in Polk County. The projection slightly increases the city's 1.06% share of the county's total population in 2008 to 1.1% out to 2030.
- Unincorporated Polk County: projection is for those areas outside city limits. The projection decreases the unincorporated portion from 16.3% in 2008 to 15.5% in 2010 and 1% thereafter every 5-years.

In 2008 and 2009, Marion County contracted with the Oregon Center for Population Research and Census (CPRC) to produce population projections to 2030 for Marion County and the cities in the county. Marion County was scheduled to adopt their coordinated projection in 2009.

Polk County recognizes that planning is a dynamic process. While the population projections shown in **Table 1** constitute the county's obligation under state statute to establish such projections, these figures only represent the best estimates available at this time. The numbers are not static, but are subject to change as new information becomes available.

Polk County recognizes its obligation to maintain such forecasts in the future and that this obligation requires ongoing coordination with both the state and the cities in the county. Polk

County will work with the Oregon Office of Economic Analysis and the Oregon Center for Population Research and Census on future forecasts to ensure the local factors which affect county population growth are factored into the population modeling process. Polk County will also continue to work with Marion County, the Salem-Keizer Transportation Study (SKATS), and the Oregon Department of Land Conservation and Development (DLCD) whenever coordinated regional population projections for the Salem-Keizer urban area are necessary.

During the local periodic review process, Polk County will continue to work with the cities in the county to refine the population figures as necessary. As part of this repetitive process, the county will work with the state and the cities to identify: 1) more accurate or up-to-date population figures or estimates, 2) local factors which influence population growth, and 3) local policy choices, which may influence population growth.

**Table 2** shows that covered employment in Polk County grew by more than 40 percent between 1996 and 2007. With the exception of retail trade, wholesale trade, and non-classified, Polk County experienced employment growth in all covered employment sectors during this period. In particular, employment in the service industry and agriculture / forestry / fishing grew 57 and 94 percent, respectively, and government more than doubled. The service industry includes a number of activities such as legal, medical, repair, and recreation. The loss of manufacturing employment was marked by declines in the lumber and wood products and food processing industries.

Service sector employment in Polk County increased from 3,574 in 1996 to 5,620 persons in 2007. The opening of Spirit Mountain Casino in Grand Ronde in the fall of 1995 started the increase, and additions to the facility from 1996 to 2007 are largely responsible for the dramatic increase in service industry employment. This figure can be expected to continue to increase. In 2007, Spirit Mountain Casino and Hotel was the largest employer in Polk County.

**Table 2**  
**Covered Employment**  
**Polk County**  
**1996 and 2007**

Sector	1996		2007		Percent Change 1996-2007
	Total	Percent	Total	Percent	
Services	3,574	25.4%	5,620	28.4%	+57.2%
Manufacturing	2,829	20.1%	2,977	15.0%	+5.2%
Government	2,594	18.4%	5,365	27.1%	+106.8%
Retail Trade	2,361	16.8%	1,513	7.6%	-35.9%
Agriculture/Forestry/Fishing	971	6.9%	1,892	9.5%	+94.8%
Construction	700	5.0%	1,012	5.1%	+44.6%
Wholesale Trade	443	3.1%	269	1.4%	-39.3%
Trans./Communications/Utilities	312	2.2%	327	1.7%	+4.8%
Financial/Insurance/Real Estate	241	1.7%	749	3.8%	+210%
Mining	30	0.2%	56	0.2%	+8.7%
Non-Classified	37	0.3%	20	0.1%	-45.9%
Total Covered Employment	14,092	100%	19,800	100%	+40.5%
Unemployment		4.8%		5.1%	+6.2%

Source: State of Oregon Employment Division, January 2008. Includes only workers covered by unemployment compensation.

**Table 3** shows employment projections for Marion, Polk, and Yamhill counties for 2006 through 2016. Most new jobs will continue to be created in the services industry. The Oregon Employment Division anticipates that most of these new service-oriented jobs will most likely be in business and professional services, which includes temporary employment agencies and services for commercial customers. Health care employment is also expected to continue to grow to meet the needs of an aging population. Retail trade is also expected to grow significantly during this period.



**Table 3**  
**Projected Employment by Industry**  
**Region 3: Marion, Polk, and Yamhill Counties**  
**2006 and 2016**

Sector	2006		2016		Percent Change 2006-2016
	Total	Percent	Total	Percent	
Total Nonfarm Employment	179,800	100.00%	205,600	100.00%	14%
Logging and Mining	1,600	0.88%	1,600	0.77%	0%
Construction	11,300	6.28%	12,900	6.27%	14%
Manufacturing	21,800	12.12%	22,200	10.79%	2%
Trade, Transportation, and Utilities	30,100	16.74%	33,600	16.34%	12%
Information	1,700	0.94%	1,800	0.87%	6%
Financial Activities	8,700	4.83%	9,700	4.71%	11%
Professional and Business Services	14,500	8.06%	17,300	8.41%	19%
Educational and Health Services	24,900	13.84%	31,800	15.46%	28%
Leisure and Hospitality	14,900	8.28%	17,800	8.65%	19%
Other Services	6,100	3.39%	6,700	3.25%	10%
Government	44,300	24.63%	50,200	24.41%	13%
Indian Tribal	1,800	0.99%	2,300	1.11%	28%

*Source: Oregon Employment Department*

A notable employment number with a site specific transportation effect is the Indian Tribal category (last line) which is forecast to increase from 1,800 in 2006 to 2,300 in 2016, an increase of 500 or 28%. The March 2009 employment in the Indian Tribal category is 2,000±. Most of that employment is at Spirit Mountain Casino and Hotel. If casino employment is forecast to increase about 28%, the number of visitors to the facility will likely increase significantly as will the number of trips on Oregon Highway 18 at the Casino.

These population and employment trends present several implications for transportation planning in Polk County. With increased population growth projected to occur in the county's larger cities, it is important for the county's transportation system to be well coordinated with those of the cities, particularly as it relates to areas within the urban-rural interface.

Consistency between functional classifications and road capacity in these areas is important to efficient and safe service. Coordination between the county and its cities regarding planned improvements in these areas is also necessary. The cities of Independence and Salem completed TSP updates in 2007. The cities of Dallas and Monmouth completed TSP updates in 2008 and 2009, respectively. The city TSP's addressed the nature and extent of system deficiencies and possible system improvements. At a county-wide level it is difficult to assess the impacts of growth on the transportation system. The TSP updates have allowed the county and its larger cities to assess the impacts of future growth, based on current zoning and potential development, on the transportation system and to identify measures to maintain an acceptable level of service as projected development occurs.

With the development of Spirit Mountain Casino and Hotel as a regional destination and major employer within Polk County, further planning was undertaken to identify design and access

improvements along Oregon Highway 18 in the Grand Ronde area. The County participated in the ODOT sponsored Corridor Refinement Plan process for Oregon Highway 18. The project identified design improvements along the highway and addressed local access and circulation needs and a project, the Fort Hill interchange, was completed in 2009. Another phase of that project is to construct a new interchange between the Oregon Highway 18 / Oregon Highway 22 intersection and Spirit Mountain Casino and Hotel.

Increased employment opportunities in urban areas of the county will result in greater numbers of commuters, particularly during peak hours. Coordination between the county, state and cities is also critical to ensuring that adequate levels of service are available along major commuting routes within the county. In the past as job growth continued, limited public transit serving major employment centers such as Salem and Dallas became feasible and the Chemeketa Area Regional Transit System (CARTS) now serves Dallas, Independence and Monmouth. Additionally, the Salem Area Mass Transit District (Cherriots) and the Grand Ronde Tribal Council entered into an agreement and service began in January 2009 between the downtown Salem Transit Mall, Spirit Mountain Casino and Hotel and the Tribal Governance Center with service focusing on work shifts at the Casino.

The general “aging” of the population will continue and will likely result in an increased demand for paratransit and public transit services for elderly residents. Coupled with the likely increases in commuter traffic, additional demand for transit service could contribute to improvements in the local transit system.

# Transportation Goals and Policies

---

The transportation system is a primary structuring element of the county, region and urban areas. Historically, the movement of people and goods to and through the region has directly affected the development of Polk County. Prior to the appearance of the automobile, development was largely limited to areas served by rail or water. As the automobile became increasingly popular and as roads were built to accommodate it, people were able to settle in previously inaccessible locations which were often great distances from their jobs.

As the cost of petroleum increases and the supply decreases, we are forced to reassess our reliance on the automobile as our primary mode of transportation. While private vehicles will continue to be the only feasible way for many citizens to travel, allowances must be made for those who are not able to operate motor vehicles and for those who choose not to do so.

Realizing the importance of the transportation system on land use and economic viability of the county, Polk County adopts the following goals and policies:

## GOAL 1

1. To provide and encourage a balanced, energy efficient transportation system giving due consideration to all modes of travel consistent with the Polk County Comprehensive Land Use Plan.
2. To develop and assist in the development of a safe, convenient, and economic transportation system available to all persons.

## POLICIES

### 1. Air Transportation

- 1.1 Polk County will cooperate with the cities of Independence and Monmouth in preventing the construction of structures which intrude into the airspace necessary for the safe operation of aircraft using the Independence State Airport, and in preventing uses of the land in the vicinity of the airport which would conflict with noise generated by the aircraft.
- 1.2 Polk County will develop procedures for the review of proposed private and public airports and heliports.

### 2. Highways

- 2.1 Polk County will adopt and periodically review a functional classification system for highways within the county.

- 2.2 Polk County will discourage direct access from adjacent properties onto those highways designated as arterials whenever alternative access can be made available.
- 2.3 Polk County will ensure that roads for which it has maintenance responsibility are kept in serviceable condition.
- 2.4 Polk County will develop a program for the assignment of priorities to road maintenance and improvement projects which take into consideration:
  - a. The existence of hazardous conditions;
  - b. The type and volume of traffic;
  - c. The type and condition of the road surface; and
  - d. The importance of the road to the overall system.
- 2.5 Polk County will consider the road network as an important and valuable component of the transportation system.
- 2.6 Polk County shall discourage adding mileage to the county road system until the following criteria are satisfied:
  - a. The condition of the road proposed for acceptance into the system meets the county road standards, or
  - b. An overall increase in efficiency in the county road network can be demonstrated.
- 2.7 Polk County shall explore options to reduce road mileage under the county's jurisdiction by working with the cities in Polk County to transfer the jurisdiction of county roads for maintenance and improvement when urbanization occurs. This will occur when the road functions as a city street and / or when urban development makes it apparent that a city is better equipped to maintain and improve the road.
- 2.8 Polk County will strive to maintain a volume-to-capacity ratio of 0.75 or less on all county arterials and collectors, and will initiate corrective action to prevent a level of operation greater than 0.75.
- 2.9 Polk County does not currently designate any hazardous material routes. The county will periodically review the need for designating routes.
- 2.10 Polk County does not currently designate any truck routes; however, any load limited bridges or roads may prevent trucks from using some routes from time to time. The county will periodically review the need for designating routes.
- 2.11 Polk County will evaluate the need for Park and Ride facilities when realigning county roadways and before disposing of resulting surplus right-of-way. If a Park and Ride facility is established by the county, the county will erect signs notifying users the county is not responsible for damage to vehicles, thefts of vehicles, or thefts from vehicles.

- 2.12 Polk County will work with private companies and public agencies to establish an economically feasible public transportation system appropriate to the needs of its citizens, including the disadvantaged and disabled. Polk County will support the Chemeketa Area Regional Transit System, the Salem Transit District, and the Yamhill County Transit District in their efforts to serve Polk County.
- 2.13 Polk County will use every practical opportunity to enhance the intermodal connectivity of its transportation system.
- 2.14 All county bicycle facilities shall be constructed in accordance with county bicycle standards.
- 2.15 Support activities that maintain adequate utility services (electricity, communications, natural gas, etc.) into, within, and through Polk County.

### **3. Public Transportation**

- 3.1 Polk County will ensure continuation of public transportation to communities which continue to need and use such service and will explore methods of providing additional service where needed.
- 3.2 Polk County will assist in the provision of transportation services to the transportation disadvantaged.
- 3.3 Polk County will work with public and private transit providers to achieve the goals of “The Salem-Keizer Transit Specialized Transportation Plan for Polk and Marion Counties,” dated April 2007 by Nelson Nygaard Consulting Associates, and the “Yamhill County Coordinated Human Services Public Transportation Plan,” dated September 2007 by the Mid-Willamette Valley Council of Governments.

### **4. Other**

- 4.1 Polk County will consider commercial and industrial development where such development has access to more than one mode of transportation.
- 4.2 Polk County will resist the abandonment of railroad lines which contribute to the economic viability of the county and will preserve and protect rail rights-of-way where needed for future public use.
- 4.3 Polk County will review right-of-way acquisitions for transmission lines and pipelines in order to minimize adverse impacts on the community and, where appropriate, require that the proposed facilities shall:
  - a. Minimize adverse impacts on land owners by locating on or near property boundaries wherever possible;
  - b. Utilize or locate near existing utility, rail or highway rights-of-way or easements;
  - c. Recognize impact on crops and field drain tile installations;

- d. Recognize and respect accepted farming practices in the affected areas for preservation and replacement of topsoil and to minimize erosion potential;
  - e. Prevent the creation of unusable parcels;
  - f. Consider utilization of parts of rights-of-way for multiple uses where conditions warrant and conflicts would not be created with adjacent land uses; and
  - g. Minimize visual impact and potential environmental damage.
- 4.4 Polk County will require dedication or reservation for future dedication of right-of-way for transportation improvements, as identified in an adopted Corridor Refinement Plan in the adopted Polk County Transportation Systems Plan.
- a. The dedication or reservation will be required at the time that a partition or subdivision is proposed on a particular property. The dedication or reservation shall be for the property subject to the development proposal.
  - b. For development activity other than in (a) above, the property owner shall sign a Waiver of Remonstrance document for other development activity. Polk County will require setbacks for new structures or additions to existing structures from the future road right-of-way identified in the adopted Transportation Systems Plan.
- 4.5 Polk County shall provide individual property owner notification and an opportunity to participate in proposals to adopt a Corridor Refinement Plan or new road alignments into the Transportation Systems Plan.
- 4.6 Polk County shall adopt findings consistent with takings law prior to a decision that an exaction is necessary or will be necessary to implement a new road or highway corridor. Upon such findings, Polk County will compensate property owners for all exactions with said compensation to be calculated based on existing county compensation policy and applicable law. The adoption of a corridor refinement plan shall include specific findings as to the impact to each property identified in the corridor.

## Goal 2

To maintain an ongoing transportation planning process keyed to meet the needs of the traveling public and coordinated among the state, regional, and local jurisdictions.

## POLICIES

- 2.1 Polk County will continue to coordinate transportation planning with and consider the needs of its cities, other counties, the region, and the state. The county will support the transportation planning efforts of all its municipalities.
- 2.2 Polk County will notify ODOT of all proposals requiring access to a state highway, and any land use change or development within 500 feet of a state highway. Polk County will notify the owner of an airport, defined by the Oregon Department of Aviation as a “public use airport,” and the Oregon Department of Aviation of any land use change or

development within 5,000 feet of a visual flight rules public use airport or 10,000 feet of an instrument flight rules public use airport.

- 2.3 Polk County will continue to participate in and support state and regional transportation planning efforts.
- 2.4 Polk County recognizes the function of Oregon Highways 18 and 22 as being critically important to a wide range of statewide, regional, and local users, and that these highways serve as the primary route linking the mid-Willamette Valley to the Oregon Coast, with links to Lincoln City and Tillamook.
- 2.5 Polk County recognizes the benefit of Oregon Highway 99W as a critically important north-south route linking areas within the mid-Willamette Valley. Oregon Highway 99W also serves as an emergency alternative to and reliever for Interstate 5. The county supports a continuing effort to enhance and maintain the capability of Oregon Highway 99W.
- 2.6 Polk County will support the development of and provision for public education opportunities and informational material to increase awareness of transportation options available in the county.
- 2.7 Polk County will promote and encourage carpooling.
- 2.8 To ensure effective management of the state and local transportation system, it is the policy of Polk County that a traffic coordination meeting shall be held with the Oregon Department of Transportation a minimum of two weeks in advance of any major event scheduled to be held at the Polk County Fairgrounds. A major event is defined to be any event that has a potential to generate more than 600 vehicle trips in any single hour of the event's operation or 50 percent of peak hour traffic (whichever is higher). The ODOT contact for this Events Management Policy shall be the ODOT District 3 Manager. The outcome of the traffic coordination meeting shall be agreement about traffic management measure and measure implementation responsibilities. These measures include, but are not limited to, increased traffic enforcement, advance notice, and other public information efforts.
- 2.9 Polk County will provide ODOT notification to ensure that ODOT is involved as early as possible in the assessment of any redevelopment or new development proposal within the Rickreall community with a trip generation potential that significantly exceeds the trip generation assumptions for the Rickreall community adopted into the Polk County TSP as part of the Rickreall Junction Facility Plan. The ODOT contact for any such development shall be the ODOT Area 3 Planner.
- 2.10 Polk County recognizes that Oregon Highways 51, 221, and 223 provide important connections between urban areas in Polk County and provide a link for rural areas to the urban centers. The county supports a continuing effort to ensure that these routes retain an adequate level of service for the variety of uses that these highways serve.

## Goal 3

To maintain a transportation system supportive of a sustained, geographically distributed and diversified economy.

### Policies

- 3.1 Polk County will encourage rural residential, commercial and industrial development where such development has access to more than one mode of transportation.
- 3.2 Polk County recognizes the importance of resource-related uses, such as agriculture and forestry to the local economy, and the need to maintain a transportation system that provides opportunities for the harvesting and marketing of agricultural and forest products.
- 3.3 Polk County supports the spot dredging of the Willamette River along the county's border to maintain the river's capability for water borne transportation and recreation.
- 3.4 Polk County encourages and supports the improvement of rail infrastructure to maintain rail service as an effective mover of goods. Concurrently, the county supports safety improvements at rail crossings.
- 3.5 Polk County supports continued use of ODOT Highway Funds to help support the Buena Vista Ferry service and for ferry related improvements.
- 3.6 Polk County supports planning for and construction of, a third bridge over the Willamette River.
- 3.7 Polk County incorporates into the 2009 Transportation Systems Plan the “OR 22 (W) Expressway Management Plan, Derry Overcrossing to Doaks Ferry Road.” Polk County supports planning for, and construction of, an overpass over Oregon Highway 22 at Greenwood Road with no access to Oregon Highway 22. Polk County supports planning for, and construction of, a grade-separated interchange for Oregon Highway 22 / Oregon Highway 51 and associated frontage and backage roads to support the interchange. Polk County supports planning for and construction of, a grade-separated interchange for Oregon Highway 22 / Doaks Ferry Road in the area west of College Drive and east of the Bonneville Power Administration facility and associated frontage and backage roads to support the interchange.
- 3.8 Polk County incorporates into the 2009 Transportation Systems Plan the “ORE-18 Corridor Refinement Plan, H.B. Van Duzer Forest Corridor to Steel Bridge Road,” June 2001 (amended May 2004), prepared by ODOT and the Mid-Willamette Valley Council of Governments. Polk County supports planning for, and construction of, a grade-separated interchange for OR18 / OR22 to replace the at-grade intersection of OR 18 / OR 22 between the Spirit Mountain Casino and the current intersection of OR 18 / OR 22 and associated frontage and backage roads to support the interchange.



- 3.9 Polk County incorporates into the 2009 Transportation Systems Plan the “Rickreall Junction Transportation Facility Plan,” September 2004, prepared by ODOT.

## **Goal 4**

To implement a level of transportation development that positively contributes to Polk County's livability.

## **POLICIES**

- 4.1 Polk County will require setbacks from the public right-of-way of principal arterials such as Oregon Highway 18 and 22, and Oregon Highway 99W for commercial and industrial uses along such facilities.
- 4.2 To allow comprehensive plan map and zone map amendments that may generate trips up to the planned capacity of the transportation system, Polk County will consider road function, classification, road capacity and existing and projected traffic volumes, as criteria for comprehensive plan map and zone map amendments.
- 4.3 Polk County will strive to take advantage of technological advances to improve the transportation system.
- 4.4 Aesthetics will be considered when new construction or reconstruction is proposed on the road network; however, safety needs will not be compromised.
- 4.5 Polk County supports the Salem-Keizer Metropolitan Planning Organization's continued allocation of Federal Surface Transportation Funds to implement the Regional (aka City of Salem) Rideshare Program.
- 4.6 Polk County recognizes that properties contiguous to the Oregon Highway 99W / Oregon Highway 22 interchange, located in the Exclusive Farm Use Zone, are specifically identified as a “separator” or “buffer” between the highway interchange and the community of Rickreall. These properties will remain in an Exclusive Farm Use Zone, subject to overlay zone provisions to ensure that land uses in the vicinity of the Rickreall Interchange will not contribute to the interchange exceeding the mobility standards of the Oregon Highway Plan.

## **GOAL 5**

To protect the function and operation of the Fort Hill Road interchange facility and the local street network within the Interchange Area Management Plan (IAMP) area, and to ensure that changes to the planned land use system are consistent with protecting the long-term function of the interchange and the local street system.

## POLICIES

- 5.1 To preserve interchange capacity for the next increment of community growth that is anticipated to occur beyond the 20-year planning horizon, Polk County has created a Fort Hill Interchange Management Area (FHIMA) Overlay Zoning District. This Overlay Zoning District includes all land within the Fort Hill Interchange Area Management Plan study area, as shown in the IAMP. Within this Overlay Zone, Polk County has established regulations that provide additional protections for the interchange in addition to the underlying zoning district's requirements. Polk County supports amending the OHP to specify that the mobility performance standard for the Fort Hill Interchange is a v/c ratio of 0.70 where eastbound highway ramp traffic merges with traffic on the highway, 0.50 where westbound highway ramp traffic merges with traffic on the highway, and 0.35 at the ramp terminal intersections with the local road network.
- 5.2 Consistent with the Unincorporated Communities Plan element in the Polk County Comprehensive Plan, the county supports development in Fort Hill that retains its predominantly residential character, while enhancing the commercial and industrial opportunities in the community in accordance with the existing land use designations.
- 5.3 Polk County promotes the re-development of sites such as the Fort Hill Lumber Mill site to encourage rural industrial employment growth in unincorporated communities. Polk County recognizes the Fort Hill Road Interchange as critical to the feasibility of developing future industrial uses at this mill site.
- 5.4 Polk County is committed to preserving the capacity of the Fort Hill Road Interchange principally for the movement of industrial goods and workers to and from Fort Hill. Any proposal to change the Comprehensive Plan land use map, or the zoning map, or to change the allowable uses within the Fort Hill Interchange Management Area Overlay Zone in a manner that would create additional trips from what is allowed within the current zoning and assumed in the IAMP must include a review of transportation impacts consistent with OAR 660-012-0060. This review must ensure that sufficient capacity would be reserved for development consistent with the planned land uses in the unincorporated rural community.
  - a. This review must give special consideration to the Fort Hill Lumber Mill site. If the lumber mill is in operation at the time when the Comprehensive Plan amendment proposal is made, the traffic produced by the mill site must be considered in the traffic impact analysis. If the lumber mill site is not in operation, the traffic impact analysis must reserve 210 trips for the PM peak hour for future industrial use at the Fort Hill Lumber Mill site. If use of the mill site is proposed for a use that is not industrial, no vehicle trips are reserved and the anticipated PM peak hour trips generated by the proposed use will be considered in the traffic impact analysis. This reservation of vehicle trips ensures sufficient interchange capacity for industrial operations at the lumber mill site in accordance with the need analysis included in the Fort Hill Interchange Area Management Plan.

- b. Any proposal to change the Comprehensive Plan land use map or the zoning map or to otherwise change the allowable uses within the Fort Hill Interchange Management Area Overlay Zone must include a finding that the change will not exceed the applicable mobility standards at the interchange. If future developments are shown to exceed mobility standards at the interchange; either the change shall not be allowed or the developer shall be held responsible for required improvements to bring the interchange operation in line with mobility standards.
- 5.5 Polk County supports land uses in the vicinity of the Fort Hill interchange consistent with the land use assumptions in the IAMP, and consistent with the stated function of the interchange as described in the IAMP.
- a. Consistent with this policy, the county supports continued resource uses of land in the Fort Hill Interchange Management Area Overlay Zone in accordance with the agricultural, farm/forest, and forest comprehensive plan designations that currently exist in most of this area. A proposal to change the land use designations of resource land would require an exception to the Statewide Land Use Planning Goals 3 (Agricultural Lands) and Goal 4 (Forest Lands).
- 5.6 It is the policy of Polk County to improve highway operations and safety by supporting construction of public roads that provide reasonable alternate access. When reasonable alternate access is provided, Polk County supports eliminating direct highway access. Whenever a property with an approach road to OR-18 that is within the Fort Hill Interchange Management Area Overlay Zone is affected by a land use action, the Polk County decision to authorize the land use action will include the following statement: “Construction of a public road eastward from the Fort Hill Interchange will provide reasonable alternate access to the land use authorized by this decision. Direct highway access will be eliminated when this road is constructed.”
- 5.7 Polk County will provide notice to ODOT for any land use actions proposed within the IAMP management area.
- 5.8 The Fort Hill Interchange highway project provides improvements needed to accommodate land uses authorized in the 2007 Polk County Comprehensive Plan designations while operating OR-18 / OR-22 consistent with applicable highway mobility standards. Proposed changes to the current plan designations within the section of highway evaluated by the “H.B. Van Duzer to Steel Bridge Road Refinement Plan” must evaluate the impacts to mobility at the Fort Hill Interchange.
- 5.9 If future changes to the land use designations or uses allowed in the IAMP management area initiated by any party (including Polk County, property owner, or private developer) would cause the adopted interchange mobility standards to be exceeded at the end of the planning period, the initiating party shall propose amendments to the IAMP and shall prepare a funding plan for ODOT and Polk County review. The funding plan shall address the provision of any required improvements to the Fort Hill Interchange. Proposed IAMP amendments shall be coordinated with ODOT and Polk County staff.

The revised IAMP and funding plan shall be submitted to Polk County and the Oregon Transportation Commission for approval and adoption.

5.10 Polk County will support ODOT’s authority to monitor and comment on any future actions that would amend the Fort Hill Rural Unincorporated Community boundary if that boundary change is within the IAMP management area.

**Table 9** of the Road Plan lists access management standards for state highways from the 1991 Oregon Highway Plan. These standards are no longer current and should be replaced with updated standards from OAR 734-051. These standards are being relied upon to implement the Fort Hill IAMP. This update will make the TSP consistent with the proposed updated standards in the Polk County Ordinance shown in Exhibit C. **Table 9**, including footnotes 1-7 shall be replaced as identified below:

**Table 9A**  
**Access Management Spacing Standards for**  
**Private and Public Approaches on Statewide Highways** <sup>(1)(2)(3)(4)</sup>  
**(OAR 734-051-0115) (Measurement is in Feet)\***

Posted Speed <sup>(5)</sup>	Rural Expressway **	Rural	Urban Expressway ** ***	Urban ***	STA
≥55	5280	1320	2640	1320	
50	5280	1100	2640	1100	
40 & 45	5280	990	2640	990	
30 & 35		770		720	(6)
≤25		550		520	(6)

NOTE: The numbers in superscript <sup>(1)</sup> refer to explanatory notes that follow Table 9C.

\* Measurement of the approach road spacing is from center to center on the same side of the roadway.

\*\* Spacing for Expressway at-grade intersections only. See the OHP for interchange spacing guidelines.

\*\*\* These standards also apply to Commercial Centers.

**Table 9B**  
**Access Management Spacing Standards for**  
**Private and Public Approaches on Regional Highways** <sup>(1)(2)(3)(4)</sup>  
**(OAR 734-051-0115) (Measurement is in Feet)\***

Posted Speed <sup>(5)</sup>	Rural Expressway **	Rural	Urban Expressway ** ***	Urban ***	STA
≥55	5280	990	2640	990	
50	5280	830	2640	830	
40 & 45	5280	750	2640	750	
30 & 35		600		425	(6)
≤25		450		350	(6)

NOTE: The numbers in superscript <sup>(1)</sup> refer to explanatory notes that follow Table 9C.

\* Measurement of the approach road spacing is from center to center on the same side of the roadway.

\*\* Spacing for Expressway at-grade intersections only. See the OHP for interchange spacing guidelines.  
 \*\*\* These standards also apply to Commercial Centers.

**Table 9C**  
**Access Management Spacing Standards for** <sup>(1)(2)(3)(4)</sup>  
**Private and Public Approaches on District Highways**  
**(OAR 734-051-0115) (Measurement is in Feet)\***

<b>Posted Speed</b> <sup>(5)</sup>	<b>Rural Expressway</b> **	<b>Rural</b>	<b>Urban Expressway</b> ** ***	<b>Urban</b> ***	<b>STA</b>
≥55	5280	700	2640	700	
50	5280	550	2640	550	
40 & 45	5280	500	2640	500	
30 & 35		400		350	(6)
≤25		400		350	(6)

<sup>(1)</sup>

NOTE: The numbers in superscript <sup>(1)</sup> refer to explanatory notes that follow Table 9C.  
 \* Measurement of the approach road spacing is from center to center on the same side of the roadway.  
 \*\* Spacing for Expressway at-grade intersections only. See the OHP for interchange spacing guidelines.  
 \*\*\* These standards also apply to Commercial Centers.  
Notes on Tables 9A, 9B, and 9C:  
 (1) These access management spacing standards are for un-signalized approaches only. Signal spacing standards supersede access management spacing standards for approaches.  
 (2) These access management spacing standards do not apply to approaches in existence prior to April 1, 2000 except as provided in OAR 734-051-0115(1)(c) and 734-051-0125(1)(c).  
 (3) For infill and redevelopment, see OAR 734-051-0135(4).  
 (4) For deviations to the designated access management spacing standards see OAR 734-051-0135.  
 (5) Posted (or Desirable) Speed: Posted speed can only be adjusted (up or down) after a speed study is conducted and that study determines the correct posted speed to be different than the current posted speed. In cases where actual speeds are suspected to be much higher than posted speeds, the Department reserves the right to adjust the access management spacing accordingly. A determination can be made to go to longer access management spacing standards as appropriate for a higher speed. A speed study will need to be conducted to determine the correct speed.  
 (6) Minimum access management spacing for public road approaches is the existing city block spacing or the city block spacing as identified in the local comprehensive plan. Public road connections are preferred over private driveways and in STAs driveways are discouraged. However, where driveways are allowed and where land use patterns permit, the minimum access management spacing for driveways is 175 feet (55 meters) or mid-block if the current city block spacing is less than 350 feet (110 meters).

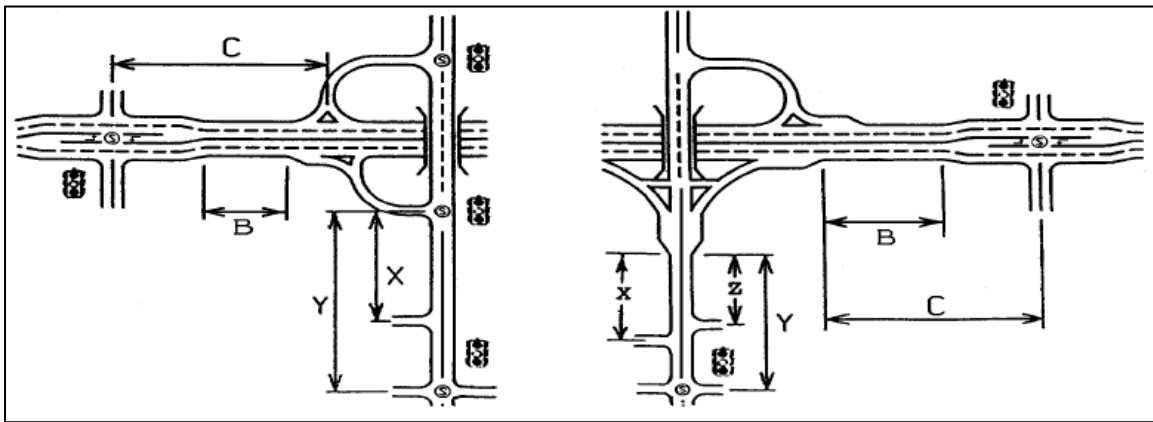
**Table 9D**  
**Minimum Spacing Standards Applicable to Non-Freeway Interchanges**  
**with Two-Lane Crossroads**  
**(OAR 734-051-0125)**

<b>Category of Mainline</b>	<b>Type of Area</b>	<b>Speed of Mainline</b>	<b>Spacing Dimension</b>				
			<b>B</b>	<b>C</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
Expressways, Statewide, Regional and District Highways	Fully Developed Urban*	45 mph (70 kph)	2640 ft (800 m)	1 mile (1.6 km)	750 feet (230 m)	1320 feet (400 m)	750 feet (230 m)
	Urban	45 mph (70 kph)	2640 ft (800 m)	1 mile (1.6 km)	1320 feet (400 m)	1320 feet (400 m)	990 feet (300 m)
	Rural	55 mph (90 kph)	1 mile (1.6 km)	2 miles (3.2 km)	1320 feet (400 m)	1320 feet (400 m)	1320 feet (400 m)

Notes:  
 1) If the crossroad is a state highway, these distances may be superseded by the Access Management Spacing Standards, providing the distances are greater than the distances listed in the above table.

- 2) No four-legged intersections may be placed between ramp terminals and the first major intersection.
  - 3) No application shall be accepted where an approach would be aligned opposite a freeway or expressway ramp terminal (OAR 734-051-0070(4)(a)).
  - 4) Use four-lane crossroad standards for urban and suburban locations that are documented to be widened in a Transportation System Plan or corridor plan.
  - 5) No at-grade intersections are allowed between interchanges less than 5 miles apart.
    - B = Distance between the start and end of tapers
    - C = Distance between nearest at-grade and ramp terminal intersections or the end/start of the taper section
    - X = Distance to the first approach on the right; right in/right out only
    - Y = Distance to first intersections where left turns are allowed
    - Z = Distance between the last right in/right out approach road and the start of the taper for the on-ramp
- \* *Fully Developed Urban Interchange Management Area: Occurs when 85% or more of the parcels along the influence area are developed at urban densities and many have driveways connecting to the crossroad. See the definition in the 1999 Oregon Highway Plan.*

**Measurement of Spacing Standards for Table 9D**



# Regulatory Framework and Relationship to Other Plans

---

## Summaries of Relevant Plans and Regulations

### Federal

There were two significant actions, one federal and one state, which occurred relatively close together which prompted a major transportation planning effort within Oregon. The federal action, the Intermodal Surface Transportation Efficiency Act (ISTEA) provided transportation funding for six years beginning in 1991. Furthermore, ISTEA required each state to have a statewide planning process and develop a transportation plan and program. Additionally, each state was required to develop, establish, and implement management systems to address safety, congestion, public and intermodal transportation. The second action was when Oregon implemented many of these federal provisions by adopting the Oregon Transportation Plan on September 15, 1992.

### State

The Oregon Transportation Plan (OTP) notes that Oregon's population growth is expected to outpace the rest of the nation, and most of the state's growth is projected in the Willamette Valley. Goals of the OTP stress that people should have transportation choices in urban areas which are reliable and accessible to all potential users. It further states that statewide transportation corridors must provide access to all areas of the state, nation, and world. The plan's chosen method to reach the state's aims is called the "Livability Approach." This approach calls for:

- a. Intercity bus or commuter bus service to cities with a population over 2,500;
- b. Urban Transit service available in communities with a population over 25,000;
- c. Additional major highway freight corridors on non-Access Oregon Highways, and
- d. Establishment of a Willamette Valley Transportation System Coordination Area.

The OTP is augmented by several transportation type specific plans known as modal elements. One modal element of the OTP is the Oregon Highway Plan. It contains criteria and standards applicable to the various levels of state highways.

The Oregon Highway Plan explains its relationship to other plans, and states that the Oregon Transportation Commission's (OTC) goal is not to impose this plan on local governments, but where possible, to seek consensus with local governments. The Highway Plan contains policy statements such as:

- a. The primary function of highways of statewide importance (e.g., Oregon Highways 18 and 22) is to provide connections and links to larger urban areas, ports and major recreation areas that are not directly served by the interstate system;
- b. The primary function of regional highways (e.g., Oregon Highway 99W) is to provide connections and links to areas within regions of the state, between small urbanized area and larger population centers. A secondary function is to serve land uses in the vicinity of these highways; and,
- c. The primary function of district highways (e.g., Oregon Highways 51, 221, 223) is to serve local traffic and land access. These roads often served a higher function in the past but now serve a similar function to county roads and city streets.

In the rural areas, highways of statewide significance are expected to function at Level of Service (LOS) B, while regional and district highways aim for LOS C. The plan also contains standards for locating accesses on state highways.

Over the years, ISTEA has been continued and as of 2009 the current legislation is referred to as the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

Another significant state action which combined with ISTEA, was the adoption by the Oregon Land Conservation and Development Commission in April 1991 of Oregon Administrative Rule (OAR) 660, Division 12, which is commonly known as the Transportation Planning Rule (TPR). It implements Oregon Statewide Planning Goal 12, Transportation, and put transportation planning into neighborhoods across the state. It identifies transportation facilities, services, and improvements which may be permitted on rural lands consistent with the statewide planning goals. The TPR also requires coordination of all aspects of transportation plans and prescribes certain predetermined outcomes such as reduction of automobile use.

Although the TPR is wholly applicable to the Polk County TSP, certain portions were found to play key roles in developing the TSP and its conclusions. Some of these are:

- a. OAR 660-12-020 requires a coordinated network of transportation facilities adequate to serve state, regional, and local transportation needs.
- b. A determination of transportation needs as provided in OAR 660-12-030; and a road plan for a system of arterials and collectors.
- c. Use of analyses of state and regional transportation needs in preparing local TSPs, and also the need to support movement of goods and services to support industrial and commercial development in accordance with Goal 9 (Economic Development).
- d. Within urban growth boundaries (UGB), determination of regional and local needs shall be based on 20-year "population and employment forecasts..." and "to encourage urban development on urban lands prior to conversion of urbanizable lands" (Goal 14).
- e. OAR 660-12-035 contains requirements for evaluating and selecting transportation alternatives including: improvements to existing facilities, new facilities, system and



demand management measures, and the no-build system alternative required by the National Environmental Policy Act of 1969.

- f. Additional requirements support urban and rural developments by providing facilities and services to support the land uses shown in the comprehensive plan.
- g. The transportation system developed shall "minimize conflicts and facilitate connections between modes of transportation." Furthermore, the system must consider issues such as air, water, energy, etc.
- h. Five-year interim benchmarks to evaluate the plan's progress.
- i. The construction of new roads outside the UGB is influenced by provisions of OAR 660-12-065, Transportation Improvements on Rural Lands. This section identifies the transportation work that is consistent with Goal 3 (Agricultural Lands), Goal 4 (Forest Lands), Goal 11 (Public Facilities and Service), and Goal 14 (Urbanization). New transportation facilities in rural areas may require a goal exception.

Another modal plan is the Oregon Bicycle and Pedestrian Plan. It guides entities in developing bikeways and walkways to fulfill the TPR requirements, and provides standards for planning, designing and maintaining bikeways and walkways. This modal plan considers bike and walkway issues along public rights-of-way while recreational bicycling and walking issues are addressed in the Oregon Recreational Trails Plan. The Bike Plan, as the document is generally known, expresses the belief that implementing a network of bikeways and walkways will support the OTP's objective of doubling the number of bicycling and walking trips over the next 20 years. Current guidance is to incorporate bike and pedestrian plans into the local TSP so that these modes of transportation are not considered in isolation or ignored. Some of the key standards contained in the plan are:

- a. Bike lanes are generally not recommended on rural highways with posted speeds of 55 m.p.h. (90 km/h),
- b. The standard width of a bike lane is 6 feet (1.8 m), with a minimum width of 4 feet (1.2 m) from the outside edge of the white (fog) line to the outside edge of the pavement on open shoulders and 5 feet (1.5 m) from the face of a curb, guardrail, or parked cars.

Another state modal plan is the Oregon Public Transportation Plan (1997). Like the Bike Plan, it is a 20-year guide in support of the Oregon Transportation Plan. Goals expressed in the plan are: a desire to provide mobility alternatives to the single-occupancy vehicle, and to have a statewide system appropriate to population and densities. This plan outlines a three-step process for implementing a public transportation system. This process considers limited funding by phasing in the implementation. But the final outcome in small communities and rural areas is to: continue reliance on dial-a-ride programs with emphasis on the elderly and disabled passenger, and to evolve into a traditional fixed route system. Expanded intercity connections are also desired. While many of the requirements are for cities, there are rural requirements to: provide an accessible service to anyone requesting service, provide a coordinated centralized scheduling system in each county, provide phone service to the scheduling system 40 hours weekly from Monday through Friday, and respond to service requests within 24 hours.

Other state modal plans are the Oregon Rail Passenger Policy and Plan, and the Oregon Rail Freight Plan.

## **Regional**

The Willamette Valley Transportation Strategy was adopted in 1995 as an element of the Oregon Highway Plan and contains three options for transportation development. The options elaborate on the Oregon Transportation Plan's "Livability Alternative." The plan recommends the "moderate" option. Some aspects of this option most likely to affect Polk County include goals to:

- a. perpetuate the plan's advisory group,
- b. aggressively implement demand management programs,
- c. identify new funding methods,
- d. evaluate pricing mechanisms to reduce congestion, and
- e. expand transit.

## **Corridors**

Two interim corridor strategies, endorsed by the Oregon Transportation Commission and directly affecting Polk County were prepared in the 1990s. One was for the Portland to Lincoln City corridor (Oregon Highway 99W and Oregon Highway 18), and the other was for the Willamina to Salem corridor (Oregon Highway 22). These strategies identified transportation goals and management objectives for the applicable corridors. The strategies were the first of three planning phases, with the second phase being the general/system plan, and the third, if needed, consisting of refinement plans.

The general plans for both corridors make provisions for improvements which can be expected along the corridor. The at-grade intersection of Oregon Highway 22 and Oregon Highway 99W has been improved to be a grade-separated interchange that was designed so that future improvements can be constructed as trip generation increases.

The portion of the Oregon Highway 99W and Oregon Highway 18 Interim Strategy which most affected Polk County was from the eastern boundary of the H. B. Van Duzer corridor to the intersection of Oregon Highway 18 / Oregon Highway 22 at Wallace Bridge near Willamina. It carried the most traffic, exceeding an average daily traffic (ADT) count of 17,000 in 1996. The strategy noted that traffic volumes were highest on Sundays during the summer. The area also had a high number of crashes, and included a short segment ranked in the upper 10 percent on the state's Safety Priority Index System (SPIS). The strategy suggested widening the segment to four lanes. Passing, turning, and truck climbing lanes were also to be considered, as well as improvements to the local street system, an access management plan, and an evaluation of the need for a grade-separated interchange near Valley Junction. The state followed-up on the studies and in 2009 completed the Fort Hill interchange. A second phase of that project is a new interchange to be constructed between Spirit Mountain Casino and Hotel and the intersection of Oregon Highway 18 / Oregon Highway 22 just east of the Casino.

The westernmost segment of the Willamina to Salem corridor (Oregon Highway 22) Interim Corridor Strategy is from the intersection of Oregon Highway 22 with Oregon Highway 18 near Willamina, to its intersection with Oregon Highway 51. This segment covers over 20 miles. The busiest portion of the segment carried an average of nearly 26,000 vehicles per day during 1996. The Safety Priority Index System identified numerous locations ranked in the top 10 percent. Strategy recommendations in this segment included: (1) exploration of park and ride lots at major highway intersections, (2) examination of demand factors and opportunities for bus service along the corridor, (3) targeting safety improvements to high accident locations, and (4) analysis of alternatives to reduce accident risks at the intersections with regional and district highways. Again, the state followed-up on the studies and in the mid-2000s completed the grade-separated interchange at Oregon Highway 99W / Oregon Highway 22. Other improvements have been completed such as the reconfigured access at the Salt Creek Market at Oregon Highway 22 / Salt Creek Road-Starr Road.

Although the western segment was emphasized, a portion of the eastern segment, from Oregon Highway 51 to the Willamette River bridges, had an even larger amount of traffic and was significantly affected by commuting traffic from West Salem. High crash counts caused the area to be designated as a safety corridor. ODOT has prepared the Expressway Management Plan for Oregon Highway 22 between the Greenwood Road intersection and the Doaks Ferry Road intersection. It is included in the 2009 Polk County Transportation Systems Plan. It includes a Greenwood Road overpass over Oregon Highway 22, a grade-separated interchange at Oregon Highway 22 / Oregon Highway 51 with county frontage and backage roads, and a new grade-separated interchange at Oregon Highway 22 / Doaks Ferry Road between College Drive and the Bonneville Power Administration facility.

The county supports the state's efforts and supports the inclusion of their recommendations into the State Transportation Improvement Program (STIP).

Another important corridor-related effort is the third bridge over the Willamette River. This process is working toward the construction of a third bridge over the River. The county has participated in the process and supports the third bridge concept.

## **County**

The Polk County Comprehensive Plan contains goals and policies relating to the state's goals, including transportation. The goals and policies serve as a base for the goals and policies contained in the earlier portions of this document. The Comprehensive Plan Map (**Figure 1**) shows the broad land use designations within the county. The Comprehensive Plan designations are implemented through the county's Zoning Ordinance and Zoning Map (**Figure 2**). **Table 1** shows the number of acres, by zone, for lands within Polk County.

**Table 1**  
**Number of Acres by Zoning Designation**  
**Polk County**

Zoning Designation	Acres - 1997	Acres – 2009	Acres Changed
Acreage Residential (AR-5)	9,426	9,413	-13
Agricultural Forestry (AF-10)	-na-	40.33	40.33
Commercial (CG, CO, CR)	277	325	48
Exclusive Farm Use (EFU)	184,562	183,565	-997
Farm Forest (FF)	28,832	28,969	137
Farm Forest Overlay (FFO)	8,192	8,083	-109
Industrial (IC, IP, IL, HI)	770	807	37
Mineral Extraction (ME)	527	527	0
Public (PA,PC,PE,PF,PP,PS)	3,572	3,569	-3
Suburban Residential (SR)	4,641	4,662	21
Timber Conservation (TC)	226,472	227,311	839

*Source: Polk County Land Information Service, 1997; Polk County Community Development Dept., 2009.*

The Polk County Zoning Ordinance provides for uses and development standards for commercial, industrial, residential, and resource (farm and forest) zones throughout the unincorporated portions of the county. Consistent with ORS, Chapter 215 and OAR 660, Division 6 and Division 33, the zoning ordinance allows transportation and utility facility improvements, as either permitted or conditional uses, in farm and forest zones within the county. The last portion of this section (Transportation Permit Requirements) references the types of facilities and improvements which are permitted outright or permitted conditionally in these zones.

Other transportation improvements beyond those listed may be permitted as conditional uses, subject to the county taking an "exception" (see ORS 197.732) to any applicable statewide planning goals. The zoning ordinance also contains provisions relating to transportation issues such as vision clearances, street widths, parking requirements, and road work.

**Figure 1**  
**Comprehensive Plan Map**

This page not used.

**Figure 2**  
**Zoning Map**

This page not used.



New public and private roads shall be designed and constructed in accordance with the following widths:

	<b>Right-of-Way Urban/Rural</b>	<b>Developed Roadway (including sidewalk/shoulder) Urban/Rural</b>
Major Arterial	84ft./NA	70ft./NA
Minor Arterial	68ft./60ft.	44ft./44ft.
Major Collector	68ft./60ft.	44ft./36ft.
Minor Collector	64ft./60ft.	44ft./30ft.
Minor (local) Streets	60ft./60ft.	44ft./22ft.
Cul-de-Sac	60ft./60ft.	34ft./22ft.

## Cities

The Monmouth Transportation System Plan was adopted in October 1997 and was updated in 2009. The functional classifications of the city's road system and the county's road system are coordinated. Riddell Road / Monmouth Avenue, Mistletoe Road / Church Street, and Helmick Road / Warren Street all received careful consideration in 1997. The 1998 Polk County TSP increased Hoffman Road's functional classification to minor arterial consistent with existing and projected uses by both Monmouth and Independence. The 2009 Monmouth TSP includes a new collector from Oregon Highway 51 in the southwest portion of the city in the UGB, easterly along the Ash Creek Drive corridor and across Oregon Highway 99W to match with the 2007 Independence TSP's Fir Mountain Avenue extension in the City of Independence. The 2009 Polk County TSP classifies the short segment between the Monmouth and Independence segments in the County as a minor arterial.

The bicycle routes contained in the Monmouth TSP connect to the county's system at Riddell Road in the UGB and to Hoffman Road. Completion of county projects on Hoffman Road will implement the route connection to Monmouth and Independence. The planned extension of Madrona Street east to Talmadge Road is completed. The extension provides an alternative route to Oregon Highway 51 and improves bicycle and pedestrian opportunities.

The original Independence TSP was adopted in June 1998 and was updated in 2007. In addition to the items mentioned above, one important aspect of the Independence plan was to realign 16th Street and Talmadge Road, and continue a 16th Street extension to Hoffman Road. The realignments significantly improved access to Central High School and Talmadge Middle School. The work also reduced peak hour congestion on Oregon Highway 51.

The 2007 Independence TSP identifies road extensions in the southern portion of the urban area, including an extension of 7<sup>th</sup> Street to the southern UGB, and a minor arterial from Corvallis Road that extends westerly to the UGB, and continues westerly outside the UGB in the county to match-up with Monmouth's Ash Creek Drive corridor inside the Monmouth UGB. The Ash Creek Drive / Mountain Fir Avenue extensions are intended to promote cross-town travel to the Independence Bridge. Polk County coordinated with the cities on the extensions and shows a minor arterial in the short segment in the county.

The Willamina TSP adopted in November 1997 does not have any significant items affecting the Polk County TSP, except for the desire to work with the county to enhance and promote intermodal connectivity. Specifically, the Willamina plan supports a bikeway connecting to the Polk County system and a future inter-county public transit system. To further bikeway connectivity, the Willamina TSP calls for a shoulder widening along Business 18 from Willamina to Sheridan. Polk County supports a bike shoulder widening along Business 18 from Oregon Highway 22 northerly to the county boundary in the City of Willamina.

Falls City with a population of 965 (as of July 1, 2008) is under 2,500 and is eligible for an exemption from the Transportation Planning Rule's requirement to prepare a Transportation System Plan.

The Dallas TSP was updated in 2009. It calls for construction of an arterial, generally along the city's northern boundary. The county's TSP calls for development of a collector generally along Webb Lane. It is anticipated that discussions between the county and the city will result in a single road serving both needs.

Functional classifications in the county and Dallas TSP's were reviewed for consistency when the 1998 Polk County TSP was adopted. The classification of Oakdale Road was changed to a collector in the UGB. It is consistent with the city's designation. The county's bike route connects to the city's system at Orr's Corner / Miller Avenue and West Ellendale Roads.

The City of Salem completed a TSP in the late 1990s and updated it in 2007. It addresses items required for a city and requirements applicable to a metropolitan planning area. As with the other cities, the functional classifications of county roads penetrating the urban growth boundary are consistent with city classifications.

Some key aspects of Salem's plan are the long-range projects which affect Polk County's roads. The City has been an active participant in the studies and planning for the third bridge crossing. In the western portions of the UGB the Salem UGB calls for collectors and arterials that include short segments in the county. The Expressway Management Plan affects areas primarily outside the city limits and UGB, however, the proposed new Oregon Highway 22 / Doaks Ferry Road interchange in the area between College Drive and the Bonneville Power Administration facility calls for the College Drive intersection with Oregon Highway 22 to be closed, and potentially others such as Stoneway Drive. The Salem TSP establishes Doaks Ferry Road as the primary north-south road in West Salem and the current at-grade intersection of Oregon Highway 22 and Doaks Ferry Road will be more problematic in the future as additional trips occur on Doaks Ferry Road.

A high priority for Salem in 1997 was to solve capacity and circulation problems on Wallace Road (Oregon Highway 221). It has been significantly widened with a 5-lane and a 3-lane boulevard design out to Michigan City Road NW.

A proposed collector is Marine Drive from River Bend Road in the north to Glen Creek Road in the south (Wallace Road Local Access & Circulation Study). Short segments at the north and

south ends are within Polk County on land zoned Exclusive Farm Use (EFU). The road would follow the UGB and Willamette River floodplain and is intended to serve as an access and circulation collector for the land that could be developed east of Wallace Road. Prior to construction of this collector street, Polk County and the City of Salem will need to develop and adopt the necessary Goal 3 (Agricultural Lands) and Goal 14 (Urbanization) exception findings to justify locating an urban facility on agricultural lands.

## **Transportation Permit Requirements**

Permits for transportation facilities are guided and regulated by many requirements. They are set forth in OAR 660-12 (the Transportation Planning Rule), ORS 215, the county zoning ordinance, and other statutes and administrative rules. They address the transportation facilities that are permitted outright and permitted conditionally. They address the type of activity such as maintenance and repair of existing transportation facilities (OAR 660-12-045(1)(a)(A)); the dedication of right-of-way, authorization of construction and the construction of facilities and improvements, where the improvements are consistent with clear, objective dimensional standards (OAR 660-12-045(1)(a)(B)); changes in the frequency of transit, rail, and airport services (OAR 660-12-045(1)(a)(C)); the allowances and prohibitions in Exclusive Farm Use (EFU), Farm Forest (FF), and Timber Conservation (TC) Zoning Districts (ORS 215, OAR 660-06); construction of navigation channels (OAR 610-18-065(3)(1)); and other uses such as electric transmission lines, airports and helipads, distribution lines for gas, oil and geothermal, and aids to navigation and aviation.

It is not the intent of the Polk County TSP to address the details of the transportation permitting system, but to bring to the reader's attention the rigorous process to review and approve transportation facilities.

# Road Plan

---

## Existing Transportation System and Current Needs

### Roads

Polk County maintains approximately 497 miles (784.4 kilometers) of roads. There are another 32.82 miles (52.5 km) consisting of public use roads and other county right-of-ways which are not maintained. The U.S. Bureau of Land Management (BLM), Oregon State Forestry Division, and Oregon State Parks Division manage 517.3 miles (827.6 km) of roads. The cities of Dallas, Falls City, Independence, and Monmouth have approximately 180 miles (288 km) of streets, while the State of Oregon has 120.4 miles (192.6 km) of highways in Polk County.

Prior to the completion of the county's TSP in 1998, it operated with two sets of functional classifications. Although the county had generally managed to align its county classification system to the federal classification, there were situations where a road under the county's classification did not match the federal classification. Additionally, the resource classification had no federal classification counterpart.

The 1998 TSP included amendments for the federal classification followed by most jurisdictions, and the county has been using the federal system since that time. The following paragraphs contain descriptions of characteristics common to this method of classification. Please see the Polk County Public Works Road Standards 1998 for the definitions of the road classifications.

### Rural Road Classification Descriptions

***Principal Arterials:*** Serve corridor movements having trip lengths and travel densities characteristics indicative of substantial statewide or interstate travel; serve all, or virtually all, urban areas of 50,000 and over population and a large majority of those with population of over 25,000 and over; and provide an integrated network without stub connections except where unusual geographic or traffic flow connections dictate otherwise (e.g., international boundary connections and connections to coastal cities).

***Minor Arterials:*** Link cities and larger towns (and other traffic generators, such as major resort areas, that are capable of attracting travel over similarly long distances) and form an integrated network proving interstate and inter-county service; spaced at such intervals, consistent with population density, so that all developed areas of the state are within a reasonable distance of an arterial highway; and provide (because of the two previous characteristics) service to corridors with trip lengths and travel density greater than those predominately served by rural collector or local systems. Minor arterials therefore constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to through movement.

***Major Collectors:*** Provide service to any county seat not on an arterial route, to the larger towns not directly served by the higher systems, and to other traffic generators of equivalent intra-

county importance, such as consolidated schools, shipping ports, county parks, important mining and agricultural areas, etc; link these places with nearby larger towns or cities, or with routes of higher classification; and serve the more important inter-county travel.

**Minor Collectors:** Are spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road; and provide service to the remaining smaller communities; and link the locally important traffic generators with their rural hinterland.

**Rural Local:** Serve primarily to provide access to adjacent land; and provide service to travel over relatively short distances as compared to collectors or other higher systems. Local roads will constitute the rural mileage not classified as part of the principal arterial, minor arterial, or collector systems.

**Resource Road:** Provide a connection between resource areas, and principal and minor arterials. These roadways are generally rural and provide access to agricultural and timber roadways, to facilitate movement of goods and services. Resource collectors provide an important and needed function in serving areas that contribute to the economic base of the community even though they may have low volumes of traffic.

The definitions of federal classifications in urban areas are not included in this document since the county has very few purely urban roads. The use of the word “urban” in front of a classification simply indicates that the road or a portion thereof is between the urban growth boundary and a city limit.

**Table 5** provides a breakdown of road mileage under the jurisdiction of Polk County by classification.

**Table 5  
Polk County Road System Mileage by Functional Classification**

	<b>Rural</b>	<b>Urban</b>	<b>Total</b>
<b>Principal Arterial</b>	0	0	0
<b>Minor Arterial</b>	0	6.02	6.02
<b>Major Collector</b>	105.98	0	105.98
<b>Minor Collector</b>	79.15	5.94	85.09
<b>Local</b>	285.1	3.92	289.02

*Source: Polk County Public Works Department, 2009*

The county's roads were initially classified many years prior to the 1998 TSP. Although periodic updates were required, there were factors which made reclassification difficult or impractical. One of these factors was the Federal Aid System. This now obsolete system affected project and road funding in the counties. Another factor was land use. Land which may have been developable to medium or high density residential, commercial or industrial uses prior to enactment of Oregon's Comprehensive Land Use laws are either no longer developable or only developable to low densities, such as those areas zoned for rural residential development.

Therefore, roads which may have once been logically anticipated to function at higher level classifications do not function at that level. As part of the 1998 TSP, the county reviewed its functional classifications, ceased use of its separate county classification system, and updated its federal classifications. **Table 6** shows the 2009 list of minor arterials, collectors, and resource roads. **Figure 3** is a map showing the functional classifications of roads.

One exception to cessation of the county separate classification system was the resource road classification. This classification is still useful. It is used to identify roads which may require repair and maintenance support greater than traffic counts would indicate. These roads play a critical role in the county's economy, and their use by heavy trucks requires additional work. The classification of the resource roads will be closely monitored to ensure they are continuing to provide resource needs.

This page not used.

**Figure 3**  
**Map of Functional Classifications**



This page not used.

**Table 6**  
**2009 Functional Classifications**  
**Arterials, Collectors, and Resource Roads**  
**Polk County Road System**

ROAD TYPE / NAME	SEGMENT
<b>Minor Arterials</b>	
Ash Creek Drive / Mountain Fir Avenue	Connect the segment in Monmouth to the segment in Independence
Brush College Road*	Salem UGB to Salem City Limits
Corvallis Road*	Independence UGB to Independence City Limits
Doaks Ferry Road	Hwy. 22 to Orchard Heights Road (varies)
Eola Road	Doaks Ferry to Salem City Limits
Hoffman Road	Riddell Road to Gun Club Road
Orchard Heights Road	Salem UGB to Salem City Limits
<b>Major Collectors</b>	
Airlie Road	Kings Valley Highway (Hwy. 223) to Pacific Highway West (Hwy. 99W)
Bethel Road	Broadmead Road to Bethel Road
Buena Vista Road	Corvallis Road to Benton County Line
Clow Corner Road (West)	Godsey Street to Hwy. 99W
Corvallis Road	Independence City Limit to Benton County Line
Dejong Road	Ballston Road to Yamhill County Line
Ellendale Rd (West) (Portion is Urban Collector)	Oakdale Road to inside Dallas City Limits
Falls City Road	Hwy. 223 to Falls City City Limits
Fort Hill Road	Yamhill County Line to Hwy.18
Grand Ronde Road	Salmon River Highway (Hwy. 18) to Yamhill County Line
Greenwood Road	Rickreall Rd. to Independence Hwy. 51 / Hwy. 22 to Rickreall Rd.
Harmony Road	Hwy. 22 to Yamhill County Line
Hopewell Road	Salem-Dayton Highway (Hwy. 221) to Yamhill County Line
Maple Grove Road	Hwy. 223 to Airlie Road
Mistletoe Road*	Monmouth UGB to Monmouth City Limits
Oakdale Road*	Dallas UGB to Dallas City Limits
Orchard Heights Road	Oak Grove Road to Salem UGB
Orrs Corner Road	Dallas City Limits to Hwy. 99W
Perrydale Road	Bethel Road to Reed St NW (Dallas)
Rickreall Road	Hwy. 99W to Greenwood Road
South River Road	Corvallis Road to Marion County Line
Suver Road	Hwy. 99W to Corvallis Road
Zena Road	Bethel Road to Hwy.221

<b>Minor Collector</b>	
40th Avenue NW	Dahlia Way to Orchard Heights Place
Ball Road*	Ballston Road to Yamhill County Line
Ballston Road*	Ball Road to Dejong Road
Ballston Road	Dejong Road to Yamhill County Line
Berry Creek Road	Airlie Road to Benton County Line
Best Road	Orchard Heights Road to Dahlia Way
Bridgeport Road*	Frost Road to Hwy. 223
Broadmead Road	Ballston Road to West Perrydale Road
Brown Road*	Hwy. 22 to Old Military Road
Clow Corner Road (East)*	Hwy. 22 to Rogers Road
Dahlia Way	Best Road to 40th Ave. NW
Elkins Road	Airlie Road to Helmick Road
Enterprise Road	Beck Road to Hwy. 22
Farmer Road*	Hwy. 99 to Oak Grove Road
Glen Creek Road*	29th Place NW to End of Road
Gooseneck Road*	Hwy. 22 to End of Pavement
Helmick Road	Monmouth City Limits to Hwy. 99W
James Howe Road (Portion is Urban Collector)	Salt Creek Road to Ellendale Road (West)
Maxfield Creek Road*	Airlie Road to Benton County Line
Mill Creek Road	Hwy. 22 to End of Pavement
Michigan City Lane*	Hwy. 221 to End of Road
Mistletoe Road*	Dallas City Limits to Monmouth UGB
Oakdale Road*	Falls City Road to Dallas UGB
Oak Grove Road	Zena Road to Hwy. 22
Prather Road*	Corvallis Road to Buena Vista Road
Red Prairie Road*	Yamhill County Line to Hwy. 22
Rickreall Road	Greenwood Road to Hwy. 22
Riddell Road (Portion is Urban Collector)	Orrs Corner Road to Whitesell Road
Rogers Road*	Clow Corner Road (East) to Hwy. 51
Salt Creek Road*	James Howe Road to Hwy. 22
SW Clay Street*	Dallas City Limits to End of Road
Talmadge Road*	Independence City Limits to Stapleton Road
West Perrydale Road*	Dejong Road to Broadmead Road
Wigrich Road	Buena Vista Road to Wells Landing Road
Wildwood Road	Gage Road to Benton County Line
<b>Urban Collector (In addition to those above)</b>	
Eola Drive	Salem UGB to Doaks Ferry Road
Fir Villa Road*	East Ellendale Road to Orrs Corner Road
Orchard Heights Place	40th Avenue NW to Orchard Heights Road

<b>Resource Road (This is a County Specialized Classification)</b>	
A.R. Ford Road	Hwy. 18 to End
Bethel Heights Road	Zena Road to Spring Valley Road
Black Rock Road	Falls City City Limits to Old RR Grade
Fire Hall Road	South of Hwy. 22
Gage Road	Wildwood Road to Burbank Road
Gardner Road*	Bridgeport Road to Hwy. 223
Gold Creek Road	Yamhill River Road to End of County Maintenance
Grant Road	Hwy. 223 to End
Ira Hooker Road	Hwy. 223 to End
Martin Road	Robb Mill Road to End
Mill Creek (Portion is Minor Collector)	Hwy. 22 to End
Reuben Boise Road	North of W. Ellendale Road
Richardson Road	Oakdale Road to End
River Bend Road	Salem City Limits to End
Robb Mill Road	Ellendale Road (West) to Gated End
Socialist Valley Road (East & West Ends)	Black Rock Road to Camp Tapawingo / Start to Lucas Road
Stapleton Road	Talmadge Road to Helmick Road
Storey Road	Maxfield Creek Road to End
Wigrich Road (Portion is Minor Collector)	Wells Landing Road to End
Wildwood Road (Portion is Minor Collector)	Gage Road to End

Source: Polk County Public Works Department, 1996

\* Indicates functional classification of some, or all of the road was amended - see Table 6, 1998 Polk County TSP.

## Road Network and Standards

There are four types of road ownership in Polk County. A *state road* is a public roadway owned, maintained and improved by the State of Oregon. A *city street* is a public roadway owned, maintained, and improved by the applicable city. A *county road* is a public roadway which has been accepted by the Polk County Board of Commissioners as a county road and for which the county is responsible for improvements and maintenance. A *local access road* (aka public use road) is one which has been dedicated to public use, and ownership has been accepted by the county, *but without obligation, responsibility, or agreement for improvement or maintenance*. A local access road could be a driveway, easement for road access, or a road created for the specific purpose of providing road access from a parcel to another local access road or county road.

The road network which will serve the county for the next 20 years is essentially in place. Except for new roads and realignments discussed in, *Transportation Forecast and Deficiencies*, for two rural residential (AR-5 – Acreage Residential 5-Acre Minimum) zoned areas north and south of Dallas (**Figures 7 and 8**), in the Expressway Management Plan (Figures 9 and 10), and in the Salem and Independence TSPs, no other major development events are expected to occur

which will cause significant relocations, or construction of new arterials or collectors. Modernization, maintenance, repairs, and minor improvements will continue to be aggressively pursued to keep the road network functional.

When a county road enters the UGB of a city, it will assume the functional classification of the city's street which is its extension. Maintenance standards will remain that of the county; however, new construction standards will be that of the respective city. This in no way implies that the county is obligated to improve the road to the city's standard, but rather that when improvements are done those standards will be considered, and efforts made to follow the city's standards in so far as the county deems possible. One improvement funding scenario is joint city-county financing of all or parts of the improvement. Since the adoption of the 1998 TSP, the county considered intergovernmental agreements (IGA) with each of its cities to address this issue and it was determined that IGA's were not necessary because it is expected that transfer of jurisdiction will be integral to the decision process. Salem is one of only two cities in Oregon wherein ORS directs that upon annexation to the city any annexed road becomes the responsibility of the city.

### County Road Standards

In accordance with provisions of the Oregon Transportation Planning Rule (OAR 660-12), standards in

**Table 7** are not considered land use regulation, and are not intended to be adopted as such. Standards are provided herein for ease of review, but they are subject to change by appropriate county determined means, such as Public Works Department procedures, or county ordinance.

**Table 7**  
**Polk County Road Standards<sup>1,2,3</sup>**

<b>Functional Classification</b>	<b>Right-of-Way Urban / Rural</b>	<b>Developed Roadway Urban / Rural</b>	<b>Parking Urban / Rural</b>	<b>Bikeway Urban / Rural</b>
Major Arterial	84 feet / N/A	70 feet / N/A	No / N/A	Bike Lane / N/A
Minor Arterial	68 feet / 60 feet	44 feet / 44 feet	No / No	Bike Lane/Shared Roadway
Major Collector	68 feet / 60 feet	44 feet / 36 feet	No / No	Bike Lane/Shared Roadway
Minor Collector	64 feet / 60 feet	44 feet / 30 feet	Yes / No	None / None
Resource Road	N/A	N/A	No	N/A / None
Local	60 feet / 60 feet	44 feet / 22 feet	Yes / Yes	None / None
Cul-de-Sac	60 feet / 60 feet	34 feet / 22 feet	Yes / No	None / None

<sup>1</sup> Within the UGB, the applicable city's standards apply

<sup>2</sup> Roads which are designated as bike routes shall have a minimum of 4 foot paved shoulders, and the shared shoulder bikeway shall prevail

<sup>3</sup> When volumes on a county road exceed 1,000 ADT, shoulder bikeways will be used instead of shared roadway bikeways.

### Access Management

Roads perform two basic functions, access to property for local traffic and allowing transit of through traffic. The functional classification of a road reflects its primary function. At the upper

level, arterials are intended to primarily serve through traffic, and at the lower end, local roads are intended to provide access to property. Collectors generally serve both purposes.

Since the majority of roads evolved from beginnings as local roads to a higher level of classification as an area grew, it is often difficult to attain the desired purpose without some reduction of service to residential, industrial, or commercial areas. A state highway which serves as the main street for a small town is often used for short trips and access to local businesses, industry, or even residences. But with increased traffic on the highway from growth in and / or out of the city, efficient service for both local and through travel becomes more and more difficult to attain. Lack of access management and insufficient coordination of land uses along the highway contribute to the degradation of the road network. Desire for traffic signals, new road approaches and driveways decrease speed and capacity while increasing both congestion and hazards. It has been estimated that the addition of a traffic signal will result in an almost automatic degradation of a road's level of service by one level.

Overall, access management is controlling vehicular access to a road. The simplest form of "management" is access denial which prohibits new accesses onto a major roadway. A related method of management is controlling where access is placed. Other forms include restricting left turns onto a highway, or not allowing cross traffic at intersections. Limits such as these provide a higher vehicle capacity on the major highway, which in turn allows higher speeds without requiring construction of additional traffic lanes. For many years the State has placed access limits on its highway system.

On the majority of roads for which Polk County has authority, congestion is not now, or for the next twenty years, expected to be a problem. Therefore, access management has traditionally been to ensure safety, and Polk County's permit process to allow access onto county roads is primarily to satisfy that purpose.

The county access management program differentiates requirements based upon functional classification. The general requirement for locating accesses is that they shall be provided in a manner and location that shall protect public safety. In addition to the general requirement, the following standards govern accesses onto county roads:

- a. Every dwelling shall have access to a public road or an easement. An easement for access to two or more dwelling units on lots established after November 13, 1970 shall be at least 60 feet wide (Polk County Zoning Ordinance).
- b. The maximum number of access points from a lot or parcel in an adopted Urban Growth Boundary is one, but no more than 40 percent of the frontage shall be used for the access. This standard does not apply to "flag lots" or lots or parcels located on a cul-de-sac which have less than 50 feet of road frontage (Polk County Road Standards).
- c. The maximum number of access points from a lot or parcel outside an adopted Urban Growth Boundary is two. However, additional access points may be permitted by the Public Works Director (Polk County Road Standards).
- d. The spacing for driveway access points is dependent on minimum stopping sight distance, and varies from 125 feet at speeds of 20 mph to 525 feet at speeds of 60 mph. For

intersections, the spacing distance ranges from 200 at speeds of 20 mph to 575 feet at speeds of 60 mph. Refer to the Polk County Road Standards for further details.

- e. For access distances within a UGB, the applicable city's standard shall apply. However, a permit applicant and / or permit approval authority should periodically review the standards with the city to ensure currency.

# Bicycle and Pedestrian Element

---

The bicycle and pedestrian plan element is in response to the Transportation Planning Rule, ORS 366.514, Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU), and applicable American's with Disabilities Act requirements. The Oregon Transportation Plan (1999) and the Oregon Bicycle and Pedestrian Plan (1995) were consulted throughout the development of this element to ensure inter-jurisdictional consistency. Further, the county has combined planning efforts for both walking and bicycling because of recognized similarities in needs, service provision, and the economies of scale that can be gained through multi-use facilities.

The updating of the bicycle and pedestrian plan reflects the county's commitment to provide for the various needs of all its citizens, including the transportation disadvantaged. The transportation disadvantaged population includes those who do not have access to an automobile, cannot operate an automobile, or choose not to use an automobile for a variety of reasons. Bicycling and walking provide a low-cost alternative to all members of the population.

Bicycle / pedestrian facilities also provide a particularly valuable resource to school-age children, especially insofar as the facilities improve safety. The ODOT Safe Routes to School program is available to the county and can be a funding resource for sidewalks.

## Network

Because Polk County is a rural county with about 85% of its population residing in incorporated cities, the most appropriate way to accommodate bicycling and walking is on the existing road network. The regularly traveled roadway provides the best opportunity for an effective network of walkways and bikeways, because it is in place and connects the various activity centers. In addition, streets are public, highly visible places where individuals feel safer for themselves and their children.

There are several types of travel paths which make up bikeways. They are shared shoulder, shared roadway, bike lanes, and the multi-use path which is separated from the roadway. As appropriate in a rural area, Polk County generally uses the "shared shoulder" concept for its bike facilities. Furthermore, the county has made good efforts to establish bicycle system connectivity between its routes and those of the various cities. One county bikeway begins at the City of Dallas' Miller Street bikeway and uses a shared shoulder on Orrs Corner Road to connect to the multi-use path paralleling Oregon Highway 99W. From that intersection the bikeway proceeds to the City of Monmouth, where it connects to the city's bike route.

Shoulder bikeways are also located along the major state highways, Oregon Highways 18, 22 and 99W. Oregon Highway 221 (Wallace Road) in West Salem has been improved to 5-lane and 3-lane sections with bike lanes out to the urban growth boundary at Michigan City Lane. There is a multi-use path paralleling Oregon Highway 22 from Eola Drive to near the Oak Grove Golf Course. At the golf course the path uses a dedicated bike / pedestrian bridge to cross over the highway and connect to Rickreall Road. Because of their relatively low traffic volumes, most



county paved roads can support the shared roadway bikeway concept. Continuing its ongoing improvement of the bicycle / pedestrian system, the county constructed an upgrade to Hoffman Road. Additional projects include upgrades to the north side of Ellendale Road (West) in Dallas and Hoffman Road from Oregon Highway 99W east to Gun Club Road as development in Monmouth and Independence occurs along Hoffman Road. These projects are listed in Section 10, *Proposed System Improvements*, and are shown in **Figure 4**. The county's bikeways are in a good to excellent state of repair.

In 2009, the City of Salem opened the former Union Street railroad bridge to bicycle and pedestrian use. It connects to the bike and pedestrian path on the east side of the Willamette River which serves Riverfront Park and connects to the bike and pedestrian path on the west side of the Willamette River which serves Wallace Marine Park.

## **Future Needs and Facilities**

For the most part, the county's road conditions are presently acceptable for bicycle and pedestrian travel and will satisfy the county's rural needs for the next twenty years. See the *Transportation Forecast and Deficiencies* section for a brief analysis of future traffic. The exceptions are those roads already identified by the county in its efforts to continue its ongoing improvements. By taking actions in and near the UGBs of its cities and unincorporated rural communities, the county is improving connectivity and safety of the bicycle / pedestrian system. Six-foot shoulder upgrades to Hoffman Road between Oregon Highway 99W and Riddell Road will improve bicycle and pedestrian flow. Along Ellendale Road (West) in the northwestern portion of Dallas, construction of a six-foot shoulder on the north side of the road will extend the bike facility westerly to Rueben Boise Road. A third project is a six-foot paved shoulder on the west side of Talmadge Road between Madrona and 16<sup>th</sup> Avenue near Monmouth. This approximately 350 foot segment in the county will help to connect sidewalks on Madrona and 16<sup>th</sup> Avenue which is a route to schools. In the northwest part of the county an evaluation of South Yamhill River Road as a recreational bike / pedestrian facility connecting to Oregon Highway 18 Business and continuing into Yamhill County should be performed. Although Oregon Highway Business 18 has shoulders meeting requirements for bicycle / pedestrian travel in some segments in Polk County, it is not a user-friendly environment for non-auto users.

The county considers the widening and paving of shoulders along Oregon Highway 18 Business in the Willamina area in Polk County, and connecting to Sheridan in Yamhill County a project of significant importance. This route is used regularly by recreational bicyclists, and current conditions present a danger to users. It will also provide a regional connection to the Polk County system.

Bicycle and pedestrian travel in rural community centers such as Rickreall is well accommodated by local streets without sidewalks or improved roads. In Rickreall, crossing Oregon Highway 99W was improved as part of the Oregon Highway 99W / Oregon Highway 22 grade-separated interchange which included a new traffic signal at Oregon Highway 99W / Rickreall Road. Attractors in that area include a small store and post office which are on the same side of the highway as the primary residential area. The Oregon Highway 99W / Oregon Highway 22 grade-separated improvements extend south into a portion of Rickreall and have improved

circulation and safety in the community. Bicycle or pedestrian crossings of state highways to schools, is an issue and it occurs in Pedee and other rural areas such as Perrydale and Bridgeport. As a follow-on action to the 1998 TSP, the county made a commitment to further evaluate the bicycle/pedestrian needs in the 14 rural community centers designated in the Comprehensive Plan and that commitment is reiterated in the 2009 TSP. The county's standards for pedestrian facilities are in the Polk County Subdivision and Partition Ordinance and in the County Road Standards.

Currently, the most active need for sidewalks is in West Salem. The county cooperates with the City of Salem when development occurs requiring sidewalks in the area, and by intergovernmental agreements uses the city's standards.

Section 10, *Proposed System Improvements*, contains a listing of the bicycle improvement projects. **Figure 4** depicts the preferred bike / pedestrian routes in Polk County. Except for the multi-use paths, the routes are either, shared roadway or shoulder bikeways. Outside the UGBs, no new separate bike lanes are planned on county roads. Inside the UGBs, the city's standards for bicycle / pedestrian facilities apply. However, this does not imply that the county is obligated to improve the road to the city's standard, but rather when improvements are planned, those standards will be reviewed and efforts will be made to follow the city's standards insofar as the county deems possible. If funding is a limiting factor, one approach is joint city-county financing of all or parts of the project.

Requirements related to the provision of bikeways are included in the Polk County Subdivision and Partition Ordinance. County bike standards are contained in the County Road Standards, but are repeated below for ease of review.

***Shared Roadway*** - It is desired that the road be paved, and provide good visibility with minimal vertical and horizontal curves. The road's travel lane should be at least 12 feet wide. When the average daily trips (ADT) on such roads exceeds approximately 1,000 vehicles per day, the county will examine the feasibility of adding four-foot shoulders to each side so that the road facility could become a shoulder bikeway. The preference will be to add the paving as part of an overlay, where possible.

***Shoulder Bikeway*** - A paved shoulder with a minimum width of four feet from center of travel lane edge striping (fog line) to edge of pavement.

This page not used.

**Figure 4**  
**Bicycle Facilities in Polk County**

# Air, Rail, Water, and Transmission Lines Element

---

## Air

There is only one public airport in the county. It is a state-owned facility located at the north edge of the City of Independence. Abutting the north end of the runway is agricultural land under Polk County jurisdiction. The 2007 City of Independence Transportation Systems Plan addresses the airport. The “Independence State Airport: Airport Layout Plan Report” prepared by Aron Faegre & Associates, 1997, also addresses the airport. The airport has a single, north-south oriented, asphalt runway, slightly over 3,000 feet long and 60 feet wide. The paved apron will accommodate 21 aircraft, with overflow on adjacent turf. In addition to tie-downs, there are about 40 hangars. The airport has maintenance, fuel, and a manned fixed-base operation seven days a week. It serves general aviation aircraft and has no scheduled airline operations. The airport does not have an instrument landing system, so operations are limited to visual flight rules. Approximately 124 general aviation aircraft are based at the airport and about 84 of these planes are based at the residential airpark located on the east side of the airport. The airpark presently has 90 homes with hangars. In 1996, the airport was the ninth busiest non-tower airport in Oregon with 32,773 operations (each takeoff and each landing is a separate operation) and the projection was for over 50,000 operations by 2016. In 2008, 189 aircraft were based at the field with 172 single engine airplanes, 11 multi-engine airplanes, 1 helicopter and 5 ultralights.

The number of operations is influenced by the adjacent airpark and an on-site flight instruction operation. In 2009, the Independence Flyers (503-606-2923) and Nutsch Aviation (503-428-7209) provided services, facilities and amenities at the airport. In 2009, the field did not have a published instrument approach, but plans call for publishing a non-precision global positioning system (GPS) approach.

The 1997, “Independence State Airport: Airport Layout Plan” projected future operations at the airport and recommended a variety of improvements to the existing facility. The report forecasts airport operations to increase from 32,773 to 50,400 per year by 2015, an increase of 54 percent. The total capacity of the airport is 97,000 operations, which means that by 2015 the airport will be operating at 56 percent of facility capacity.

The recommended improvements include a runway extension of 540 feet to the north and the addition of approximately 41 acres to the west for future parking and hangar development. The report also recommended incorporating the Airport Layout Plan into the Polk County and City of Independence comprehensive plans.

Both the City of Independence and Polk County have airport overlay zoning intended to accommodate the facilities necessary for general aviation purposes and to minimize potential dangers from, and conflicts with, the use of aircraft at Independence State Airport (Polk County Zoning Ordinance). The overlay zoning limits uses and imposes height restrictions within

several defined areas. These include the airport “approach zone” which is a fan-shaped area extending from the end of the runway for a distance of 4,000 feet and to a width of 1,250 feet and the airport “clear zone” which extends from the edge of the airport for a distance of 1,000 feet and a width of 312.5 feet. The width of both of these zones at the end of the runway is 250 feet.

All other airfields in Polk County are privately-owned. The Oregon Aviation Department maintains an inventory of private airfields located throughout the state. Among those listed in Polk County are private fields near Airlie Road, Wigrich Road (which supports an aircraft painting business), Matney Road, and Bethel Road.

With development limitations imposed by exclusive farm use zoning to the north and west, high value homes to the east, and the city's water / sewer facilities to the south, it is doubtful the Independence State Airport can be expanded to provide commercial passenger service. It is also likely that any attempt to do so will be met with significant public resistance. Therefore, air transportation is not anticipated to play an important multimodal transportation role in Polk County.

## **Rail**

The Hampton Railway operates between Willamina and Fort Hill (approximately 5.3 miles). A previously existing extension between Fort Hill and Grand Ronde was abandoned in 1984 by the predecessor Willamina & Grand Ronde Railway. Less than one million gross tons are transported over the line annually. Service is provided by Willamette & Pacific Railroad, Inc., under a haulage agreement with Hampton Railway. Although Willamette & Pacific Railroad and Portland & Western Railroad are separate wholly-owned subsidiaries of Genesee & Wyoming Inc., Willamette and Pacific's identity has been subjugated and both railroads operate under Portland & Western's banner and use Portland & Western as a public face. Hampton's line is maintained to Federal Railroad Administration (FRA) Class 1 standards permitting a maximum freight train speed of 10 miles per hour. The connecting Willamette & Pacific line doing business as Portland & Western, extends from Willamina northerly to Whiteson, 18.7 miles, and has benefited from combined investment of state, federal and private funds since 2004. It has been upgraded for its full length with heavier continuous welded rail, new ties, ballast and surfacing to meet FRA Class 2 standards permitting 25 miles per hour freight operation. At the same time the line was cleared for handling 286,000 gross vehicle weight shipments, the new rail industry standard loaded freight car weight. Whiteson is the junction of the Willamina Branch with Portland & Western's West Side Line.

Portland & Western's Westside Branch runs from Monroe in Benton County via Independence, McMinnville and Newberg to a junction with another line running east through Sherwood, Tualatin and Lake Oswego, and across the Willamette River in the Milwaukie area to the Union Pacific mainline. The mainline runs into Union Pacific's Brooklyn Yard in southeast Portland. Paralleling Oregon Highway 99W, the West Side line intersects with the Dallas branch at Gerlinger, a rail junction south of Rickreall Road. Through Polk County, the West Side Branch is maintained to FRA Class 2 standards and the line handles over one million gross tons per year. The Dallas line is 4.8 miles long and handles less than one million gross tons per year. It is in

“excepted” status, a sub-class of FRA Class 1, and maximum freight train speed is 10 miles per hour. The Dallas Branch serves industries in the City of Dallas and is used for railcar storage. The density of train traffic using the West Side line is expected to remain static at two per day for the foreseeable future. For train traffic to increase, one or more of the following events would have to occur:

1. Recruitment of a significant industrial enterprise heavily dependent upon rail service locating in Polk or Yamhill Counties.
2. Routing of overland traffic (through shipments destined to distant points) via the West Side line by rehabilitating trackage over Rex Hill (between Newberg and Sherwood) or over rebuilt trackage between St. Joseph and Gaston (Seghers) that was abandoned and torn up in 1984 and 1991. Reconstruction of this missing 16-mile segment would restore a through line with favorable grade conditions linking Hillsboro and Albany via McMinnville and Independence. With some additional strategic infrastructure investment in the greater Portland metropolitan area, this route could become part of a rail bypass between Kalama, WA and Albany, OR that would avoid operating through core Portland.
3. The line is upgraded for regional commuter passenger services that would serve Linn, Benton, Polk, Yamhill, Washington and Multnomah Counties.
4. Rail movement of refuse to distant disposal sites becomes desirable as local landfills reach capacity and close.

Absent one or more of the growth factors above, rail operations in Polk County over the next twenty years are expected to continue at approximately the same level of activity as the last twenty years; providing service to the timber and agricultural industries and to the steel mill at McMinnville and the paper mill at Newberg. Since 1986, there was sizeable tonnage growth statewide in freight rail traffic. However, most of the originating and terminating rail freight has been in counties other than Polk. The future in both Polk County and the state is difficult to predict, but data indicates a continued rise with a possible shift to commodities other than wood and farm products.

While use of rail reduces truck traffic in the county, rail service is not anticipated to play a significant role in reducing automobile use, unless there is a wholesale change in public transportation policy to superimpose regional passenger service on some, or all of the state’s low-density rail network in the Willamette Valley. Continued use of the existing rail system and rail line upgrades will contribute to maintaining a reduction in truck traffic.

The Oregon Transportation Plan's minimum desired level of service states that branch rail lines should be maintained to FRA Class 2 standards that allow a maximum freight train speed of 25 miles per hour whenever upgrading can be achieved with a favorable benefit-cost ratio.

In developing transportation plans, one point of contention between local jurisdictions and the rail service is grade crossings. The Oregon Department of Transportation, Rail Division has exclusive jurisdiction over all public rail crossings in the state. Except for signage, ODOT does not have authority over private crossings except when they involve railroad right-of-way owned by the state. There is no state-owned rail right-of-way in Polk County. For public crossings

ODOT must approve new crossings and closure of existing crossings. Any alterations to existing crossings must be similarly approved and ODOT-Rail may order upgrading of protective devices at existing crossings when circumstances warrant.

## **Water**

In the county's early years, Independence was an important central shipping point on the Willamette River. In those years, the river was used to transport food from the Willamette Valley to gold miners in California. The goods were taken from warehouses and docks in Independence and shipped by steamboat to Portland. In 1885, a ferry operated from Independence across the Willamette River. A ferry owned and operated by Marion County operates Wednesday through Sunday, mid-April through October, at Buena Vista, crossing between Polk and Marion Counties. The ferry serves approximately 1,000 vehicles during the operating period.

The Wheatland Ferry, operated by Marion County, crosses the Willamette River daily throughout the year (except Thanksgiving Day and Christmas Day) from Mission Bottom State Park in northwest Marion County to Wheatland in southeast Yamhill County. The ferry provides a connection to the east side of the River and Interstate 5 for travelers in northern Polk County. The primary road from Polk County to the ferry is Oregon Highway 221 (Wallace Road, Salem-Dayton Highway).

Over the years, the river has lost its significance as a transportation system, and its use today is primarily recreational. In support of greater use, a hydrographic survey to determine spot dredging locations was completed in May 1998. Although waterborne transportation is not expected to become a major form of multimodal transportation, private operators may find opportunities for limited travel along the Willamette River. In the past, the U.S. Army Corps of Engineers dredged the River, but ceased dredging in the late 1970s. As commercial use declined the Corps was not able to show in a cost / benefit analysis that continued dredging was justified. The county supported past efforts to study dredging of the River to provide for greater use, but to no avail. The Willamette Queen sternwheeler provides excursions from the River Front Park dock in downtown Salem.

## **Transmission Lines (Pipelines)**

The only natural gas pipelines in the county roughly parallel Oregon Highway 22 and Oregon Highway 99W. Other lines for transmission of water, electricity, telephone, cable television, and towers for cellular phones and radio use are located throughout the county. The lines which are classified as utilities are authorized to use county road rights-of-way. Therefore, most of these transmission lines are located along county roads.

As noted above, the county's use of natural gas pipelines is minimal. However, the use of other transmission lines is expected to grow as the population increases. Over the next twenty years there is optimism that telecommuting will grow in popularity. Should this occur, increased demands on county water, electric, and phone services will occur from those who change their work habits and remain at home. Those individuals who are most likely to be able to avail



themselves of telecommuting presently work in office environments often outside the county in larger urban areas. Telecommunications companies have replaced or augmented older phone lines with fiber optic lines which can handle increased demand. The rural electric service, while adequate, is subject to outages in the winter, and has limited rerouting capability to bring power back on-line. Since it is anticipated that telecommuting will require reliable phone and electric service, improvements in these capabilities will be necessary. Water use increases resulting from telecommuting should not be as significant, but it is possible that peak usage will shift, and this needs to be anticipated by service providers.

# Public Transportation Element

---

## INTRODUCTION

The 1998 Polk County TSP included a significant amount of detailed facts, information, analysis, and discussion about public transportation. At that time there had been no similar level of work regarding public transportation in Polk County and it was appropriate for the TSP to cover a topic that had not been adequately covered before.

Two recent documents inventory, analyze, discuss, make conclusions about, and set policies for public transportation in Polk County. They are “The Salem-Keizer Transit Specialized Transportation Plan for Polk and Marion Counties” dated April 2007, by Nelson Nygaard Consulting Associates, and the “Yamhill County Coordinated Human Services Public Transportation Plan” dated September 2007, by the Mid-Willamette Valley Council of Governments. The 2009 Polk County TSP incorporates these documents by reference and provides policy support.

The two plans were produced because effective July 1, 2007, ODOT began requiring that state and federal transit funding intended for non-urbanized portions of the state be derived from coordinated plans. ODOT serves as the designated recipient for state and federal transit funds, intended for non-urbanized portions of the state, and, in turn distributes funds to local entities through a competitive grant process. The overarching goal of requiring the disbursement to be based on coordinated plans is, it responded to the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and the state’s requirements for receiving federal funds.

Oregon’s Specialized Transportation Fund (STF) administrative rule requires STF Agencies to prepare a plan to guide the investment of STF moneys to maximize their benefit to the elderly and people with disabilities. The plan is a condition to receive STF formula and discretionary funds.

The federal SAFETEA-LU transportation authorization passed by Congress in 2005, requires a “locally developed, coordinated public transit-human services transportation plan” intended to improve transportation services for persons with disabilities, individuals who are elderly, and individuals with lower incomes. The coordinated public transit-human services transportation plan is required for three of the federal Transit Administration funding programs. They are the Formula Program for Elderly Persons and Persons with Disabilities (§5310), New Freedom (§5317), and Job Access Reverse Commute (§5316).

Because the state and federal requirements are similar, ODOT, through a policy decision, determined that the two planning requirements will be jointly managed so that there is only one plan which is referred to as the “coordinated plan.”

The “Salem-Keizer Transit Specialized Transportation Plan for Polk and Marion Counties” dated April 2007, by Nelson Nygaard Consulting Associates includes the following chapters:

- Chapter 1 Project Purpose and Organization.
- Chapter 2 Regional Profile.
- Chapter 3 Overview of Existing transit and Specialized Transportation Services.
- Chapter 4 Community Support and Expectations.
- Chapter 5 Stakeholder Input.
- Chapter 6 Goals, Objectives and Performance Standards.
- Chapter 7 Plan for Chemeketa Area Regional Transportation System.  
CARTS provides service to Polk County.
- Chapter 8 Administrative Recommendations.
- Chapter 9 Transportation Coordination Plan.
- Chapter 10 Five-Year Financial Plan, Chapter 10.

The “Yamhill County Coordinated Human Services Public Transportation Plan” dated September 2007, by the Mid-Willamette Valley Council of Governments includes the following chapters:

- Chapter 1 Plan Background.
- Chapter 2 Public Involvement.
- Chapter 3 Demographics and Travel Patterns.
- Chapter 4 Evaluation of Existing transportation Services and Resources.
- Chapter 5 Medicaid Infrastructure Grand (MIG) Project.
- Chapter 6 Progress.
- Chapter 7 Unmet Transportation Needs.
- Chapter 8 Transportation Strategies and Priorities.

The Yamhill County document is included because the southern one-third of the City of Willamina is within Polk County, and the route serving the Grand Ronde community traverses Polk County.

The following is a summary of existing public transportation services in Polk County.

## **Inventory**

Fixed route, express and flexible route public transportation provided by the Chemeketa Area Regional Transportation System (CARTS) serves Independence, Monmouth and Dallas. Fixed route service provided by the Salem-Keizer Transit District and the Confederated Tribes of Grand Ronde serves Spirit Mountain Casino and Hotel and the Tribal Governance Center. Fixed route service provided by Yamhill County Transit Area District serves Willamina and Spirit Mountain Casino and Hotel from McMinnville via Oregon Highway 18. There is no fixed route public transportation system to Falls City or the rural areas outside the cities in Polk County. The Cherriots Rideshare Program (formerly Salem Rideshare), operating in the Salem-Keizer area since 1975, is available to Polk County residents. This program includes carpool, vanpool, buspool matching service, a preferential parking program, and reduced parking fees for carpools. It is financed by ODOT through the Salem-Keizer Metropolitan Planning Organization (MPO) from federal Surface Transportation Program (STP) funds under the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

## **Inter-City Fixed Route Systems**

The Salem-Keizer Transit District (Cherriots) and the Chemeketa Area Regional Transportation System (CARTS) are the only public transportation agencies which fit this category.

### **Salem Area Transit District**

The Salem-Keizer Transit District (Cherriots) operates regularly scheduled bus service in the Salem-Keizer area. See the district's 2007 Plan for detailed service information.

The Polk County area served by Cherriots is in West Salem.

In January 2009, the Salem-Keizer Transit District and the Grand Ronde Tribal Council entered into an agreement to provide service between the downtown Salem Transit Mall and Spirit Mountain Casino and Hotel and the Tribal Governance Center with the service focusing on the work shifts at the Casino.

### **Chemeketa Area Regional Transportation System (CARTS)**

The Chemeketa Area Regional Transportation System (CARTS) serves Dallas, Independence and Monmouth with fixed-route service and provides express service to Dallas from Salem. It provides "on request" service to Fairview Market in Dallas, and serves the Rickreall Park and Ride. The Polk County Flex Route 45 serves Dallas, Independence and Monmouth with flex-pickup and drop-off Monday through Friday.

### **Paratransit**

For the purposes of this section, paratransit public transportation consists of those systems which primarily serve the disabled, elderly, or other transportation disadvantaged individuals.

The largest of the paratransit providers in Polk County is the Oregon Housing and Associated Services (OHAS *aka* "Wheels"). Although OHAS could be listed with the Salem-Keizer groupings and does provide contract service to many of the other paratransit organizations, it also routinely serves a much broader base. Unlike the other paratransit providers, it is open to the general-public. The other paratransit providers operate out of Dallas, Monmouth, and Independence. Cherriots operates an on-call service for the disabled in West Salem.

### **Other**

Although not serving Polk County per se, the Yamhill County Transit Area District operates a transportation service between McMinnville and Willamina and on to Grand Ronde which began in early 2009. Polk County residents may use the service if they meet at the pick-up point in Willamina, or at Spirit Mountain Casino and Hotel. The District provides service to Sheridan, McMinnville, and, through links to other providers, several other cities.

## **SALEM-KEIZER TRANSIT DISTRICT SPECIALIZED TRANSPORTATION PLAN GOALS**

The Goals and Objectives of the “Salem-Keizer Transit Specialized Transportation Plan for Polk and Marion Counties” dated April 2007 follow (page ES-4 in the Plan).

1. Improve the level and overall quality of transit service in Polk and Marion Counties through coordinated efforts.
2. Fill-in the gaps in Polk and Marion Counties’ transportation network.
3. Provide a wide array of transportation options for all populations and for all trip types.
4. Enhance cooperative efforts by transit and human service agencies.
5. Increase the visibility, awareness and availability of information about transportation options in Marion and Polk Counties.
6. Ensure the sustainability of transportation programs in Polk and Marion Counties.
7. Provide affordable transportation.

## **CARTS SERVICE PLAN: POLK COUNTY RECOMMENDATIONS**

The CARTS service plan’s Polk County recommendations follow (page ES-6).

1. The existing Polk County services have much higher productivity and lower cost per passenger than the existing Marion County CARTS service. The connection between Dallas and Salem is perhaps the most critical rural transit service connection in the two-county region. Similar to the changes proposed in North Marion County, some minor service modifications are recommended in Polk County.
2. These include the introduction of express service between Dallas and the Salem Transit Mall, as well as regular intercity service from Dallas via Monmouth and Independence.
3. For a Dallas-Salem Express Service, other than a “by request” stop at the Rickreall Park-and-Ride, deviations within  $\frac{3}{4}$ -mile of the fixed route would require ADA eligibility.
4. In addition to the direct service between Dallas and the Salem Transit Mall, another route would maintain the local circulation between Polk County cities and their connection to Salem.
5. A flex-route service is also recommended to operate between Falls City, Dallas, Rickreall, Independence and Monmouth, providing connections to the intercity CARTS routes to Salem. The bus could be scheduled for specific timepoints within each community. Although its purpose would not be to provide local circulation for people traveling within each community, some intra-community travel could be permitted depending on funding arrangements with the various cities.

# **YAMHILL COUNTY COORDINATED HUMAN SERVICES PUBLIC TRANSPORTATION PLAN**

The following are the strategies and priorities in the “Yamhill County Coordinated Human Services Public Transportation Plan” dated September 2007.

## **Transportation Strategies**

The transportation strategies identified in this section are meant to address the various challenges and gaps in existing transportation services previously identified. The strategies fall into four (4) general categories: planning, operations, improvements and coordination / mobility management.

### **Public Transportation Planning**

Update Coordinated Human Services Public Transportation Plan.

Service Design Planning.

### **Transportation Operations**

Sustain Transit Services.

Enhanced Transit Services.

Improve Local Transportation Systems.

Improve Employment Transportation.

User Subsidies.

### **Transportation Capital Improvements**

Provide routine preventative maintenance measures and replace or rehabilitate vehicles as needed.

Bus Shelters and Signs.

### **Transportation Coordination and Mobility Management**

Lead Agency Coordination.

Continued Implementation of Market Strategies and Promotion of Public Transportation.

Promote Increased Regional Transportation Coordination and Cooperation.

Develop and Implement a Public Transportation Travel Training Program.

Promote Greater Utilization of Transportation Technologies.

Promote Better Communication and Awareness Among Transit Providers, Human Service Agencies and Transit Clientele.

Coordinate Public Transportation with Community Planning and Encourage Rational Public Transportation Friendly Development.

Increase Transit Service Coordination and Development among Transportation Providers.

### **Prioritized Strategies**

- Priority 1: Maintain existing service levels of viable operations.
- Priority 2: Lead agency coordination.
- Priority 3: Enhance services.
- Priority 4: Transportation service planning.

## **Constraints and Opportunities**

Polk County's population centers outside of West Salem, while growing, are relatively small. Dallas and Monmouth / Independence contain the largest concentrations. These cities are approximately nine miles apart, and travel time is nearly 15 minutes between centers. The remainder of the county's population is spread over a relatively large area, and offers little opportunity for efficient service.

Service to the western portion of the county is minimal. Because there are providers in the eastern one-third of the county, there may be an opportunity to use this as a base for expanding or enhancing regularly scheduled route service and the paratransit operations, and to eventually extend public transportation services to a greater number of county residents.

Opportunities for increasing use of carpools and vanpools also exist. The Regional Rideshare Program serves Polk County, but requires constant reinforcement so that residents are aware of its capabilities. Periodically, efforts to market the program are made but the impact in Polk County is minor. The county will promote and encourage carpooling.

For a number of reasons the public transportation providers and paratransit providers focus on the population centers and travel, primarily, on State highways between the cities of Dallas, Monmouth and Independence. The providers and the cities where the population concentrations exist are the important elements in the public transportation system. Polk County will continue to support their efforts and provide assistance when and where it will be effective. Polk County supports the goals and policies of the Salem-Keizer Transit District Specialized Transportation Plan for Polk and Marion Counties and the Yamhill County Coordinated Human Services Public Transportation Plan.

# Transportation Forecast and Deficiencies

---

This section addresses automobile travel.

## Traffic Volumes

With a few exceptions near urban areas, the county's roads are relatively lightly traveled. The rural areas in the county do not generally develop high traffic counts. **Table 8** lists the average daily traffic for the higher volume roads. The traffic counts were developed in 2008.



**Table 8**  
**Average Daily Traffic**  
**Higher Volume County Roads**

<b>Road Name</b>	<b>Road Section</b>	<b>From</b>	<b>ADT</b>	<b>To</b>	<b>ADT</b>
Bethel Road	Perrydale Road - Highway 99W	Perrydale Road	2370	Highway 99W	2370
	Highway 99W - Zena Road	Highway 99W	2400	Zena Road	2400
Brush College	Eagle Crest Road - Salem City Limits	Eagle Crest Road	370	Salem City Limits	880
Buena Vista Rd.	Corvallis Road - Benton County Line	Corvallis Road	1580	Prather Road	600
		Prather Road	600	Benton County Line	660
Clow Corner Rd.	Dallas City Limits - Highway 99W	Dallas City Limits	6750	Highway 99W	5130
Corvallis Road	Independence City Limits - Benton County Line	Independence City	2200	Prather Road	1110
		Prather Road	1110	Benton County Line	1780
Doaks Ferry Rd.	Brush College Road - Highway 22	Brush College Road	*	Orchard Heights Rd	*
		Orchard Heights Rd	*	Glen Creek Rd	*
		Glen Creek Road	2400	Highway 22	2410
Ellendale Road (West)	Robb Mill Road - Dallas City Limits	Robb Mill Road	1300	Dallas City Limits	4620
Eola Drive	36 <sup>th</sup> Ave NW - Salem City Limits	36th Ave. NW	440	Doaks Ferry Road	2310
		Doaks Ferry Road	*	Salem City Limits	*
Falls City Road	Falls City City Limits - Highway 223	Falls City City Limits	2170	Highway 223	2310
Fir Villa Road	East Ellendale Road - Orrs Corner Rd.	East Ellendale Road	*	Orrs Corner Road	*
Glen Creek Road	35 <sup>th</sup> Av. NW - Salem City Limits	35th Av. NW	2630	Salem City Limits	2050
Grand Ronde Rd.	Yamhill County Line - Highway 18	Yamhill County Line	2650	Highway 18	3970
Hoffman Road	Riddell Rd. - Independence City Limits	Riddell Road	2280	Highway 99W	5230
		Highway 99W	5230	Independence City Limits	6010
Hopewell Road	Yamhill County Line - Highway 221	Yamhill County Line	2950	Highway 221	3140
Oakdale Road	Ellendale Road - Dallas City Limits	Ellendale Road	700	Dallas City Limit	1390
Orchard Heights Road	Orchard Heights Place - Salem City Limits	Orchard Heights Place	1240	Salem City Limits	1240
Orrs Corner Rd.	Fir Villa Road - Highway 99W	Dallas City Limits	2140	Highway 99W	1800
Perrydale Road	Highway 22 - Dallas City Limits	Highway 22	1130	Dallas City Limits	3020
Rickreall Road	Highway 22 - Greenwood Road	Highway 99W	1400	Greenwood Road	1,030
		Greenwood Road	1,030	Highway 22	430
South River Rd.	Corvallis Road - Independence Bridge	Corvallis Road	5160	Independence Bridge	5160
Zena Road	Bethel Road - Highway 22	Bethel Road	2270	Bethel Heights Road	2680
		Bethel Heights Road	2680	Highway 221	2640

Source: Polk County Public Works Department, 2009

\* Inside City Limits

Historically, traffic increases on the county's road system have been low. The exceptions are the road systems in and near West Salem, Independence, Monmouth, and Dallas. A "spot" analysis of roads near these areas is adequate to guide overall county needs.

Doaks Ferry Road in West Salem had a 1996 traffic count of 1,300 average daily trips (ADT) at Oregon Highway 22 and in 2008 it had a count of 2,410. The Salem TSP has addressed long term improvements for this road based on modeling projections from the Salem-Keizer Metropolitan Planning Organization. The Expressway Management Plan (EMP) which is incorporated into the 2009 Polk County TSP calls for a new grade-separated interchange of Oregon Highway 22 / Doaks Ferry Road between College Drive and the Bonneville Power Administration facility with a new segment of Doaks Ferry Road connecting the interchange to the area of the current Doaks Ferry Road and Eola Drive intersection at the top of the hill. The EMP also calls for a new grade-separated interchange of Oregon Highway 22 / Oregon Highway 51 with a system of county frontage and backage roads. These two new interchanges and the associated changes to local roads will significantly improve the county road system in the Eola Unincorporated Community area.

Near Independence / Monmouth in 1998, Hoffman Road was problematic. Using the average yearly traffic increase on the state highways through both cities, and applying this to Hoffman Road, traffic was calculated in the 1998 TSP to increase by 3.6 percent per year. This fairly high rate of increase meant the average daily traffic would increase from its 1996 highest count of 2,750 ADT to approximately 6,000 ADT by 2020. The road would continue to operate at LOS A during most of the day, with a potential for LOS B during p.m. peak hours. However, as shown in the 1990s Independence and Monmouth TSPs, the roadway itself was not the limiting factor. Rather, the intersections with Oregon Highway 99W and Gun Club Road were thought to be the factor that would limit the level of service. Those TSPs contained proposals for improvements. In 2008, the traffic count on Hoffman Road was 5,230 ADT at Oregon Highway 99W and 6,010 ADT at the Independence city limits. The trips forecast for 2020 in the 1990s TSPs already existed in 2008, but a new signal at Oregon Highway 99W and improvements to Hoffman Road, including improvements associated with subdivisions on land abutting the road, have provided an efficient connection from Riddell Road in the west to Oregon Highway 51 in the east.

In Dallas, the county road with the highest 1996 traffic count was Clow Corner (3,600 ADT). Using a 3.6 percent per year factor for traffic increases, an ADT of approximately 7,000 vehicles per day was expected by 2020. Assuming the bulk of the traffic occurred over a 12 hour period, the level of service on the road would remain at a borderline LOS A, but during p.m. peak hours could dip to a LOS C. The intersections at Uglow Street in Dallas and at Oregon Highway 99W would provide greater limits on the levels of service. Upgrades planned on the highway would help with the problems. In 2008, the traffic count showed 6,750 trips at the Dallas city limits and 5,130 at Oregon Highway 99W. The trip forecast for 2020 was almost attained in 2008, but very little new development had occurred in the southeast portion of Dallas along the Clow Corner Road corridor and some nearby employment lands did not have as many jobs as 10-years ago. The area is capable of attracting a significant number of new jobs.

Based on the 2008 ODOT Average Annual Daily Trip (AADT) counts of these three roads, in the growth areas, the existing road system is adequate for the 20-year period of this 2009 plan.

The state's road system handles considerably higher traffic volumes. On Oregon Highway 22, approximately 88,400 (2007) vehicles per day (up from about 80,000 in 1998) were recorded

using the bridges into and out of Salem. From that location the traffic volumes steadily decrease to approximately 36,600 (2007) vehicles per day near Doaks Ferry Road (up from about 31,000 in 1998) and to 10,600 about 1-mile west of Oregon Highway 99W. Prior to the at-grade Oregon Highway 22 / Oregon Highway 99W intersection project that created the current Oregon Highway 22 / Oregon Highway 99W grade-separated interchange, there was a turn-off at Oregon Highway 99W and another just to the west at Oregon Highway 223 to Dallas. In 1998, just past the Dallas turnoff at Oregon Highway 223, traffic was significantly less at approximately 5,000 vehicles per day and in 2007 it was 10,600 1 mile west of the Oregon Highway 22 / Oregon Highway 99W interchange.

The Polk County portion of Oregon Highway 18 in the western area of the county had 19,300 (2007) vehicles per day at Valley Junction (up from 18,000 in 1998), and 7,100 (2007) vehicles per day at the Tillamook-Polk County Line (up from 6,600 in 1998). Compared to the 7,100 AADT at the Tillamook-Polk County Line, a relatively large increase in the traffic occurs to the east. The count increases to the east. The count is 7,800 at about Fire Hall Road, 11,100 just east of Grand Ronde Road, and 17,100 just east of Spirit Mountain Casino and Hotel (and just west of Three Rivers Highway / Highway 22). The count peaks at 19,300 just east of the intersection of Three Rivers Highway / Oregon Highway 22.

Modernization of portions of Oregon Highway 221 (Wallace Road out to the Salem UGB), traffic signal installation at the intersection of Oregon Highway 99W / Hoffman Road, constructing the Oregon Highway 22 / Oregon Highway 99W interchange, and the Fort Hill interchange in the past 10-years have improved safety and traffic flow.

## Crashes

Records from 2003 to 2007 were reviewed for crash statistics. A total of 3,366 crashes occurred in Polk County during the 5-year period for an average of 673 per year. A total of 1,718 rural area crashes occurred during the 5-year period for an average of 344 per year. A total of 2,643 injuries occurred during the 5-year period for an average of 529 per year. A total of 56 deaths occurred during the 5-year period for an average of 11 per year.

Generally from 2003 to 2007, the number of crashes in rural areas in Polk County has remained stable and the deaths have declined significantly from 17 in 2003 to 9 in 2006 and 9 in 2007.

For generalized road segments the crash and fatality locations are shown in **Figure 5**. It should be noted, the crash data includes numerous crash causes, such as driver error, wet or icy road conditions, and does not necessarily indicate that road or intersection improvements are needed to improve traffic safety. The Polk County Public Works Department developed a database of crash information as part of the 2009 TSP update process, and will continue to update and monitor future crash data to identify future safety improvements to County roads and intersections.

The following summary of crash data for 2003 to 2007 (for crashes on all state, county and city roads) is based on ODOT data from the Transportation Development Division, Transportation Data Section, Crash Analysis and Reporting Unit.

**Table 9**  
**Traffic Crashes All Roads in Polk County**  
**2003 TO 2007**

<b>Year</b>	<b>Crashes - Total</b>	<b>Deaths</b>	<b>Injuries</b>	<b>Rural Area Crashes</b>
2003	747	17	505	359
2004	567	11	500	295
2005	690	10	561	371
2006	695	9	590	331
2007	667	9	487	362

Source: Summary of Motor Vehicle Traffic Crashes, 2003, 2004, 2005, 2006 and 2007.

The following additional material shows crash data for county roads and provides information to consider when selecting projects for safety improvements. The data does not include state or city highways and roads.

The Oregon Department of Transportation, Polk County Sheriff's Office and Polk County Public Works Department maintain crash data. The three sets of data are not the same due to several factors, however they are useable to determine the roads with the highest number of crashes and then to identify future projects that may improve safety on the county road system. The following projects were selected wholly or partially to improve safety; Clow Corner Road / Riddell Road intersection, straightening-out the 90 degree corners on Red Prairie, Corvallis, Buena Vista, Suver, James Howe, and Pioneer Roads, and re-aligning Oakdale and Black Rock Roads.

The following lists crashes from 2003 through 2008 for county roads, with the highest number of crashes listed first (data from Polk County Public Works Department).

Clow Corner Road and Zena Road stand out as the roads with the greatest number of crashes. In 2007 and 2008, the intersection of Clow Corner Road and Riddell Road had 6 and 5 crashes, respectively. Many factors contribute to accidents such as driver impairment, driver error, nighttime versus daytime, wet / dry road conditions, road or intersection design, and whether safety elements such as signs, lights, and rumble strips are in place. Before starting a project, further review will occur of the data and the probable contributing causes of the crashes.

1. Clow Corner Rd                      67 crashes
2. Zena Rd                                54
3. Falls City Rd                        33
4. Perrydale Rd                        29 - 1 Fatal
5. Airlie Rd                              24
6. Corvallis Rd                         24
7. Hoffman Rd                         22
8. Red Prairie Rd                     22 - 3 Fatal
9. Stapleton Rd.                      21 - 1 Fatal
10. Oakdale Rd.                        19

11. Riddell Rd.	19
12. Brush College Rd.	16
13. Orrs Corner Rd.	16
14. Gooseneck Rd.	14 - 1 Fatal.
15. Hopewell Rd.	14
16. Oak Grove Rd.	14
17. Grand Ronde Rd. N	13
18. Bethel Rd.	12
19. Buena Vista Rd.	12
20. Ellendale Rd.	11
21. Mistletoe Rd.	11
22. Rickreall Rd.	11
23. Bridgeport Rd.	10
24. Helmick Rd.	10
25. Rogers Rd.	10 - 2 Fatal
26. Bowersville Rd.	9
27. Doaks Ferry Rd.	9
28. Orchard Heights Rd.	9 - 1 Fatal
29. Parker Rd.	9
30. Strong Rd.	9
31. Elkins Rd.	8 - 1 Fatal
32. Liberty Rd.	8
33. Oak Villa Rd.	8
34. Yamhill River Rd.	8
35. Ballston Rd.	7
36. Cooper Hollow Rd.	7
37. Enterprise Rd	7
38. Harmony Rd	7
39. James Howe Rd	7
40. A R Ford Rd	6
41. Fir Villa Rd	6
42. Fort Hill Rd	6
43. Hawthorne Ave	6
44. Maple Grove Rd	6 - 1 Fatal
45. Smithfield Rd	6
46. Mill Creek Rd	5
47. West Perrydale Rd	5
48. Wigrich Rd	5
49. Talmadge Rd	3 - 1 Fatal
Total Crashes: 674.	Fatals: 12.

The following is the same list as above, but in alphabetical order.

A R Ford Rd.	6
Airlie Rd.	24
Ballston Rd.	7
Bethel Rd.	12
Bowersville Rd.	9
Bridgeport Rd.	10
Brush College Rd.	16
Buena Vista Rd.	12
Clow Corner Rd.	67
Cooper Hollow Rd.	7
Corvallis Rd.	24
Doaks Ferry Rd.	9
Elkins Rd.	8 - 1 Fatal
Ellendale Rd.	11
Enterprise Rd.	7
Falls City Rd.	33
Fir Villa Rd.	6
Fort Hill Rd.	6
Gooseneck Rd.	14 - 1 Fatal
Grand Ronde Rd. N	13
Harmony Rd.	7
Hawthorne Ave.	6
Helmick Rd.	10
Hoffman Rd.	22
Hopewell Rd.	14
James Howe Rd.	7
Liberty Rd.	8
Maple Grove Rd.	6 - 1 Fatal
Mill Creek Rd.	5
Mistletoe Rd.	11
Oak Grove Rd.	14
Oak Villa Rd.	8
Oakdale Rd.	19
Orchard Heights Rd.	9 - 1 Fatal
Orrs Corner Rd.	16
Parker Rd.	9
Perrydale Rd.	29 - 1 Fatal
Red Prairie Rd.	22 - 3 Fatal
Rickreall Rd.	11
Riddell Rd.	19
Rogers Rd.	10 - 2 Fatal
Smithfield Rd.	6

Stapleton Rd.	21 - 1 Fatal
Strong Rd.	9
Talmadge Rd.	3 - 1 Fatal.
West Perrydale Rd.	5
Wigrich Rd.	5
Yamhill River Rd.	8
Zena Rd.	54

Crashes: 674

Fatals: 12

**Figure 5**  
**High Crash Areas**



This page not used.

## Pavement Type / Conditions

Of the approximately 497 miles (784.4 kilometers) of roads maintained by Polk County, slightly under half of the county road system is paved (242 miles, 48.6 percent), while the remainder is primarily gravel (250 miles, 50.3 percent). A small amount (5 miles 0.1 percent) is unimproved.

Inspection results show approximately 80 percent of the paved mileage to be in excellent condition. Another 17 percent is rated as good. Approximately 3 percent is rated fair to poor.

The county's ongoing chip seal program has contributed significantly to maintaining such good pavement conditions. The bulk of the roads received major work in the late 1980s. In 2006 the voters of Polk County approved, by an approximately 70:30 margin, a \$20-million bond measure to fund paving of county roads. As of 2009, about 98 percent of the funds were spent on paving about 180 miles of county roads.

## Intersections

When the 1998 TSP was prepared, a steady theme in the county's list of projects was improvements to intersections. The improvements were primarily to "square off" intersections to improve a driver's ability to see oncoming traffic. The 2009 TSP's list of projects is more diversified and includes bridges, road re-alignments, intersections, road extensions, joint county-state efforts on state highways, frontage / backage roads related to the planned grade-separated interchange at Oregon Highway 22 / Oregon Highway 51, and a re-alignment of Doaks Ferry Road related to the planned grade-separated interchange at Oregon Highway 22 / Doaks Ferry Road between College Drive and the Bonneville Power Administration facility.

In Section 10, *Proposed System Improvements*, **Table 12** provides a list of non-prioritized proposed projects and **Figure 12** indicates the locations of intersection projects.

## Bridges

Every other year, ODOT conducts an inspection of the county's bridges to determine their structural and functional condition. The inspection gives each bridge a "sufficiency rating" from 0 to 100, with 100 being the best possible condition. The rating is based on ten evaluation categories including; deck, superstructure, substructure, retaining wall, channel protection, deck and approach geometry, clearances, and safe load capacity. A rating of 4 (on a scale from 0 to 10) on the deck, superstructure, substructure, or culvert and retaining walls will make the bridge "structurally deficient." A rating of 3 or less on deck geometry, underclearances, or approach roadway alignment will make the bridge "functionally deficient." Of the county's 120 bridges, two are weight limited (seven were weight limited in 1998), and another 13 are considered either structurally or functionally deficient. **Table 10** contains the weight limited bridges and **Table 11** contains the deficient bridges. **Figure 12** shows the bridges scheduled for improvements during the present work program.

Ten county bridges are shown on the project list for replacement and one for removal. It will take several years to complete the work. This, combined with work to improve other deficient

bridges, is sufficient for the next 20 years.

**Table 10  
Weight Limited Bridges**

Bridge Number	Bridge Name (Road)	Road Mile	Water Body	HS Truck		Actual Limit or Posting (tons)		
				Inv. (tons)	OP. (tons)	Type 3	Type 3s2	Type 3-3
				53C063	Military Road	0.1	Mill Creek	19
53C132	Ronco	1.22	N. Fork Pedee Creek	20	27	25	33	41

Source: Polk County Public Works Department, 2009

**Table 11  
Deficient Bridges**

Bridge Number	Road Name	Milepost	Sufficiency Rating	Road Classification	Deficiency
53C009	Clow Corner Road	2.25	62.4	Rural Major Collector	Structural
53C014	Falls City Road	3.72	52.2	Rural Major Collector	Structural
53C031	Buena Vista Road	0.1	49.9	Rural Major Collector	Structural
53C050	Oak Knoll Road	0.91	50.9	Rural Local	Structural
53C053	Kroeing Road	0.46	72.2	Rural Local	Functional
53C063	Old Military Road*	0.1	3	Rural Local	Structural
53C064	Gooseneck Road	1.82	12	Rural Local	Structural
53C076	Grand Ronde Road	0.16	11	Rural Local	Structural
53C078	Riverbend Road*	0.16	27	Urban Local	Structural
53C105	Guthrie Road*	0.12	49.6	Rural Local	Structural
53C107	Riddell Road	2.22	12.6	Rural Minor Collector	Structural
53C120	Helmick Road	0.54	40.8	Urban Collector	Structural
53C132	Ronco Road	1.22	27.5	Rural Local	Structural

Source: Polk County Public Works Department, 2009 \*Replacement scheduled in the state's 2008-2011 STIP.

**Figure 6**  
**Polk County Bridges**

## Impacts from Future Development

The estimated traffic figures used below are based on the addition of traffic from developable lands to existing and / or future traffic estimates. Since development capability in the unincorporated areas is limited by various land use statutes and rules, this method yields reasonable working figures. Generally, traffic increases on most county roads are not expected to be high, especially in comparison to more populated areas.

In Polk County, the highest Average Daily Trip (ADT) increases on county roads are expected to be in the West Salem area. The ADT's are expected to increase from a present population of 22,477 within the city limits as of July 1, 2008 (14,735 in 1998) to approximately 38,496 in 2030. Eola Drive is now connected to 55<sup>th</sup> Avenue and 55<sup>th</sup> Avenue is planned to be the north "leg" of the new Oregon Highway 22 / Oregon Highway 51 grade-separated interchange. Eola Drive will gain additional trips over the 20-year period to 2030. Doaks Ferry Road is the primary north-south road in West Salem extending from Oregon Highway 22 in the south to Oregon Highway 221 (Salem-Dayton Highway) in the north. The planned grade-separated interchange at Oregon Highway 22 between College Drive and the Bonneville Power Administration facility may draw additional trips from streets to the east whose intersections with Oregon Highway 22 will be closed. The segment of Doaks Ferry Road from the new grade-separated interchange up the hill to the north is in the county. Additional data and information on forecasts for that area can be found in the Regional Transportation System Plan (RTSP) and the Salem TSP.

In the remainder of the county, full development of two areas north and south of Dallas zoned for rural residential use (**Figures 7 and 8**) consisting of over 3,000 acres has the potential to generate nearly 3,000 additional vehicle trips per day.

The preferred alternative for each area was developed with significant citizen involvement for the 1998 Polk County TSP and the proposed location of new local and collector roads is described below. The various other alternatives considered for each area are described in the 1998 TSP's Appendix F. The area located west and north of the City of Dallas is bounded by Pioneer and Reuben Boise Roads joining and completing a loop from and onto West Ellendale Road. The Pioneer / Reuben Boise area could have as many as 139 additional homesites at full buildout. At buildout, this area is capable of generating approximately 1,400 trips per day. This would total 2,350 trips generated from the area. Presently the only outlet for these vehicles is through the Pioneer and Reuben Boise connections to West Ellendale Road.

The preferred alternative for this area (**Figure 7**) shows a connection between Reuben Boise Road and Pioneer Road which could serve the several hundred acres of vacant AR-5 property in this area. Acquisition of right-of-way and construction of this road would occur over time based on the level and intensity of rural residential development in this area.

The preferred alternative also shows an extension of Webb Lane to connect with Oregon Highway 223 (Kings Valley Highway) on the east. As shown in **Figure 7**, the county will identify the future location of a connection between West Ellendale Road and the west end of Webb Lane, which is undeveloped. Such a connection coupled with the extension of Webb Lane

to connect to Oregon Highway 223 would function as a limited access collector serving local traffic needs and rural land uses. This connection could serve the James Howe Road, Pioneer Road, and Orchard Knob Road area and could be used as a truck route alleviating some traffic problems on Ellendale Road. **Table 16**, Outstanding Actions, Steps or Refinements, notes that the county will coordinate with the City of Dallas to identify the approximate location of the Ellendale Road-Webb Lane connection in the year 2015.

West Ellendale Road leads to the busiest intersection in the City of Dallas at Oregon Highway 223. The intersection is the connection point for all traffic using Oregon Highway 22 for commuting to points north, west, or east. In 1992, ODOT followed up on a 1973 Oregon State Highway Division study and analyzed future alternative traffic routes to serve the city of Dallas, specifically in regard to the intersection of West Ellendale. The analysis only addressed existing traffic plus traffic generated by known planned developments in the Dallas UGB through 2016. It did not consider total buildout or additional traffic generated from the Pioneer Road - Reuben Boise Road area. The study concluded that the Ellendale intersection would exceed its design capacity by 2002 (no-build LOS F) during morning and / or afternoon commuter peak hours. The addition of a limited access collector road from the Pioneer Road / James Howe Road area would help improve the level of service to a mid-level LOS D. The intersection of Ellendale and Oregon Highway 223 has been improved with upgraded signals, additional lanes and turning lanes and now operates at higher than LOS F.

A second area zoned for rural residential development is near West Salem. Traffic from this area presently exits onto Oregon Highway 22 through direct connections off 55th Avenue or off Doaks Ferry south of Eola Drive. This area has a potential to generate an additional 1,000 trips per day for a total of 2600 trips. The 55th Avenue exit onto Oregon Highway 22 was identified in the 1998 TSP as a dangerous and high crash location and the Doaks Ferry Road intersection was identified as an undesirable intersection point. The intersections of Oregon Highway 22 / Oregon Highway 51 at 55<sup>th</sup> Avenue and Oregon Highway 22 / Doaks Ferry Road were analyzed in the Expressway Management Plan and grade-separated interchanges with frontage / backage roads are called for to resolve the problems. The Expressway Management Plan is incorporated into the 2009 Polk County TSP.

In comparison to other areas zoned AR-5 which were reviewed in the 1998 Polk County TSP, the West Salem area has greater physical and topographic constraints, as well as significant public safety issues. With the exception of the area around the undeveloped portion of Eola Drive, this area does not have the large tracts of vacant, developable rural residential land found in the other study area northwest of Dallas. The preferred alternative for this area (**Figure 9**) shows the two grade-separated interchanges and options for the frontage and backage roads which will be determined in a future ODOT planning process for an Interchange Area Management Plan (IAMP).

Polk County will work with ODOT as part of the Interchange Area Management Plan process. The process may begin in 2010.

The third area, located south of Dallas, is bordered by Cooper Hollow Road and Oregon Highway 223 and is less critical for safety or capacity concerns. Traffic originating from this area will exit onto Oregon Highway 223 or Oregon Highway 51. Both highways are well below

capacity. At full buildout, this area would have as many as 148 new dwellings. Many of the large properties have been partitioned since the 1998 Polk County TSP was adopted, but housing has not been placed on all of the new parcels. Road planning in this area is intended to improve the local road arterial system.

The preferred alternative for this area (**Figure 8**) shows several proposed connections between Ferns Corner Road, Oregon Highway 223, and Oregon Highway 51. These connections would serve the largest vacant developable tract in the study area and would provide adequate circulation and access to this area. Acquisition of right-of-way and construction of these roads would occur over time based on the level and intensity of rural residential development in this area.

In the northwest portion of the county, the county roads connecting onto Oregon Highway 18 and Oregon Highway 22 are experiencing problems due to increased traffic on the state highways. There is development potential in the Grand Ronde / Fort Hill / Valley Junction area which will exacerbate the problems. At the time of the 1998 TSP a major state sponsored refinement plan of the corridor was underway. The process resulted in the Fort Hill Interchange project which was completed in 2009. In the past 10-years, the Spirit Mountain Casino and Hotel facility has expanded and the site has area for additional development. In addition, the Chinook Winds Casino in Lincoln City, the City of Lincoln City and the central Oregon coast are additional attractors that increase traffic on Oregon Highway 18 in the Grand Ronde / Fort Hill / Valley Junction area. Solutions to the traffic issues in this segment of Oregon Highway 18 are, primarily, the responsibility of ODOT. Polk County is committed to work with ODOT, the Confederated Tribes of the Grand Ronde and the other parties in the area to identify and resolve traffic issues.

The county has other developable lands, but they are not expected to generate significant traffic increases. Despite the lack of significant traffic increases there is still accident risk from private driveways and private road connections to the county road system constructed before the county enacted access standards.

The preferred alternatives for the rural residential zoned areas north of Dallas (**Figure 7**) and south of Dallas (**Figure 8**) identify the approximate locations of one or more new local roads that would need to be constructed as future development occurs. The figures represent the best effort in 1998 to provide adequate access to potentially developable properties and connectivity to the existing road system. The planned roads are carried forward into the 2009 Polk County TSP.

Polk County will purchase or require the dedication of right-of-way or obtain easements for these future local roads as the properties are partitioned or subdivided. Because the road locations are approximate, the actual platted and constructed locations of these roads may vary from the locations depicted in Figures 7 and 8 based on factors such as engineering, topography, drainage, and future property ownership and parcel configurations. Any significant variation from these approximate locations, as proposed by property developers, should be based on a justifiable demonstration that the proposed road location will adequately serve both existing and potential development and provide safe and adequate connections to the existing road system.

**Figure 7**  
**Existing and Proposed Road System North of Dallas Preferred Alternative**



This page not used.

**Figure 8**  
**Existing and Proposed Road System South of Dallas Preferred Alternative**

This page not used.

**Figure 9**  
**Oregon Highway 22 / Oregon Highway 51 Interchange**

This page not used.

**Figure 10**  
**Frontage and Backage Road Options 50<sup>th</sup> Avenue to Doaks Ferry Road**

# Proposed System Improvements

---

This section contains a list of intersection, bridge, and bikeway improvements planned for county facilities during the next twenty years. The overall cost of the work is approximately \$46.4 to \$56.4 million. Portions of some costs may be covered by state or federal programs, or may be joint ventures with cities.

Also in this section are outstanding issues and further steps to be addressed during the twenty year period.

## Facility Improvement Projects

**Table 12** contains a list of road and intersection improvements, locations, action required, and estimated costs. Projects involving state highways are identified in the Final Statewide Transportation Improvement Program 2008-2011 which is updated every two years by ODOT. With the exception of a portion of the Oregon Highway 99W and Clow Corner Road improvement project, the projects in **Table 12** are funded using state and federal funds only. Additional road improvement projects involving county roads are also listed in the county's Five-Year Capital Improvements Plan. The Capital Improvement Plan is reviewed in March and April of each year during the county's budget development process and is then approved each year with the adoption of the county's operating budget.

Except for the frontage / backage roads related to the Oregon Highway 22 / Oregon Highway 51 grade separated interchange, the estimated cost in 2009 dollars for the projects in **Table 12** is \$23.5 million. The configuration and estimated costs for the frontage / backage roads will not be determined until the Interchange Area Management Plan is prepared. An estimated figure of \$10.0 million is included in Table 12 to provide an approximation of the cost.

The total estimated cost of the projects in **Table 12** is \$33.5 million.

**Figure 12** shows the proposed projects during the period 2009 to 2030. Additional projects serving areas zoned for rural residential development will be designed and constructed as shown in **Figures 7 and 8** as further development occurs.

**Table 12**  
**Polk County Road and Intersection Improvement Projects**

---

<b>Road Name:</b>	<b>Clow Corner Road / Riddell Road</b>
<b>Action:</b>	Improve intersection. Improve sight distance and construct left turn refuge.
<b>Estimated Cost:</b>	\$1.2mil
<b>Remarks:</b>	Fig. 12, #18
<b>Road Name:</b>	<b>Black Rock Road</b>
<b>Action:</b>	Realignment.
<b>Estimated Cost:</b>	\$3.5mil
<b>Remarks:</b>	Fig. 12, #15
<b>Road Name:</b>	<b>Oakdale Road</b>
<b>Action:</b>	Realignment
<b>Estimated Cost:</b>	\$0.4mil
<b>Remarks:</b>	Fig 12, #16
<b>Road Name:</b>	<b>Eola Drive</b>
<b>Action:</b>	Extend Eola Drive to Oak Grove Road.
<b>Estimated Cost:</b>	\$2.2mil
<b>Remarks:</b>	Fig 12, #17
<b>Road Name:</b>	<b>Doaks Ferry Road</b>
<b>Intersecting Road:</b>	Oregon Highway 22 to Eola Drive
<b>Action:</b>	Realign Doaks Ferry Road from Eola Drive down the hill to the new Oregon Highway 22 / Doaks Ferry Road grade-separated interchange.
<b>Estimated Cost:</b>	\$7.8mil
<b>Remarks:</b>	Identified in the Expressway Management Plan. Fig 12, #20
<b>Road Name:</b>	<b>Red Prairie Road; Corvallis Road; Buena Vista Road; Suver Road; James Howe Road; Pioneer Road</b>
<b>Action:</b>	Smooth out (flatten) the 90 degree corners on roads with high average daily trip counts.
<b>Estimated Cost:</b>	\$8.4mil (RPR: \$1.2mil; CR: \$1.2mil; BVR: \$1mil; SR: \$.5mil; JHR: \$.4mil; PR: \$.5mil.).
<b>Remarks:</b>	Fig 12, #19
<b>Road Name:</b>	<b>Frontage and Backage Roads Related to the Oregon Highway 22 / Oregon Highway 51 Interchange</b>
<b>Intersecting Road:</b>	Several
<b>Action:</b>	Prior to construction of the Oregon Highway 22 / Oregon Highway 51 interchange, construct frontage and backage roads to ensure residences and businesses have access during construction of the interchange.
<b>Estimated Cost:</b>	A generalized estimate of \$10mil is provided, but a revised estimate will be prepared at the completion of the Interchange Area Master Plan.
<b>Remarks:</b>	The number and location of frontage and backage roads will be determined when the Interchange Area Master Plan is prepared. Cost estimates will be developed at that time. Fig 12, 6-1 and Alternatives DFR-2

---



**Table 13** lists the bridge improvement projects in Polk County for the period 2009 to 2030. Funding for these projects comes from the Highway Bridge Rehabilitation and Replacement program (HBRR). The HBRR is a federal program which provides up to 80 percent of the funding for bridge improvement projects. The total cost to Polk County for the projects listed below is approximately \$500,000.

**Table 13**  
**Polk County Bridge Improvement Projects**

Crossing	Road	Bridge #	Action	Cost	Estimated Remarks
1. Ash Creek	Riddell Rd	53C107	Replace	\$1.2 mil	Not on STIP
2. Small Creek	Buena Vista Rd	53C031	Replace	\$1.1 mil	Not on STIP
3. Gooseneck Cr.	Gooseneck Cr. Rd.	53C064	Replace	\$1.1 mil	Not on STIP
4. Spring Valley Cr.	Oak Knoll Rd	53C050	Replace	\$1.3 mil	Not on STIP
5. N Fork Ash Cr.	Clow Corner Rd	53C009	Replace	\$1.6 mil	Not on STIP
6. Fern Creek	Falls City Rd.	53C014	Replace	\$1.3 mil	Not on STIP
7. N Pedee Cr.	Ronco Rd.	53C132	Replace	\$1.0 mil	Not on STIP
8. S Fork Ash Cr.	Helmick Rd.	53C120	Replace	\$1.0 mil	Not on STIP
9. Luckiamute River	Helmick Rd	53C122	Replace	\$2.2 mil	Not on STIP
10. Little Luckiamute	Black Rock Rd.	53C003	Replace	\$1.4 mil	Not on STIP
11. Rickreall Cr.	State Farm Rd.	53C080	Remove	\$0.1 mil	Not on STIP
				<b>\$13.3mil</b>	

See **Figure 12**, Numbers 1 – 11 for the location of the above bridge projects.

This page not used.

**Figure 11**  
**Polk County Road and Bridge Improvements**

This page not used.

**Figure 12**  
**Polk County Transportation Projects**

This page not used.

**Table 14** lists the bikeway system improvement projects in Polk County for the period 2008 to 2030. In addition to the following listed projects, additional bike paths will be constructed as new roads are constructed or as existing roads are improved. For example, when Eola Drive and 55<sup>th</sup> Avenue are improved, they will include a bike facility.

The total estimated cost of the projects in **Table 14** is \$180,000.

**Table 14**  
**Polk County Bikeway System Improvements**

---

<b>Road Name:</b>	<b>Hoffman Road</b>
<b>Section:</b>	Highway 99W easterly to Gun Club Road
<b>Length:</b>	0.97 mi.
<b>Estimated Cost:</b>	\$80,000
<b>Action:</b>	Construct 6-foot-wide paved shoulder contiguous to each traffic lane
<b>Remarks:</b>	Joint venture with city of Monmouth Fig 12, #13

---

<b>Road Name:</b>	<b>Ellendale Road</b>
<b>Section:</b>	James Howe Road westerly to Rueben Boise Road
<b>Length:</b>	0.5 mi.
<b>Estimated Cost:</b>	\$60,000
<b>Action:</b>	Construct 6-foot-wide paved shoulder contiguous to each traffic lane
<b>Remarks:</b>	Fig 12, #12

---

<b>Road Name:</b>	<b>Talmadge Road</b>
<b>Section:</b>	The portion in the county between Madrona and 16 <sup>th</sup> Avenue
<b>Length:</b>	350 feet
<b>Estimated Cost:</b>	\$40,000
<b>Action:</b>	Construct sidewalk on west side of Talmadge Road
<b>Remarks:</b>	Fig 12, #14

---

**Table 15** is a list of jointly funded projects with ODOT on state highways. The projects are overpasses or interchanges that involve county roads. It is not clear at this time that any of these would be jointly funded because the interchange project may include realigning the nearby county roads making the project entirely ODOT funded. It is anticipated, however, that some amount of county funding will be required for these projects. Polk County will work with ODOT to place these projects in the 2010-2013 State Transportation Improvement Program (STIP) and in future revised STIPs. These projects are intended to improve safety and increase capacity on Oregon Highway 99W and Oregon Highway 22 which serve as the county's principal arterials. Polk County will work with ODOT on any necessary studies related to these projects. It is anticipated that additional projects will be identified as part of the Oregon Highway 18 Corridor Refinement Plan process which is currently underway.

**Table 15**  
**Potential Joint Funded Interchange Projects**

---

<b>Road Name:</b>	<b>Oregon Highway 22 / Oregon Highway 223-Smithfield Road</b>
<b>Action:</b>	Construct interchange, close Perrydale Road at Oregon Highway 22 and reroute to Smithfield Road.
<b>Remarks:</b>	Fig 12, #21
<b>Road Name:</b>	<b>Oregon Highway 22 / Greenwood Road</b>
<b>Action:</b>	Construct overpass (Greenwood over Oregon Highway 22).
<b>Remarks:</b>	Fig 12, #22
<b>Road Name:</b>	<b>Oregon Highway 22 / Oregon Highway 51-55<sup>th</sup> Avenue</b>
<b>Action:</b>	Construct interchange.
<b>Remarks:</b>	Fig 12, #23
<b>Road Name:</b>	<b>Oregon Highway 22 / Doaks Ferry Road</b>
<b>Action:</b>	Construct interchange.
<b>Remarks:</b>	Fig 12, #24

---

## Summary of Facility Funding Costs

Road and Intersection Improvements:	\$23,500,000
Frontage / Backage Roads:	10,000,000
Bridge Improvements:	13,300,000
Bikeway Improvements:	180,000
Joint Funding, ODOT Projects:	<u>No estimate</u>
<b>TOTAL:</b>	<b>\$46,980,000</b>

## Outstanding Actions, Next Steps, and Future Plan Refinements

The items contained in **Table 16** are issues which require further evaluation or actions, follow-up steps, or further refinements to the “living” document. The 2009 Polk County TSP updated the 1998 Polk County TSP and in so doing has carried many of the concepts of the 1998 TSP forward, including the goals and policies for Polk County’s transportation system, and the methods of funding projects. However, there are still items which must be completed to implement, simplify, or further improve the plan. The expectation is that the TPR will be updated again in 10-years. However, additional amendments may be added to the TPR as needed. Items identified during the public involvement process which require further study (see Appendix G) should be reviewed on an ongoing basis and grant funding to conduct the studies should be sought from sources such as the Transportation and Growth Management (TGM) Program as funds become available.



**Table 16**  
**Polk County Transportation Systems Plan**  
**Outstanding Actions, Steps, or Refinements**

Number	Actions, Steps, and Refinements	Year Completed
1.	Participate in the ODOT Interchange Area Management Plan at OR 22 / OR 51	2010
2.	Participate in the ODOT planning process for the 3 <sup>rd</sup> bridge across the Willamette	2010-2030
3.	Participate in the ODOT Interchange Area Management Plan at OR 18 / OR 22	2010
4.	Coordinate with the City of Dallas for the new collector north of the city.	2011
5.	Evaluate needs for bike / pedestrian crossing improvements near schools in rural community centers	2012
6.	Coordinate with CARTS and Cherriots for transit service in Polk County	Ongoing
7.	Coordinate with ODOT and other participants in the Oregon Highway 99W Corridor Plan	Until Completed
8.	Complete GPS rights-of-way project	2012
9.	Conduct sidewalk inventory	2013
10.	Review need for hazardous materials routes and truck routes	2014
11.	Review county access permit requirements and procedures	2015
12.	Review TSP; revise as necessary	2019

# Finance Plan

---

This portion of the TSP describes methods available for funding proposed projects. Some projects, such as county roads in urban growth boundaries, will require funding from more than one jurisdiction, even when only one jurisdiction has responsibility for and authority over the improvement being made. Multi-jurisdictional funding can also occur when the county wishes a project to be constructed by the state and joint funding can enhance the probability of the work being done. Multi-jurisdictional funding supports the concept that those who generate the need for improvements should either pay or share in the costs. Developers are usually expected to share the expenses of new construction through right-of-way dedication or roadway construction, or both. It is to the county's advantage to participate in funding projects which directly or indirectly benefit its residents. This portion of the plan addresses these possibilities.

In fiscal year 2008-2009, the Oregon Highway Fund accounted for approximately 75 percent of the annual revenue of the Polk County Public Works Department. The fund is comprised of state-imposed transportation user fees in the form of fuel taxes, weight mile taxes on trucks, and vehicle registration fees. Approximately 24 percent of the fund is shared with counties while 16 percent is shared with cities. These shared funds are distributed to individual counties based on their share of vehicle registrations, and to individual cities based on their population. The remainder of the Public Works Department funds comes from charges for services, such as work on vehicles, intergovernmental revenues, and others. These latter sources are variable and unpredictable over the long term.

The funds the county receives are typically exhausted accomplishing ongoing maintenance, repair, and minor construction projects. The fiscal year 2008-2009 budget shows the normal operations of the Public Works Department would use the entire highway fund allotment, and any construction work, including major pavement overlays, will require another funding source.

## Federal and State Funding

### Federal Surface Transportation Program / State Highway Funding

As the recipient of Federal Highway Administration funding, ODOT is the primary distributor of federal and state transportation funding. ODOT allocates funding through updates to the Statewide Transportation Improvement Program (STIP). Polk County is in Region 2 of the ODOT STIP. Projects selected for inclusion in the STIP must be consistent with the goals and objectives of the Oregon Transportation Plan, and its modal plans for highways, public transportation, freight and passenger rail, and bicycle and pedestrian facilities. Eligible projects are usually selected from a list of prioritized improvements, such as those included in the Polk County TSP and other related refinement plans or studies. Input and testimony from the general public, the local Area Commission on Transportation, and local government representatives play an important role in getting specific projects on the STIP.

STIP project costs will likely be subject to escalation to reflect rising land costs and material costs such as oil and steel. The combined result of fixed federal / state funding allocations and

annual project cost escalation means fewer improvements can be constructed over time. It should be noted that the state has begun to require contributions from local jurisdictions for some projects when development has significant traffic impacts. Cost sharing may become more common if federal funds decrease in the future. It is expected that local contribution to, or cost sharing for, projects such as interchanges and bridges will continue.

The financing methods are those typically used by local, city, and county jurisdictions. The state has fewer options and relies almost exclusively on gas tax, vehicle registration fees, and federal transportation programs for funding projects. However, the state has enhanced its funding by requiring contributions from local jurisdictions or cost sharing when developments have significant traffic impacts. The latter method was used for improvements on U.S. Highway 101 near Lincoln City and for Oregon Highway 18 near Valley Junction in the 1990s. These cost sharing techniques have become more prevalent since the 1998 TSP was adopted.

Polk County would like to see ODOT take a nationwide leadership role to revise the federal project requirements for roads and bridges. The county believes many of the standards are excessive for local rural road systems. This role would begin with ODOT's review and revision of its interpretation of the federal requirements by determining how other states interpret the same requirements.

The sections below summarize some of the federal / state programs that could be useful in Polk County.

### **State Motor Vehicle Fund**

The state collects gas taxes, vehicle registration fees, overweight / overheight fines, and weight / mile taxes and distributes a portion of these revenues to counties and cities using an allocation formula. Revenues vary from year to year because the allocation formula can vary. Funds can be used for capital improvements or maintenance. While the state gas tax provides needed transportation system revenue, it is unlikely to keep pace with future maintenance and project needs. Over time fuel efficiency and the appearance of hybrid or mixed-fuel vehicles will offset the future purchasing power of the gas tax. The projected gas tax revenue, see below, assumes an annual increase of 1.5% out to 2030 which is lower than the past 10-year average annual increase of 2.37%. Increased vehicle mileage, use of alternative fuels, use of electric vehicles, and increased gas prices which can result in reduced vehicle miles traveled are reasons for the 1.5% per year increase.

### **Special Public Works Fund and Immediate Opportunity Fund**

The Special Public Works Fund (loans and grants) and Immediate Opportunity Fund (grants) provide funding for public works that encourage economic and community development such as supporting private projects resulting in creation or retention of permanent jobs. Loans that are provided through the Special Public Works Fund are typically available at below market rates.

### **Oregon Transportation Infrastructure Bank**

The OTIB is a statewide revolving fund available to local governments to provide long-term (up to 30-years) low interest loans designed to promote innovative transportation funding solutions.

Project must be Federal-Aid eligible. OTIB funds can be spent on engineering, environmental permitting, right-of-way acquisition, construction, and project management. Applications are accepted on an ongoing basis.

### **Oregon Immediate Opportunity Fund**

The Immediate Opportunity Fund program, managed by ODOT and the Oregon Department of Economic and Community Development (OECDD), provides a maximum of \$500,000 for public road work associated with an economic development related project of regional significance, provided the project creates primary employment. Additionally, although lesser shares will be considered, the grantee should provide an equal local match.

### **Bicycle and Pedestrian Grant Program**

The State Bicycle and Pedestrian Grant Program, provides funds for highways, county roads and local streets where improvements are needed for pedestrians and / or bicyclists. Eligible project types include: Americans with Disabilities Act upgrades; completing short sections of missing sidewalks or bike lanes; street crossing improvements; intersection improvements; and minor widening for bike lanes or shoulders. ODOT's Safe Routes to Schools Program makes funds available to local governments who partner with schools to identify an appropriate route used by students that needs improvement.

### **Federal Community Development Block Grants**

The Federal Department of Housing and Urban Development administers the Community Development Block Grant Program. Funds are allocated based on county size and demographics, such as income levels and housing standards. In some communities, street reconstruction projects in older neighborhoods have been funded by this program. Many cities use these funds to provide or improve the sidewalk system in older neighborhoods, particularly in the vicinity of schools. It is not clear that CDBG funding would be approved due to the specific criteria of the CDBG program. Showing area wide benefit (entire county) could be problematic. Depending on the specific project further investigation of funding through the CDBG program would be needed.

## **Local Funding**

The sections below summarize local options for funding projects in Polk County.

### **County Gas Tax**

The county could levy a per gallon tax on fuel sold in Polk County. Typical taxes range from \$0.01 to 0.03 per gallon and Washington County, Woodburn, Tillamook, and The Dalles are examples of jurisdictions that have used such a tax. The county could contract with the State Fuel Tax Branch to collect and administer the tax.

### **Local Vehicle Registration Fee**

This would operate similarly to the existing statewide system. Although the method has been discussed, no county or city governments have implemented such a program.

### **Local Property Tax Levies / Street Bonds**

This method is typically used to fund road improvements that will benefit an entire community. General obligation bonds are supported by a property tax levy on the assessed value of property. This method requires voter approval of bond issues and, because of the high costs of bond underwriting, is not usually viable for funding single projects that cost less than \$2,000,000. In 1986, the voters of Polk County approved a bond for road improvements, and another was approved in 2006 for \$20,000,000 by an approximately 70:30 margin. Another bond in the future is a possibility, and the 2009 TSP Financing Plan assumes a \$30,000,000 bond in 2029.

### **Local Improvement Districts (LIDs)**

LIDs levy special assessment charges on property owners within a defined area such as a neighborhood, street frontage or industrial / commercial district, with each property assessed a portion of total project cost. They can be initiated by the property owners or by the county, subject to remonstrance (protests).

LIDs are commonly used for street paving, drainage, parking facilities and sewer lines. The justification for such levies is that many of these public works improvements provide a direct benefit or enhancement to the value of nearby land, thereby providing direct financial benefits to the owners. LIDs are typically used for local street projects that cannot be funded through other means. State law and county code govern the formation of LIDs, the assessment methodology, and other factors.

LIDs are usually funded by the participants, but may also be combined with other funding sources to leverage all available resources. LIDs can be initiated by property owners or the County, and the collected funds are commonly used to repay debt on bonds incurred to undertake the infrastructure improvements. The bonds are guaranteed by payments from the affected properties through a property lien that sunsets when the LID share is paid off. LIDs typically require at least 51 percent of the affected properties to approve the LID. Costs can be determined based on road frontage or square footage.

LIDs appear to be used more commonly by cities, but depending on the transportation project an LID could be used by Polk County.

### **Reimbursement District or Zone of Benefit District**

Public or private entities that build road systems can be compensated by future property owners at a proportional rate as development occurs. Usually limited to private construction of roads, this mechanism can be useful for public / private developments. Implementation of these districts requires local legislative action.

### **Road User, or Street Utility, Fees**

This method would charge county residents and nonresidential users a monthly or yearly fee for use of the county road system, similar to water and sewer utility fees. User fees go to maintenance activities and have been instituted in a number of communities. Typically, such fees are adopted by cities rather than counties. A fee of this type would free up other local transportation dollars (such as gas tax receipts) to be used for constructing transportation projects.

### **Transportation System Development Charges (SDCs)**

SDCs are fees paid by land developers to cover a portion of the increased system capacity needed to accommodate new development. Development charges are calculated to include the costs of impacts on services, such as increased parks and recreation use, or traffic congestion. Polk County does not currently have a transportation SDC. Typically, transportation SDCs are adopted by cities. Except for counties such as; Multnomah, Washington and Clackamas which have a significant portion of development in unincorporated areas, most Oregon counties have not adopted transportation SDCs.

### **Conditions of Approval (exactions)**

System improvements can be required as a condition of development. The process requires the county to demonstrate how the improvements required are necessary to accommodate the impact generated by the new development.

## **Miscellaneous**

The State's Special Transportation Fund for Elderly and Disabled and the federal Title XIX, Section 5310, Section 5311, and grants under ODOT's Community Transportation grant program are available for public transportation. The Community Transportation Program (CTP) will provide funds for operations as well as capital purchases. The award cycle for the CTP is aligned with the STIP schedule. Some of these funds are administered by, or need to be coordinated with, the Salem Area Mass Transit District.

Statewide, most bicycle and pedestrian improvements are made using State Highway Funds as required by ORS 366.514. This statute requires that in any given fiscal year, the amount expended to provide walkways and bikeways must be a minimum of one percent of the state highway funds received by the county. However, this amount may be credited to a reserve fund provided they are expended within a period not to exceed ten years.

Beyond the one percent funding requirement is the section of the statute which requires walkways and bikeways to be provided whenever a road is constructed, reconstructed, or relocated. Projects where the entire depth of the road bed is replaced are usually considered reconstruction projects. Footpaths and trails are not required to be established under this statute: (1) where the establishment of such paths and trails would be contrary to public safety; (2) if the cost of establishing such paths and trails would be excessively disproportionate to the need or

probable use; or (3) where sparse population, other available ways or other factors indicate an absence of any need for such paths and trails.

In 1980, a constitutional amendment prohibited using highway funds in parks and recreational areas. A subsequent Oregon Supreme Court opinion allowed the use of the funds as long as the construction occurs within the road right-of-way.

## **Budget Information**

From fiscal year (FY) 1990 through FY 1996, the total annual expenses for Polk County Public Works Department averaged approximately \$2.65 million. The adopted budget for FY '08-'09 shows a maintenance budget of about \$2.75 million. Although the fund was partially supported by general fund revenues in the 1990's, for the last several years the Department relied, primarily, on state highway funds dedicated to roads. It is anticipated that funds for the Department and the projects in the 2009 TSP will need to come from sources other than state highway funds.

### **House Bill 2001 – Transportation Funding**

House Bill 2001 was passed by the 2009 Legislature and signed by the Governor. House Bill 2001 provides an estimated \$1,485,000 of gas tax revenue and \$76,119 of vehicle registration revenue to Polk County per year. The total could be about \$1.56 million per year. The additional gas tax cannot take effect until there have been two consecutive fiscal quarters of positive state employment or January 1, 2011, whichever is sooner. Upon signing by the Governor, opponents of the Bill began collecting signatures to place the Bill on the ballot. Sufficient signatures were not collected to place the matter before the state's voters. The Transportation Financing Program for Polk County includes the House Bill 2001 funds over the next 20-years.

## **Revenues**

From 1998 to 2008, Polk County had a strong commitment to pavement preservation for its roads and to maintaining its bridges. About \$65.3 million was expended in the county to ensure all roads and bridges were well maintained and that safety improvements were constructed.

Revenues for the county's road, bike and pedestrian transportation systems are shown in **Table 17**, page 11-10, 10-Year TSP Revenue History. Overall, the funding increased from \$2.6 million in FY 98-99 to \$3.2 million in FY '07-'08, an increase of \$620,000 or 23.7 percent over a 10-year period. The 23.7 percent increase was less than 3 percent per year. The funding ranged from a low of \$2.5 million in FY '01-'02 and \$2.6 million in FY '02-'03 to a high of \$3.2 million in FY '07-'08. The range from low to high was a 28 percent change which is significant over one fiscal year.

Funding to support future road, bike and pedestrian projects is expected, generally, to come from the same sources. The amount of funding can vary significantly from year to year depending on the source. The federal and state gas tax is the most stable source, but it is not clear if the same

2.37 percent per year average increase that occurred over from 1998 to 2008 will continue over the next 21-years to the year 2030.

Changing conditions such as higher mileage vehicles, alternate fuels, hybrid vehicles, electric vehicles, and reduced driving, due to higher fuel prices and a poor economy, may mean the gas tax receipts may not increase at the same rate as in the past.

For the purposes of updating the Polk County TSP, an assumption of a 1.5 percent increase per year in gas tax revenue is used.

Over the past 10-years land costs for right-of-way and construction costs have risen significantly. Costs increased much faster than the 2.37 percent average increase per year for revenues with the net effect that year-by-year the county's buying power was less and less.

### **Gas Tax Revenues**

For gas tax revenues, the funding increased from \$2.4 million in FY 98-99 to \$2.9 million in FY 07-08, an increase of \$485,000 or 20.1 percent over a 10-year period which is less 2 percent per year. The funding ranged from a low of \$2.4 million in FY 98-99 to a high of \$3.0 million in FY '05-'06 and '06-'07.

For the purposes of updating the Polk County TSP, a 1.5 percent increase per year is proposed out to 2030.

### **Bike Revenues**

For bike revenues, the average annual revenue to the county for the first three fiscal years 98-99, 99-00 and 00-01 was \$25,167 (\$75,500/3). The average annual revenue to the county for the last three fiscal years '05-'06, '06-'07 and '07-'08 was \$29,894 (\$89,681/3). The increase from the average of the first three years to the average of the last three years was \$4,727 (\$25,167 - \$29,894) which is an 18.8 percent increase over 10-years or 1.8 percent per year.

Again, changing conditions with travel costs and travel behavior could negatively affect the bike revenues received by the county to the year 2030. For the purposes of updating the Polk County TSP, a 1.5 percent increase per year in bike revenue is proposed.

### **Federal Revenues**

Federal revenues the last 10-years have varied from zero dollars in three of the fiscal years to a high of \$305,716 in FY '07-'08. The average annual revenue to the county for the past 10-years was \$140,312 (\$1,403,120/10).

The variability of this category may or may not continue and the average amount may change. The variability is so great and the timing of zero receipts is so inconsistent that it is not prudent to develop an annual average increase such as was done above for gas tax and bike funding. For example, the federal annual average of the first three years is about \$48,000 more than the annual average of the last three years. For the purposes of updating the Polk County TSP, a fixed \$150,000 per year in federal revenue out to 2030 is proposed.



### **Oregon Transportation Investment Act III of 2003**

Oregon Transportation Investment Act III of 2003 (OTIA III) revenues over the last 10-years have also varied significantly. The 2003 legislation provided a \$2.46 billion bond funding package for Oregon's roads and bridges for a 10-year period. Projects along freight routes of statewide significance have priority. The projects are incorporated into the Statewide Transportation Improvement Program (STIP). Calculating the annual average revenue to the county for the past 10-years would not be meaningful because there were projects in the county only in two years. OTIA III funded projects are listed in the STIP state funded project lists that are updated every two years. A portion of the \$2.46 billion funding (\$300 million) goes to replace and repair local bridges and 141 projects were approved by the Oregon Transportation Commission in 2004. A portion of the funding (\$361 million) goes for county and city maintenance and preservation over 10 years. Of the \$361mil, 60 percent, or \$217 million, goes to Oregon's 36 counties based on a formula and the counties select their individual projects.

For the purposes of updating the Polk County TSP, no specific dollar assumption in revenue is included because the county received its share of the funds early in the funding period and it is not expected that additional funds will be received.

### **County-wide Road Bond**

For the Road Bond category a property tax funded bond was approved by the voters of Polk County in 2006 for over \$20.7 million by an approximately 70:30 margin. Almost all the funds were expended during the period 2007 to 2009 on pavement overlays for about 180 road miles. A small amount of about 1 percent was unspent as of late 2009. Given the high voter support the county may choose to present to the voters another road bond, but it is not known when or what specific projects would be included or how much the bond would be. Many factors must be considered before a decision is made to ask the voters to approve another property tax funded bond measure. About 180 road miles were repaired and maintained and the work will not begin to fail for about 10-years.

For the purposes of updating the Polk County TSP, a \$30 million road bond is assumed in 2029.

### **Economic Development Loan**

For the Economic Development Loan category there was a \$1 million loan in FY '02-'03. Many factors must be considered before another application for an Economic Development loan is submitted. At this time it is not known when or what specific project would be included or how much the requested loan would be.

For the purposes of updating the Polk County TSP, no specific dollar assumption for an Economic Development loan is proposed, but it is recognized that during the next 20-year period a loan application may be submitted. Economic Development loans are tied to a specific transportation need related to attracting or retaining jobs. If a loan application is to be added, it would have to be for a known specific facility at a specific location.

### **Federal Stimulus**

Another category of funding was available in 2009 due to the national economic situation. Federal stimulus funds of about \$400,000 were received by Polk County in fiscal year 2009-2010 beginning July 1, 2009. The specific project was repaving the Falls City Highway from Oregon Highway 223 (Kings Valley Highway) to the City of Falls City.

For the purposes of updating the Polk County TSP, \$400,000 was anticipated in FY '09-'10 and it was expended in FY '09-'10.

**Table 17**  
**10-Year TSP Revenue History**  
**POLK COUNTY**

Fiscal Year	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08
Gas Tax	2,416,481	2,546,155	2,522,104	2,511,840	2,496,612	2,837,864	2,867,920	3,024,232	3,013,161	2,901,360
Bike Path	24,409	25,719	25,476	25,372	25,218	28,665	28,969	30,242	30,132	29,307
Fed \$	175,021	263,964	163,629	0	57,593	0	282,791	154,406	0	305,716
<b>TOTAL</b>	<b>\$2,615,911</b>	<b>\$2,835,838</b>	<b>\$2,711,209</b>	<b>\$2,537,212</b>	<b>\$2,579,423</b>	<b>\$2,866,529</b>	<b>\$3,179,680</b>	<b>\$3,208,880</b>	<b>\$3,043,293</b>	<b>\$3,236,383</b>
OTIA III						\$13,116,000	\$1,803,000			
Road Bond									\$20,722,826	
Econ Dev Loan					\$1,000,000					

Source: Polk County.

### Summary and Projection

For the 10-year period of 1998 to 2008, total funding increased from \$2.6 million in FY 98-99 to \$3.2 million in FY '07-08, an increase of \$620,000 or 23.7 percent. The following projection shows the gas tax funding to increase 1.5 percent per year, the bike funding to increase 1.5% per year, a constant amount of \$150,000 per year for federal funding, no further funding from OTIA III, no Economic Development loan, \$1.56 million from House Bill 2001 and a \$30 million local road bond in 2029.

For the period 2009 to 2030 the revenue projection is:

Gas tax:	\$78,989,943	
Bike:	789,899	
Federal:	3,450,000	
2009 stimulus:	<u>400,000</u>	
TOTAL:	\$83,629,842	\$83,629,842
House Bill 2001	31,200,000	
Bond in 2029	<u>30,000,000</u>	
	61,200,000	<u>61,200,000</u>
<b>TOTAL REVENUE:</b>		<b>\$144,829,842</b>

**Table 18  
Revenue Projection 2009 to 2030**

FY	Gas Tax	Bike	Federal	Stimulus	Total	HB 2001	Bond
2008	\$2,901,360	\$29,014	\$150,000		\$3,080,374		
2009	\$2,944,880	\$29,449	\$150,000	\$400,000	\$3,524,329		
2010	\$2,989,054	\$29,891	\$150,000		\$3,168,944		
2011	\$3,033,889	\$30,339	\$150,000		\$3,214,228	1,560,000	
2012	\$3,079,398	\$30,794	\$150,000		\$3,260,192	1,560,000	
2013	\$3,125,589	\$31,256	\$150,000		\$3,306,845	1,560,000	
2014	\$3,172,473	\$31,725	\$150,000		\$3,354,197	1,560,000	
2015	\$3,220,060	\$32,201	\$150,000		\$3,402,260	1,560,000	
2016	\$3,268,361	\$32,684	\$150,000		\$3,451,044	1,560,000	
2017	\$3,317,386	\$33,174	\$150,000		\$3,500,560	1,560,000	
2018	\$3,367,147	\$33,671	\$150,000		\$3,550,818	1,560,000	
2019	\$3,417,654	\$34,177	\$150,000		\$3,601,830	1,560,000	
2020	\$3,468,919	\$34,689	\$150,000		\$3,653,608	1,560,000	
2021	\$3,520,953	\$35,210	\$150,000		\$3,706,162	1,560,000	
2022	\$3,573,767	\$35,738	\$150,000		\$3,759,504	1,560,000	
2023	\$3,627,373	\$36,274	\$150,000		\$3,813,647	1,560,000	
2024	\$3,681,784	\$36,818	\$150,000		\$3,868,602	1,560,000	
2025	\$3,737,011	\$37,370	\$150,000		\$3,924,381	1,560,000	
2026	\$3,793,066	\$37,931	\$150,000		\$3,980,996	1,560,000	
2027	\$3,849,962	\$38,500	\$150,000		\$4,038,461	1,560,000	
2028	\$3,907,711	\$39,077	\$150,000		\$4,096,788	1,560,000	
2029	\$3,966,327	\$39,663	\$150,000		\$4,155,990	1,560,000	\$30mil
2030	\$4,025,822	\$40,258	\$150,000		\$4,216,080	1,560,000	
<b>TOTAL</b>	<b>\$78,989,943</b>	<b>\$789,899</b>	<b>\$3,450,000</b>	<b>\$400,000</b>	<b>\$83,629,842</b>	<b>\$31,200,000</b>	<b>\$30mil</b>
							144.8mil

**Project and Maintenance Costs Compared to Revenues**

Total estimated project costs (not including annual maintenance) are \$46.9 million for all county road, bike, pedestrian and bridge projects out to 2030. ODOT projects are not included in the costs because ODOT projects are funded by state and federal funds, although for ODOT projects that involve county roads it is anticipated there may be a requirement for a local contribution.

The annual maintenance expense budgeted in FY '08-'09 was \$2,765,000. This amount, not counting any inflation factor, over a 20-year period is \$55,300,000.

When combined, the 20-year project costs of \$46.9 million and the 20-year maintenance costs of \$55.3 million are \$102.2 million. The project costs and maintenance costs significantly exceed the 20-year \$83.6 million in revenues without House Bill 2001 and without a \$30 million bond. The shortfall is \$18.6 million over the 20-year period.

Project and Maintenance Costs:	\$102.2 million
Revenues (without HB 2001 & Bond):	<u>83.6 million</u>
	\$ 8.6 million shortfall

Including an estimated \$31,200,000 from House Bill 2001 and an estimated \$30,000,000 bond as revenues, the total revenue figure is \$144,800,000. The project costs and maintenance costs do not exceed the 20-year \$144.8 million in revenues with the House Bill 2001 and bond funds. The excess is \$42.6 million over the 20-year period.

Project and Maintenance Costs:	\$102.2 million
Revenues (with HB 2001 & Bond):	<u>144.8 million</u>
	\$ 42.6 million excess

Polk County will carefully prioritize its projects each year and ensure the project and maintenance costs are supported by revenues.

The 2009 TSP does not prioritize the projects. The county prioritizes its projects on an annual basis in the spring when the Five-Year Capital Improvement Plan is reviewed during the county's budget development process and is then approved each year with the adoption of the county's operating budget.

The frontage / backage roads associated with the Oregon Highway 22 / Oregon Highway 51 interchange should be a high priority. The county intends to construct them prior to ODOT constructing the interchange to ensure the residents and businesses have access. The Expressway Management Plan (EMP) calls for county frontage roads that will be constructed with County funds. The EMP projects are not eminent because an Interchange Area Management Plan must be completed for the area around the interchange before the construction phase with land acquisition, engineering and associated steps occur. The county has time to calculate an estimated amount to start setting aside each year to ensure funds are available for the frontage / backage road system.