## CHAPTER 6: FUTURE TRAFFIC VOLUME DEMAND PROJECTIONS

When planning ahead to address the needs of the transportation network, it is important to project the level of traffic that can be anticipated during the planning period and beyond. Population growth plays a key role in determining the needs of a transportation system. Generally, an increase in population results in an increase in the use of transportation facilities; which, in most cases, means more vehicles on the roadways. For this reason, future population growth is often a good indicator of future increases in traffic volumes. To help paint this 'picture', population figures compiled by the U.S. Census Bureau, Portland State University Population Research Center, and projections developed by Marion County in coordination with the individual cities in Marion County were used.

Based on this information, County staff has developed projections of what the future traffic volume will be for the major roadways within Marion County in the year 2032. These volumes project the anticipated demand for travel on each road assuming the roadway will have adequate capacity to handle this demand. We then identify locations where capacity problems are anticipated to develop during the 20-year timeframe of this plan, and these locations are described in Chapter 8.

## 6.1 POPULATION FORECAST

Marion County is required by Oregon Revised Statute (ORS 195.036) to establish and maintain a population forecast for the urban areas and the unincorporated area of the county in coordination with the local cities. This forecast is used in maintaining and updating comprehensive plans. Marion County most recently adopted a population forecast for the year 2030 in October 2009. Previously, 2020 population projections were developed in cooperation with local governments and adopted by the County in October 1998. The adopted 2030 projections utilized population estimates for cities and counties provided by the Portland State University Population Research Center and the respective plans and studies of each of the cities. For the larger cities of Salem, Keizer, Woodburn, Silverton and Stayton, PSU generated population estimates based on low, medium, and high growth scenarios that the cities may use in their planning efforts, for instance to consider the impact of different levels of potential future growth on the city's provision of services.

Amendments to the adopted population projections are reviewed and adopted on a periodic basis as new population data is made available and as cities require a 20-year forecast for use in their local planning efforts. Marion County may address the population projections for all the cities and the unincorporated area of the county through a coordinated process to develop and adopt new 2035 or 2040 population projections for use in updating comprehensive plans.

In 1998, Marion County initiated a countywide Growth Management Project that resulted in the 2002 adoption of an Urban Growth Management Framework that is part of the Urbanization Element of the Marion County Comprehensive Plan. The Framework is a coordinated planning strategy that provides the county and cities with a guide when considering urban expansion needs

and decisions in response to growth issues. It also contains long-range 2050 population forecasts that may be used to consider planning issues beyond the standard 20-year horizons of local plans.

**Table 6-1** shows the population figures counted in the 2000 and 2010 census and 2007 and 2010 estimates from Portland State University for each city in Marion County, the unincorporated areas of the County, and the County as a whole. Also shown are the County's adopted 2030 projections and average annual growth rate for the urban areas of the county, and the unincorporated area of the county, from 2010 to 2030.

Table 6-1
Population Projections for Marion County

Jurisdiction	1990	2000	2007	<b>2010</b> Census <sup>3,4</sup>	<b>2030</b> <sup>1</sup>	2010-2030 Av Annual Growth Rate
Marion County	228,516	284,834	311,070	315,335	410,245	1.20%
Aumsville	1,660	2,989	3,300	3,584	5,706	2.20%
Aurora	597	664	955	918	1,825	2.54%
Detroit	331	262	265	202	371	1.70%
Donald	314	607	995	979	2,034	3.20%
Gates <sup>2</sup>	466	437	460	455	487	0.23%
Gervais	999	1,923	2,250	2,464	4,597	2.80%
Hubbard	1,901	2,458	3,095	3,173	4,718	1.85%
Idanha <sup>2</sup>	160	131	145	145	170	0.63%
Jefferson	1,810	2,488	2,590	3,098	5,121	2.44%
Mill City <sup>2</sup>	309	316	328	330	367	0.53%
Mt Angel	2,794	3,128	3,755	3,286	4,977	1.08%
Salem/Keizer UGB <sup>2</sup>	146,560	185,796	201,391	206,444	261,484	1.12%
St Paul	322	352	410	421	556	1.34%
Scotts Mills	286	316	300	357	581	2.04%
Silverton	5,932	7,610	9,205	9,222	14,418	1.92%
Stayton	5,029	6,829	7,765	7,644	11,359	1.66%
Sublimity	1,487	2,139	2,255	2,681	3,200	1.53%
Turner	1,266	1,175	1,690	1,854	3,664	3.15%
Woodburn	13,535	20,191	22,875	24,080	37,216	2.04%
Unincorporated	42,758	45,023	47,041	43,998	47,394	0.19%

<sup>(1)</sup> Forecast Population

<sup>(2)</sup> Marion County portion only (Salem and Keizer forecasts coordinated with SKATS and are portion of entire Salem/Keizer area forecast total)

<sup>(3) 2010</sup> Census number is PSU 2010 annual estimate.

<sup>(4)</sup> The 2010 Census estimate for Salem/Keizer was made by first deriving an AAGR based on growth in the cities during the time between the PSU 2007 annual estimate and the 2010 census number. Then, the derived AAGR was applied to the 2007 PSU annual estimate for the entire Salem/Keizer UGB to generate an estimated 2010 census number for the Marion County portion of the Salem/Keizer UGB.

## 6.2 FUTURE TRAFFIC PROJECTIONS

Future traffic volumes have been projected by County Staff for the year 2032. These projections are based on many factors, including:

- Population projections for the areas served by the road
- Anticipated growth of cities
- Anticipated growth of business traffic on the road
- Connections to recreation or tourist activities
- Directness of the route
- Character of the roadway
- Anticipated transportation trends
- Land development patterns

As a reference, **Figure 6-1** shows the existing traffic volumes on roadways in rural Marion County. This gives us a picture of the traffic volumes currently on the County road system today.

**Figure 6-2** shows projected future traffic volume demand on selected major rural roadways. The projected future traffic volumes have been used to identify roadway segments that could experience heavy traffic and unacceptable levels-of-service within the next 20 years if no improvements are made, such as transit improvements, Transportation System Management (TSM) and Transportation Demand Management (TDM) strategies, or roadway improvements. As it is not possible to predict the growth of a region with complete accuracy, future traffic projections will need to be updated regularly as more accurate and updated information becomes available. The use of computer modeling was used in addition to historic growth rates collected by the County. Use of computer modeling provides a more sophisticated approach to predict future traffic demand, in part, by taking into account future land use development that simple historic growth rates do not account for.

It is important to note that these projections are for future traffic volume <u>demand</u>. This is our estimate of the number of drivers who would want to use that roadway in the year 2032. This would be equivalent to the projected traffic volume on that road <u>if an adequate supply of roadway capacity is available</u>. In some cases, roadway expansion would have to occur before these volumes of traffic could actually travel on that road. If sufficient capacity is not available, drivers would likely divert to other routes. If these other routes are not available, or if they also lack available capacity, some drivers may choose to make the trip to a different location, not make the trip, or reduce their visits to or business in the region.

**Figure 6-3** shows the anticipated growth in traffic volume demand on key roadways in Marion County as a percentage of the current traffic volume on the road.

**Table 6-2** shows the projected future traffic volume demand for Arterials, Major Collectors, and Strategic Corridors in Rural Marion County, including State Highways. State Highway volumes and projections were obtained from ODOT. 1995 and 2004 volumes are also listed for reference.

Twenty year traffic volumes are anticipated to increase on virtually all roadways in Marion County, and some key corridors are expected to see large increases in traffic volume. In some cases, key roadways and intersections currently do not have enough capacity to handle the amount of traffic that will want to use that road.

Table 6-2
Projected Future Daily Traffic Volume Demand

Corridor	From	To	1995 Daily Volume	2004 Daily Volume	2011 Daily Volume	2032 Daily Projection
Airport Rd	Ehlen Rd	Arndt Rd	2100	2600	2800	3900
Arndt Rd	Oregon 551	Airport Rd	8200	12500	10900	14200
Arndt Rd	Boones Ferry Rd	Oregon 551	2000	2400	2500	2500
Aumsville Hwy	Salem	Witzel Rd	1800	2500	2800	6300
Aumsville Hwy	Witzel Rd	Silver Falls Hwy	1700	1800	2400	3600
Aumsville Hwy	Silver Falls Hwy	Aumsville	4200	4000	3600	4000
Battle Creek Rd	Delaney Rd	Salem	1400	1700	1400	2200
Brooklake Rd	Wheatland Rd	River Rd	2200	2500	2500	3400
Brooklake Rd	River Rd	Huff Ave	7400	9300	8400	11300
Brooklake Rd	Huff Ave	1-5	7000	12000	10600	18100
Brooklake Rd	I-5	Oregon 99E	5800	8200	7800	10000
Brush Creek Rd	Silverton Rd	Hazelgreen Rd	1300	1800	1600	2200
Butteville Rd	Oregon 219	Donald	2300	2600	2500	3800
Butteville Rd	Donald	Ehlen Rd	2300	2700	2800	4300
Butteville Rd	Gervais	Oregon 219	2000	2600	2800	5300
Cascade Hwy	Stayton	Oregon 22	8000	12500	12100	18300
Cascade Hwy	Oregon 22	Sublimity	7200	9000	10400	14700
Cascade Hwy	Sublimity	Triumph Rd	3700	3900	3700	4800
Cascade Hwy	Triumph Rd	Oregon 214	3400	3600	3200	4100
Cascade Hwy	Oregon 214	State St	2700	3400	3300	5300
Cascade Hwy	State St	Sunnyview Rd	3100	3700	3700	5800
Cascade Hwy	Sunnyview Rd	Kaufman Rd	3100	3700	3800	6000
Cascade Hwy	Kaufman Rd	Paradise Alley	3600	4600	4700	8000
Cordon Rd	Caplinger Rd (Salem UGB)	State St	10900	14000	12700	17800
Cordon Rd	State St	Center St	13700	17000	16400	22300
Cordon Rd	Center St	Sunnyview Rd	12500	16000	14900	20500
Cordon Rd	Sunnyview Rd	Silverton Rd	10400	14500	13900	20600

Corridor	From	То	1995 Daily Volume	2004 Daily Volume	2011 Daily Volume	2032 Daily Projection
Cordon Rd	Silverton Rd	Hayesville Dr	5400	8000	7600	12300
Cordon Rd	Hayesville Dr	Kale St	4300	7000	6200	10200
Cordon Rd	Kale St	Hazelgreen Rd	3700	6400	5600	9700
Deer Park Rd	Culver Dr	Gaffin Rd	2000	2600	2500	3700
Delaney Rd	Sunnyside Rd	I+5	1600	2600	3000	5500
Delaney Rd	I-5	Battlecreek Rd	3000	3400	4200	6600
Delaney Rd	Battlecreek Rd	Turner UGB	2450	2700	3300	4500
Delaney Rd	Turner UGB	3rd Street	2900	3000	2800	4300
Ehlen Rd	Donald Rd	Butteville Rd	3000	6600	6500	10700
Ehlen Rd	Butteville Rd	Bents Ct	5000	8600	8400	14900
Ehlen Rd	Bents Ct	I-5	5800	9800	10100	17900
Ehlen Rd	I-5	Oregon 551	4100	7600	8300	13300
Ehlen Rd	Oregon 551	Aurora UGB	4800	8300	8500	13900
Gaffin Rd	Cordon Rd	Oregon 22	2800	3800	4100	7500
Golf Club Rd	Oregon 22	Stayton UGB	9500	10000	10000	13200
Hazelgreen Rd	Salem UGB	Cordon Rd	5600	6500	8300	11600
Hazelgreen Rd	Cordon Rd	62nd Ave	4100	5400	6300	12000
Hazelgreen Rd	62nd Ave	Howell Prairie Rd	3800	5000	5900	10000
Hazelgreen Rd	Howell Prairie Rd	Shannon Rd	3100	3700	4300	7300
Hazelgreen Rd	Shannon Rd	Brush Creek Rd	3400	4200	4300	6100
Hazelgreen Rd	Brush Creek Rd	Mt. Angel Hwy	4300	5400	5200	7700
Hazelgreen Rd	Mt. Angel Hwy	Silverton UGB	3100	3700	3200	3900
Howell Prairie Rd	Oregon 214	Jordon Rd	500	700	750	1400
Howell Prairie Rd	Jordon Rd	Macleay Rd	800	900	1000	1100
Howell Prairie Rd	Macleay Rd	State St	1200	1400	1400	1900
Howell Prairie Rd	State St	Sunnyview Rd	2000	2400	2300	3000
Howell Prairie Rd	Sunnyview Rd	Kaufman Rd	2200	2600	2800	3700
Howell Prairie Rd	Kaufman Rd	Silverton Rd	1500	2000	2200	3500

Corridor	From	То	1995 Daily Volume	2004 Daily Volume	2011 Daily Volume	2032 Daily Projection
Howell Prairie Rd	Silverton Rd	Hazelgreen Rd	1500	2300	2700	5900
Howell Prairie Rd	Hazelgreen Rd	Labish Center Rd	1500	1700	2100	2900
Howell Prairie Rd	Labish Center Rd	Waconda Rd	1200	1400	1100	1600
Howell Prairie Rd	Waconda Rd	Mt. Angel-Gervais Rd	1100	1400	1300	2100
Howell Prairie Rd	Mt. Angel-Gervais Rd	Monitor-McKee Rd	1500	1800	2200	2700
Howell Prairie Rd	Monitor-McKee Rd	Oregon 99E	3000	3300	3100	4000
Hylo Rd	Liberty Rd	Sunnyside Rd	1200	1700	1700	3300
Jefferson-Marion Rd	Jefferson City Limits	Skelton Rd	2900	3000	2700	3200
Jefferson-Marion Rd	Skelton Rd	Parrish Gap Rd	2500	2500	2300	2700
Jefferson-Marion Rd	Parrish Gap Rd	Greens Bridge Rd	2100	2400	2100	2500
Jefferson-Marion Rd	Greens Bridge Rd	Stayton Rd	2400	2500	2600	3200
Jefferson-Scio Rd	Jefferson UGB	County Line	2500	2600	2500	3600
Liberty Rd	Salem	Hylo Rd	3000	4000	3400	5200
MacLeay Rd	Cordon Rd	Culver Dr	2800	3800	3400	5300
MacLeay Rd	Culver Dr	62nd Ave	1400	1800	1900	3100
Marion Rd	Stayton Rd	Mac Robins Ln	1100	1100	1000	1200
Marion Rd	Mac Robbins Ln	Darley Rd	1300	1300	1500	1800
Marion Rd	Darley Rd	Shaff Rd	1700	1700	1600	1900
Marion Rd	Shaff Rd	Bear Ln SE	2300	2000	1600	2200
Marion Rd	Bear Ln SE	Mill Creek Rd	2600	2200	1800	2400
Marion Rd	Mill Creek Rd	Turner UGB	4700	4300	3500	5900
Matheny Rd	Ferry Landing	Wheatland Rd	1050	900	1000	1100
Matheny Rd	Wheatland Rd	River Rd	690	800	700	1000
McKay Rd	Oregon 219	French Prairie Rd	3700	6800	7000	11500
McKay Rd	French Prairie Rd	Arbor Grove Rd	3100	6500	6800	13800
Meridian Rd	Hobart Rd	Downs Rd	1700	2000	2300	3300
Meridian Rd	Downs Rd	E. College Rd	2400	2600	3200	4200
Meridian Rd	E. College Rd	Marquam Rd	1800	2000	2200	2800

Corridor	From	То	1995 Daily Volume	2004 Daily Volume	2011 Daily Volume	2032 Daily Projection
Meridian Rd	Marquam Rd	Woodburn-Monitor Rd	2000	2200	2300	3100
Mill Creek Rd	Marion Rd	Aumsville	3100	2700	3600	4900
Mill Creek Rd	Aumsville	Golf Club Rd	3700	3300	3300	4100
Mt. Angel-Gervais Rd	Oregon 99E	Howell Prairie Rd	1400	2200	1500	2700
Mt. Angel-Gervais Rd	Howell Prairie Rd	Mt. Angel	1300	1300	1400	2100
Mt. Angel Hwy	Hazelgreen Rd	Mt. Angel	2500	3400	3100	5500
Mt. Angel-Scotts Mills Rd	Meridian Rd	Oregon 213	2000	2200	2400	3000
Mt. Angel-Scotts Mills Rd	Oregon 213	Scotts Mills	1600	1800	1800	2300
North Fork Rd	Oregon 22	Pioneer Rd	1300	1500	1300	1400
Orville Rd	South River Rd	Vitae Springs Rd	1300	1800	1600	2600
River Rd	Keizer City Limits	Brooklake Rd	4900	5800	5500	8000
River Rd	Brooklake Rd	Waconda Rd	4500	5100	5100	6600
River Rd	Waconda Rd	French Prairie Rd	3900	4600	4900	6900
River Rd	French Prairie Rd	Mahony Rd	2200	2500	2300	3000
River Rd	Mahony Rd	Davidson Rd	2500	2800	2500	3100
River Rd	Davidson Rd	St. Paul	2400	2600	3800	4900
River Rd South	Independence Bridge	Orville Rd	3800	4700	4400	7100
River Rd South	Orville Rd	Vitae Springs Rd	2400	2700	2700	3500
River Rd South	Vitae Springs Rd	Sawmill Rd	2400	2800	2800	3900
River Rd South	Sawmill Rd	Riverdale Rd	2500	2900	2800	3800
River Rd South	Riverdale Rd	Salem	2900	3200	3200	4000
Shaw Hwy	Aumsville	Oregon 22	3500	4500	4800	8000
Shaw Hwy	Oregon 22	Brownell Rd	1200	1600	2000	3900
Shaw Hwy	Brownell Rd	Oregon 214	900	1000	1500	2000
Silverton Rd	Cordon Rd	72nd Ave	8900	11000	10200	15500
Silverton Rd	72nd Ave	Howell Prairie Rd	8100	10500	10300	15000
Silverton Rd	Howell Prairie Rd	Shannon Rd	8200	10500	10200	15100
Silverton Rd	Shannon Rd	Brush Creek Rd	8100	10500	10700	17200

Corridor	From	То	1995 Daily Volume	2004 Daily Volume	2011 Daily Volume	2032 Daily Projection
Silverton Rd	Brush Creek Rd	Silverton	7800	9500	9800	14000
Skyline Rd	Vitae Springs Rd	Salem	3200	3600	3500	4400
State St	Cordon Rd	63rd Ave NE	3900	4700	5200	8000
State St	63rd Ave NE	Howell Prairie Rd	2400	3300	3700	5600
Stayton Rd	Jefferson-Marion Rd	Woodpecker Dr	2100	2300	1800	2200
Stayton Rd	Woodpecker Dr	W Stayton Rd	2500	2700	2300	3000
Stayton Rd	W Stayton Rd	Stayton	3300	3800	3200	4600
Sublimity Rd	Golf Club Rd	Sublimity	2000	3400	3700	7500
Sunnyside Rd	Delaney Rd	Salem	1800	2500	3400	6500
Sunnyview Rd	Cordon Rd	Hampden Ln	2800	3200	3100	4000
Sunnyview Rd	Hampden Ln	Howell Prairie Rd	1800	2200	2100	3600
Talbot Rd	Buena Vista Rd	Marlatt Rd	200	200	200	220
Talbot Rd	Marlatt Rd	Jorgenson Rd	700	600	450	450
Talbot Rd	Jorgenson Rd	I-5	900	800	900	900
Talbot Rd	I-5	Jefferson Hwy	1300	1600	1100	2400
Turner Rd	Turner City Limits	Salem	5100	5700	4700	5400
Vitae Springs Rd	Orville Rd	Skyline Rd	1600	2100	2100	3300
Wheatland Rd	Keizer	Brooklake Rd	1700	2000	1700	2000
Wheatland Rd	Brooklake Rd	Ferry	2000	2200	2200	2300
Whiskey Hill Rd	Hubbard	Clackamas County	1900	2600	2300	3700
Woodburn-Monitor Rd	Oregon 214	Meridian Rd	1400	1500	1200	1400
Woodburn-Monitor Rd	Meridian Rd	Clackamas County	2600	2800	3200	3600
Yergen Rd	Arbor Grove Rd	Case Rd	3700	7400	7500	12300
Yergen Rd	Case Rd	Donald Rd	3700	7600	8200	13400
Interstate 5	Linn County	Talbot Rd	50000	60100	56800	82400
Interstate 5	Talbot Rd	Ankeny Hill Rd	50100	60300	56900	81300
Interstate 5	Ankeny Hill Rd	Jefferson Hwy	49000	60300	56900	81300
Interstate 5	Jefferson Hwy	Delaney Rd	50100	62000	58700	94100

Corridor	From	То	1995 Daily Volume	2004 Daily Volume	2011 Daily Volume	2032 Daily Projection
Interstate 5	Delaney Rd	Salem UGB	46900	58100	60600	95800
Interstate 5	Salem UGB	Brooklake Rd	71000	85800	88200	132600
Interstate 5	Brooklake Rd	Woodburn	68900	85300	83300	109300
Interstate 5	Woodburn	Ehlen Rd	64600	84000	83100	112500
Interstate 5	Ehlen Rd	Clackamas County	67400	86400	85500	116100
Oregon 22	Salem UGB	Joseph St	19700	23600	24500	35200
Oregon 22	Joseph St	Silver Falls Hwy	14400	22900	24200	34800
Oregon 22	Silver Falls Hwy	Aumsville	14100	20500	20900	27700
Oregon 22	Aumsville	Golf Club Rd	13800	20000	19100	29200
Oregon 22	Golf Club Rd	Cascade Hwy	10600	13300	13100	13600
Oregon 22	Cascade Hwy	Old Mehama Rd (west int)	10000	12000	8200	8400
Oregon 22	Old Mehama Rd (west int)	Oregon 226	9000	10500	8800	10100
Oregon 22	Oregon 226	North Fork Rd	7100	7900	7300	9200
Oregon 22	North Fork Rd	Mill City	5300	6200	7000	7800
Oregon 22	Mill City	Gates	4800	5000	6000	7000
Oregon 22	Gates	Detroit	3800	4000	4600	4900
Oregon 22	Detroit	Idanha	3100	3600	4000	5600
Oregon 22	Idanha	Linn County	2800	3300	3800	4600
Oregon 99E	Clackamas County	Ehlen Rd	13100	16000	13500	19400
Oregon 99E	Ehlen Rd	Wilsonville-Hubbard Hwy	7500	9500	7300	10300
Oregon 99E	Wilsonville-Hubbard Hwy	Hubbard	12600	16500	13200	20400
Oregon 99E	Hubbard	Woodburn	12000	16000	16700	20300
Oregon 99E	Woodburn	Boones Ferry Rd	10000	12000	10100	14000
Oregon 99E	Boones Ferry Rd	Mt. Angel-Gervais Rd	8500	11600	10100	15900
Oregon 99E	Mt. Angel-Gervais Rd	Waconda Rd	7900	11000	10000	15200
Oregon 99E	Waconda Rd	Brooklake Rd	8800	11000	9900	14900
Oregon 99E	Brooklake Rd	Quail St	9500	10600	8500	15600
Oregon 99E	Quail St	Chemawa Rd	10900	11700	9300	17100

Corridor	From	То	1995 Daily Volume	2004 Daily Volume	2011 Daily Volume	2032 Daily Projection
Oregon 211	Woodburn	Clackamas County	6200	7200	6300	11800
Oregon 213	Clackamas County	Abiqua Rd	3000	3900	3900	6100
Oregon 213	Abiqua Rd	Silverton	4000	5200	5000	7600
Oregon 214	I-5	Oregon 99E	16000	19000	19700	22400
Oregon 214	Oregon 99E	Elliot Prairie Rd	6500	7800	7100	10800
Oregon 214	Elliot Prairie Rd	Mt. Angel	5900	6400	5700	7600
Oregon 214	Mt. Angel	Silverton	5600	6200	6000	9100
Oregon 214 (Silver Falls Hwy)	Oregon 22	Shaw Hwy	1250	1400	1400	1700
Oregon 214 (Silver Falls Hwy)	Shaw Hwy	Cascade Hwy	650	800	820	1100
Oregon 214 (Silver Falls Hwy)	Cascade Hwy	Silver Falls Park	600	650	550	800
Oregon 214 (Silver Falls Hwy)	Silver Falls Park	Drakes Rd	400	480	420	440
Oregon 214 (Silver Falls Hwy)	Drakes Rd	Forest Ridge Rd	1200	1400	1300	1500
Oregon 214 (Silver Falls Hwy)	Forest Ridge Rd	Silverton	2400	2600	2800	3600
Oregon 219	Yamhill County	Champoeg Rd	5900	8000	7500	11300
Oregon 219	Champoeg Rd	McKay Rd	5700	7500	7500	7500
Oregon 219	McKay Rd	St. Paul	2900	4100	3300	4700
Oregon 219	St. Paul	French Prairie Rd	1800	2200	1300	1400
Oregon 219	French Prairie Rd	Mahony Rd	2200	3100	2500	3100
Oregon 219	Mahony Rd	Arbor Grove Rd	2200	2600	1500	1900
Oregon 219	Arbor Grove Rd	Butteville Rd	2400	2800	2800	4100
Oregon 219	Butteville Rd	I-5	6000	8100	11200	14600
Oregon 226	Linn County	Oregon 22	4300	4900	3800	3900
Wilsonville- Hubbard Hwy	Clackamas County	Ehlen Rd	6700	9600	10300	17300
Wilsonville- Hubbard Hwy	Ehlen Rd	Oregon 99E	5200	7800	7700	11400
Jefferson Hwy	I-5	Ankeny Hill Rd	2000	2900	2900	4200
Jefferson Hwy	Ankeny Hill Rd	Winter Creek Rd	2400	3400	3300	3300
Jefferson Hwy	Winter Creek Rd	Talbot Rd	2000	3200	3100	4300
Jefferson Hwy	Talbot Rd	Jefferson	4500	5000	4300	5000

## 6.1.1 Intersection Level-of-Service (LOS) in 2032

Strategic intersections throughout Marion County were selected for a future level-of-service (LOS) analysis. The analysis was prepared by applying historic growth rates specific to the area near the intersection with the most recent traffic counts collected at that location. When appropriate, historic growth rates were blended with the regional and Marion County forecasting model for further refinement. Assumptions specific to each analysis may be obtained by contacting Marion County Public Works. Table 6-3 lists those intersections that are anticipated to have a poor LOS ("E" or "F") in the horizon year 2032. Intersections in the urbanized areas are not included in this table. They can be found in the Urban Strategy companion document. It is presumed that an intersection operating at these levels-of-service in 2012 will continue to degrade unless mitigation measures are taken at those locations. It is important to note that for two-way stop controlled intersections (and stop controlled tee-intersections) the LOS is defined by the movement that experiences the worst delay. If a movement, such as a left turn across heavy through traffic, experiences considerable delay during peak periods, it is likely motorists will find alternate routes. Therefore, in locations that experience significant delay on a particular movement, it is important to understand the underlying issue(s) prior to recommending mitigation. Signalized intersections that experience poor LOS in the future may require timing adjustments (which is done in partnership with neighboring agencies) or additional capacity, such as turn lanes or additional through lanes. Also, as part of an annual assessment, Marion County prepares a detailed Signal Warrant analysis for those unsignalized intersections that may warrant signalization in the future. Many of those locations are found in this list below. A detailed description of LOS and other capacity-related terms can be found in Chapter 5.

Table 6-3
Intersections Operating at Level of Sevice (LOS) E or worse\*

INTERSECTION	2032 LOS (2012 LOS)	EXISTING TRAFFIC CONTROL
Airport Rd at Ehlen Rd	F (D)	One-way stop (tee-intersection)
Arndt Rd at Airport Rd	F (F)	Signalized
Bents Rd at Ehlen Rd	F (D)	One-way stop (tee-intersection)
Boones Ferry Rd at Ehlen Rd	E (D)	Two-way stop
Brush Creek Rd at Silverton Rd	F (D)	Two-way stop
Cordon Rd at Auburn Rd	F (F)	Two-way stop
Cordon Rd at Carolina Av	F(D)	One-way stop (tee-intersection)
Cordon Rd at Center St	E (C)	Signalized
Cordon Rd at Gaffin Rd	F(C)	One-way stop (tee-intersection)
Cordon Rd at Hazelgreen Rd	F (C)	All-way stop
Cordon Rd at Herrin Rd	F (D)	One-way stop (tee-intersection)
Cordon Rd at Pennsylvania Ave	F (D)	One-way stop (tee-intersection)
Cordon Rd at Silverton Rd	E (D)	Signalized
Cordon Rd at State St	F (D)	Signalized
Cordon Rd at Sunnyview Rd	F (D)	Signalized
Cordon Rd at Swegle Rd	F (F)	Two-way stop
French Prairie Rd at McKay Rd	F(C)	Two-way stop
River Rd at Brooklake Rd	F (C)	All-way stop

<sup>\*</sup> This table does not include those intersections operating at poor levels-of-service that are within the Urban Areas (those locations can be found in the *Urban Strategy*)