

6.00 POPULATION ELEMENT INDEX

6.10 BACKGROUND

- Oregon Statewide Planning Requirements

6.20 ORGANIZATION

6.30 DATA SOURCES AND METHODS

- OEA forecast for Josephine County 2000-2040
- Grants Pass population forecast methods
- Forecast assumptions

6.40 FACTORS AFFECTING LONG-TERM GROWTH

- Regional Population Trends
- Grants Pass Development Trends

6.50 HISTORIC POPULATION CHANGE AND DEMOGRAPHIC CHARACTERISTICS

- Demographic characteristics

6.60 POPULATION FORECASTS

- Base population estimate
- Growth rate assumption
- Population forecast

6.70 POPULATION ELEMENT FINDINGS

6.10 BACKGROUND

The City of Grants Pass is located along I-5 in Southern Oregon. It is the largest city in Josephine County, with about 38% of the County's population within the city limits in 2006. Population in the city limits has grown from about 17,500 residents in 1990 to about 30,900 residents in 2006, an increase of about 13,000 residents or more than 75%.

Population forecasts are a foundational component of planning analysis and are necessary for an assessment of land needed for residential and employment purposes, as well as land needed for public and semi-public uses. The population forecast provides the foundation for a technical analysis of future growth and land availability to determine whether the City has sufficient lands within its Urban Growth Boundary (UGB) for 20-years of growth. The City may also consider establishing Urban Reserve Areas, which would include enough land for 50-years of growth.

6.11 Oregon Statewide Planning Requirements

Local governments in Oregon have developed and adopted population forecasts for planning purposes since the inception of the statewide planning program. The forecasts are used for many purposes including determining the size of Urban Growth Boundaries (UGBs), capital improvement planning, and other planning activities. For example, Oregon state planning law (ORS 197.295 – 197.296) requires cities to plan for needed housing to accommodate population growth in urban growth boundaries. ORS 197.712 also requires cities to ensure that sufficient land is available in urban growth boundaries for commercial development and economic growth.

Historically, consistency was an issue in the forecasting process. In many instances the forecasts of incorporated cities would sum to a figure far higher than the county forecast. In 1995, the Oregon Legislature recognized a need for local consistency in population forecasting and for a coordinated statewide forecast by adding a statute requiring counties to:

“...establish and maintain a population forecast for the entire area within its boundary for use in maintaining and updating comprehensive plans, and shall coordinate the forecast with the local governments within its boundary.” [ORS 195.036]

To help with consistency at the state level, the legislature designated the state Office of Economic Analysis (OEA), a division of the Department of Administrative Services, as the primary forecasting agency for the state of Oregon. The OEA prepares population and employment forecasts for the state and each county. The OEA prepared state and county population forecasts in 1997 and again in 2004. These forecasts are intended to serve as a basis for county-level population coordination.

ORS 195.036 requires that population forecasts be coordinated by a designated “coordinating” agency; in this case Josephine County. The combined sum of forecasts for incorporated cities and rural areas must roughly equal the forecast for the county as a whole (the county “control total”).¹ The control total usually comes from the long-term population and employment forecasts developed by the Office of Economic Analysis of the State Department of Administrative Services.² The most recent OEA forecasts are from 2004.

OAR 660-024-0030 provides additional guidance on local population forecasts. Subsection 1 requires cities to adopt a 20-year population forecast for the urban area consistent with the coordinated county forecast. Subsection 2 defines the standards for population forecasting:

“The forecast must be developed using commonly accepted practices and standards for population forecasting used by professional practitioners in the field of demography or economics, and must be based on current, reliable and objective sources and verifiable factual information, such as the most recent long-range forecast for the county published

¹ The forecasts for incorporated cities include all lands within the existing Urban Growth Boundaries (UGBs) of those cities. In short, the forecasts are for growth in the UGBs.

² While most coordinating bodies use the OEA forecasts as the basis for coordination, there is no statutory requirement that the OEA forecasts be used.

by the Oregon Office of Economic Analysis (OEA). The forecast must take into account documented long-term demographic trends as well as recent events that have a reasonable likelihood of changing historical trends. The population forecast is an estimate which, although based on the best available information and methodology, should not be held to an unreasonably high level of precision.” OAR 660-024-0030(2)

Thus, the forecasting requirement is for 20 years—a figure consistent with the requirement that cities maintain a 20-year land supply. OAR 660-021, however, allows the establishment of urban reserve areas to accommodate up to 50 years of growth.

This chapter provides 20-year and 50-year forecasts of population growth for Grants Pass. It presents information on population growth and population characteristics necessary to the City's present and future needs for the type and amount of residential housing and commercial and industrial development. The forecasts in this chapter will be used to assess the demand for urban services such as water, sewer, storm drainage, streets, parks and open space, schools, and fire and police protection.

6.20 ORGANIZATION

The remainder of this chapter is divided into sections.

- **Section 6.30** describes the data sources, methods, and assumptions used to develop the population forecast.
- **Section 6.40** discusses factors that influence households' locational choices.
- **Section 6.40** presents historic population trends and demographic trends in Grants Pass.
- **Section 6.50** presents the population forecast for the Grants pass UGB.
- **Section 6.60** identifies the key findings of this chapter for population change in Grants Pass.

6.30 DATA SOURCES AND METHODS

The population forecast presented in this chapter build from an analysis of a range of secondary data sources—primarily historical population data and the Oregon Office of Economic Analysis' forecast for Josephine County. All of the data used in developing the allocations are from easily available standard sources:

- The U.S. Census of population and housing (1980, 1990, and 2000) provides decennial population figures as well as a broad range of demographic and socioeconomic variables;
- The Oregon Office of Economic Analysis (OEA) provides long-term state and county-level population forecasts (through 2040);
- The Population Research Center at Portland State University provides annual population estimates and annexation history for incorporated cities; and

- The Grants Pass Community Development Department provided data on building permit activity in the Grants Pass UGB.

6.31 Population forecast Josephine County 2007 to 2060

Table 6.30.1 shows the adopted population forecast for Josephine County. The forecast projects that Josephine County will grow from 85,966 people in 2007 to 113,167 people in 2027, an increase of 27,201 people at an average annual growth rate of 1.38%. Between 2007 and 2057, Josephine County is forecast to grow by 69,163 people at an average annual rate of 1.19%.

**TABLE 6.30.1
POPULATION FORECAST
Josephine County, 2000-2060**

Year	Population
2000	76,050
2005	79,956
2007	85,966
2010	93,233
2020	104,528
2027	113,167
2030	116,895
2040	129,812
2050	144,156
2057	155,129
2060	160,084
Change 2007 to 2027	
Number	27,201
Percent	32%
AAGR	1.38%
Change 2007 to 2057	
Number	69,163
Percent	80%
AAGR	1.19%

Source: ECONorthwest
AAGR – Average Annual Growth Rate

The forecast presented in Table 6.30.1 is based on the “Alternative” forecast presented in the report “Josephine County Coordinated Population Forecast” by ECONorthwest. This forecast is based on the OEA’s 2004 forecast for Josephine County. The forecast includes an adjustment to the population base (2007) to more accurately reflect current population in Josephine County, based on building permit activity in the County between 2000 and 2006. In addition, the growth rate for 2000 to 2040 used in this scenario is lower than the historic growth rate for the 1960 to 2006 period (2.19%) and the 1990 to 2006 period (1.63%). However, it is reasonable to expect a decline in the average annual rate of population growth as population increases because a larger population base requires a larger increase in the *number* of people in the County to achieve the same *rate* of increase.

6.32 Grants Pass population forecast methods

The literature identifies many accepted approaches to projecting or forecasting population. More robust approaches use component models (natural increase plus migration),³ or econometric models (which consider the interplay between population and employment). Simpler approaches extrapolate from historic trends. At large geographic levels, migration becomes less of a factor making component models more accurate. For smaller regions, migration and other factors are more difficult to document.

At the national or state level, population growth has a larger affect on employment growth. Standard cohort-component models can provide relatively accurate forecasts of population growth in larger areas where the migration component is small. Such models are frequently applied in areas where there is relative stability in demographic characteristics and vital statistics (e.g., birth and death rates).

Regional or city-level forecasts often use a step-down method based on a larger regional or national forecast. The general concept is to estimate the portion of regional population growth that will occur in the subregion. There are several variations on the step-down method, summarized in Table 6.30.2.

**TABLE 6.30.2
BASIC POPULATION FORECASTING METHODS**

Method	Description
Trend extrapolation	Uses historical population growth rates and extrapolates them into the future, includes straight-line and compounding methods.
Ratio trend	Uses current city/county ratio of population and extrapolates to the future.
Comparative	Past growth pattern is compared with growth patterns of larger, older areas. Should consider social, economic, political, and other variables.

Source: ECONorthwest

These methods are relatively simple and rely on past trends as an indicator of future growth. A number of assumptions are implicit in these methods: (1) past growth is a good indicator of future growth; (2) factors affecting local population growth will not change substantially; and (3) selection of base year can significantly affect the forecast. The ratio and comparative methods scale from forecasts of larger geographies and implicitly assume that the forecasts for the larger areas are (1) good forecasts, and (2) represent trends that might be observed in the smaller geography.

The “trend extrapolation” method described in Table 6.30.2 was used to forecast population for the Grants Pass UGB. Developing the population forecast involved reviewing historical population trends to develop observed annual growth rates that provide the basis for the forecast

³ The OEA long-range forecasts use this methodology.

(e.g., the assumed future growth rates). Trend data was also reviewed as part of this analysis included annual population changes from the Census and from the Population Research Center at Portland State University, trends in residential development, and trends in population demographics and characteristics.

Several different methods for forecasting population in the Grants Pass UGB were considered, including the straight-line extrapolation method, the compounding method, and the ratio method. The comparative method was dismissed in this instance because it would be difficult to identify comparable cities to Grants Pass. The **compounding methodology** was selected because it is (1) most consistent with historical population growth trends, (2) it is a relatively simple approach that builds from historical data and assumptions about future City and County growth policies, and (3) it assumes that the increment of population growth (e.g., the rate of growth or annual percent change) will be constant.

6.33 Forecast assumptions

The assumptions that are implicit in a forecasting model can profoundly influence the forecasts. This analysis is based on the following assumptions:

- *Historic trends will continue into the future.* Historic population data assuming that past trends will continue into the future were reviewed. The forecast does not assume that future growth will be at the same rate as historic growth but that historic growth rates provide some indication of future growth rates.
- *Future population growth in Grants Pass will be influenced by national, regional, and local economic and social conditions.* These variables are not explicitly incorporated into our model. Historic trends are influenced by these factors, however, and are thus indirectly included in the forecasts.

6.40 FACTORS AFFECTING LONG-TERM GROWTH

This section discusses some of the factors that affect long-term growth in Grants Pass. These factors include regional population growth trends and residential development trends in Grants Pass.

6.41 State and Southwestern Oregon Population Trends

Population growth in Oregon tends to follow economic cycles. Oregon's economy is generally more cyclical than the nation's, growing faster than the national economy during expansions and contracting more rapidly than the nation during recessions. This pattern is shown in Table 6.40.1, which presents data on population in the U.S., Oregon, and Southern Oregon, and Jackson and Josephine Counties and selected cities in Southern Oregon over the 1980–2006 period.

Table 6.40.1 shows Oregon grew more rapidly than the U.S. in the 1990s (which was generally an expansionary period) but lagged behind the U.S. in the 1980s. Oregon's slow growth in the 1980s was primarily due to the nationwide recession early in the decade. Oregon's population growth regained momentum in 1987, growing at annual rates of 1.4%–2.9% between 1988 and

1996. Population growth for Oregon and its regions slowed in 1997 and remained slow between 2000 to 2006, averaging 1.1% to 1.3% annually, the slowest rate since 1987.

Growth in Southern Oregon, including Douglas, Jackson, and Josephine Counties, has been on average slower than the State average over the twenty-six year period. The fastest growing county in Southern Oregon has been Jackson County, which grew by about 62,000 residents at an average annual rate of 1.55% over the twenty-six year period. Josephine County grew by more than 22,000 people at an average annual growth rate of 1.29% between 1980 to 2006.

The majority of population growth in Southern Oregon occurred in the cities of Medford, Ashland, Central Point, and Grants Pass. These cities grew by about 62,000 people, accounting for about two-thirds of the population growth in Southern Oregon over the 1980 to 2006 period. Population within the Grants Pass city limits grew from 15,032 residents in 1980 to 30,930 residents in 2006, an increase of 15,898 people at an average annual rate of 2.81%.

TABLE 6.40.1
HISTORIC POPULATION CHANGE
U.S., Oregon, Southern Oregon, Jackson And Josephine Counties, and Selected Cities in Southern Oregon, 1980 - 2006

Area	Population				Change 1980 to 2006		
	1980	1990	2000	2006	Number	Percent	AAGR
U.S.	226,545,805	248,709,873	281,421,906	299,398,484	69,864,599	31%	1.08%
Oregon	2,639,915	2,842,321	3,421,399	3,690,505	988,785	37%	1.28%
Southern Oregon	285,059	303,685	357,394	383,555	98,496	35%	1.19%
Jackson County	132,456	146,389	181,269	198,615	62,059	47%	1.55%
Medford	39,746	46,951	63,154	73,960	31,109	78%	2.34%
Ashland	14,943	16,234	19,522	21,430	5,937	40%	1.35%
Central Point	6,357	7,509	12,493	16,550	9,283	146%	3.67%
Josephine County	58,855	62,649	75,726	81,125	22,270	38%	1.29%
Grants Pass	15,032	17,488	23,003	30,930	15,898	106%	2.93%
Cave Junction	1,023	1,126	1,363	1,600	577	56%	1.81%

Source: U.S. Census, Population Research Center, and calculations by ECONorthwest

Note: Southern Oregon includes Douglas, Jackson, and Josephine Counties.

Oregon's population is also related to economic conditions in other states—most notably, in California. During downturns in California's economy, people leave the state for opportunities in Oregon and elsewhere. As California's economy recovers, the population exodus tapers off. Such interstate migration is a major source of population change.

According to a U.S. Census study, Oregon had net interstate in-migration (more people moved *to* Oregon than moved *from* Oregon) during the period 1990-2004.⁴ Oregon had an annual average

⁴ Marc J. Perry, 2006, *Domestic Net Migration in the United States: 2000 to 2004*, Washington, DC, Current Population Reports, P25-1135, U.S. Census Bureau.

of 26,290 more in-migrants than out-migrants during the period 1990-2000. The annual average dropped to 12,880 during the period 2000-2004.⁵

According to data from the Population Research Center at Portland State University, about 70% of population growth in Oregon resulted from migration and about 30% resulted from natural increase (births minus deaths). Between 2000 to 2006 In Southern Oregon, net migration accounted for all the population increase because population growth from natural increase was negative (deaths outnumbered births). All population growth in Josephine County between 2000 and 2006 was the result of net migration because the County had about 1,500 more deaths than births.

The Oregon Department of Motor Vehicles collects data on out-of-state driver licenses surrendered by applicants for Oregon licenses. These data provide an indicator of the source of Oregon's in-migration. During the period 1999-2005, over 30% of surrendered licenses were from California and approximately 17% were from Washington. All other states each accounted for less than 5% of the surrendered licenses.⁶ The DMV also collects data on Oregon driver licenses surrendered in other states. These data indicate that Washington and California are the top destinations for Oregon's out-migrants.⁷

The *1999 Oregon In-migration Study* found that migrants to Oregon tend to have the same characteristics as existing residents, with some differences—recent in-migrants to Oregon are, on average, younger and more educated, and are more likely to hold professional or managerial jobs, compared to Oregon's existing population. The race and ethnicity of in-migrants generally mirrors Oregon's established pattern, with one exception: Hispanics make up more than 7% of in-migrants but only 3% of the state's population. The number-one reason cited by in-migrants for coming to Oregon was family or friends, followed by quality of life and employment.⁸

6.42 Grants Pass Development Trends

Residential development is a key factor directly related to population growth—households cannot (and will not) move to an area without housing. One way to track residential development is to compare the number of permits issued for new residences, which can provide an indication of the level of potential building activity but does not indicate the amount of actual residential development because a building permit does not guarantee development. The construction of a new dwelling unit will eventually result in a population increase when the new dwelling becomes occupied.

⁵ In contrast, California had net interstate *out-migration* over the same period. During 1990-2000, California had an annual average of 220,871 more out-migrants than in-migrants. The net outmigration slowed to 99,039 per year during 2000-2004.

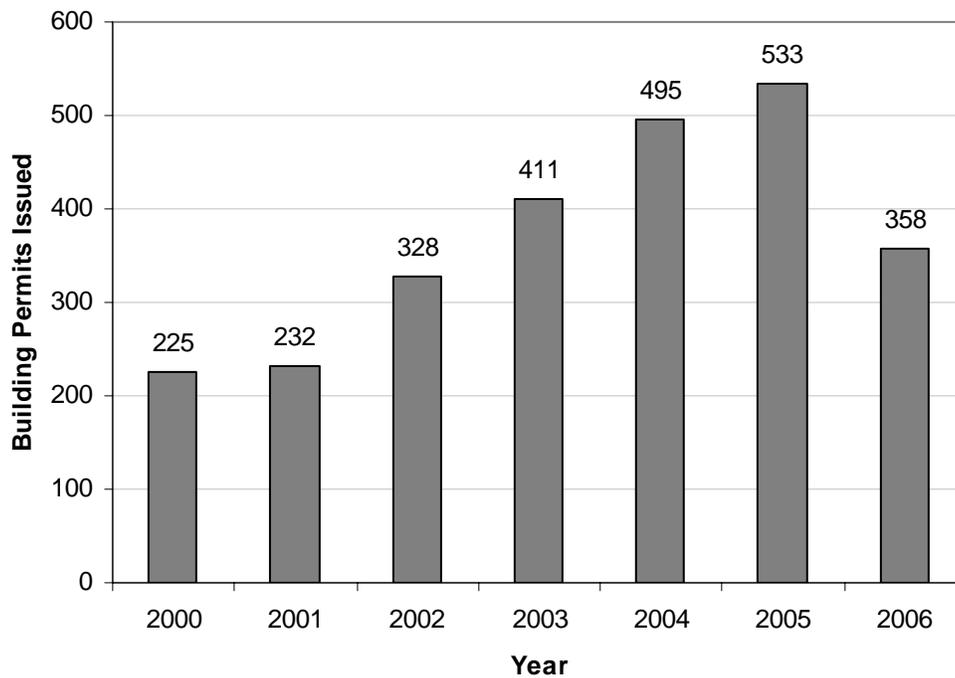
⁶ See Oregon Department of Motor Vehicles, "Driver Issuance Statistics," http://www.oregon.gov/ODOT/DMV/news/driver_stats.shtml, accessed April 19, 2007.

⁷ For a discussion of the DMV data, see Ayre, A, 2004, *People Moved to Oregon Despite Recession*, Oregon Employment Department, July.

⁸ State of Oregon, Employment Department. 1999. *1999 Oregon In-migration Study*.

Figure 6.40.1 shows all residential building permits issued by the City of Grants Pass between 2000 and 2006 within the Urban Growth Boundary. The City issued a total of 2,582 residential permits during the seven-year period. The number of building permits issued peaked in 2004 and 2005. The average number of permits issued annually was 368. The U.S. Census database of building permit activity shows that Grants Pass issued an average of about 235 permits annually during the 1990's. The increase in the number of building permits issued annually since 2002 suggests an increase in development activity in Grants Pass.

**FIGURE 6.40.1
DWELLING UNITS APPROVED THROUGH BUILDING PERMITS ISSUED FOR
NEW RESIDENTIAL CONSTRUCTION,
Grants Pass UGB, 2000 to 2006**



Source: City of Grants Pass, 2007

An indicator of future development activity is subdivision of land into residential lots. Subdivision of land and creation of residential lots does not guarantee immediate development of a dwelling unit but increases the likelihood of residential development on the subdivided land. Table 6.40.2 shows the number of subdivisions in the final plat process and the number of lots created annually between 2000 and 2006. Grants Pass had 109 subdivisions and more than 2,000 lots created during the seven-year period. The number of subdivisions platted and lots created peaked in 2005 and 2006. The increased number of subdivisions and lots created suggest that developers are likely to continue developing residential units in Grants Pass.

**TABLE 6.40.2
SUBDIVISIONS IN THE FINAL PLAT PROCESS AND LOT CREATION,
City of Grants Pass, 2000 to 2006**

Year	Number of subdivisions	Number of lots created
2000	5	113
2001	9	195
2002	10	166
2003	14	329
2004	23	327
2005	29	487
2006	19	386
Total	109	2,003
Average	16	286

Source: City of Grants Pass, 2007

6.50 HISTORIC POPULATION CHANGE AND DEMOGRAPHIC CHARACTERISTICS

This section discusses long-term historical population changes in Grants Pass from 1960 to 2006. It also discusses changes in the demographic characteristics of Grant Pass' population, comparing the City to Josephine County and Oregon where appropriate.

Table 6.50.1 shows population change within the city-limits of Grants Pass from 1960 to 2006. Grants Pass' population more than doubled between 1960 and 2006, growing by 20,812 residents at an average annual rate of 2.46%. Grants Pass grew at an average annual rate of 2.81% between 1980 and 2006, faster than the County average.

The share of population in Grants Pass has varied from about one-third of the County population in 1970, dropping to about one-quarter of the County population in 1980. By 2006, more than one-third of the County's population lived within the city limits of Grants Pass.

**TABLE 6.50.1
POPULATION CHANGE
Grants Pass city-limits, 1960-2006**

Year	Population	Pop. Change	Percent Change	Percent of County Pop.
1960	10,118	--	--	34%
1970	12,455	2,337	23%	35%
1980	15,032	2,577	21%	26%
1990	17,488	2,456	16%	28%
2000	23,003	5,515	32%	30%
2006	30,930	7,927	34%	38%
Average Annual Growth Rates				
1960 to 2006	2.46%			
1980 to 2006	2.81%			
1990 to 2006	3.63%			

Source: Portland State University Center for Population Research; Calculations by ECONorthwest.

Between 1990 and 2006, annexations added more than 4,600 persons to the City of Grants Pass.⁹ Excluding population growth from annexations, the average annual growth rate for Grants Pass between 1990 and 2006 was 2.6%. More than 95% of 4,600 people annexed into the City were brought in between 2000 to 2006. Excluding population growth from annexations, the average annual growth rate for Grants Pass between 2000 and 2006 was 2.42%.

6.51 Demographic characteristics

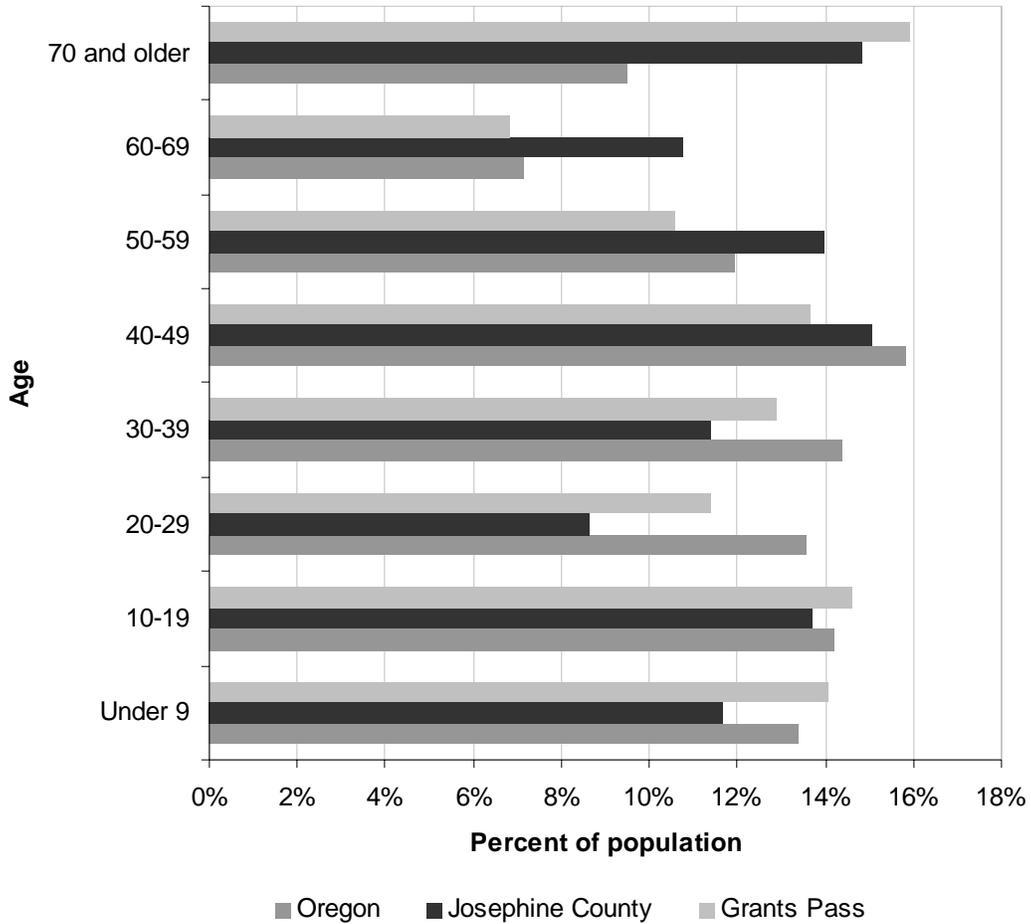
Demographic characteristics provide a broader context for growth; factors such as age, household composition, ethnicity, and migration show how communities have grown and shape future growth. To provide context, Grants Pass is compared to Josephine County and Oregon where appropriate.¹⁰

Figure 6.50.1 shows the age distribution of Grants Pass compared with Oregon and Josephine County in 2000. Grants Pass and Josephine County had a smaller share of population aged 20 to 59 than the state average. Grants Pass had a larger share of residents aged 20 to 39 years than the County average. Grants Pass had a larger share of residents under 19 years and 70 years and older than Josephine County or Oregon. These trends suggest that Grants Pass attracted retirees and families with children.

⁹ PSU's information about annexations prior to 2002 seems to be incomplete, possibly resulting in an under reporting of the number of people annexed by Grants Pass.

¹⁰ For a discussion of economic characteristics and employment growth in Grants Pass, please refer to the Economic Element (Chapter 8) of Grants Pass' comprehensive plan.

**FIGURE 6.50.1
AGE DISTRIBUTION,
Oregon, Josephine County, and Grants Pass, 2000**



Source: U.S. Census, 2000

During the 1990's Grants Pass experienced changes in the age structure of its residents. Table 6.50.2 shows population by age for Grants Pass for 1990 and 2000. Grants Pass grew by more than 5,500 people during the ten year period. While Grants Pass experienced an increase in population for every age group, the fastest growing groups were 45 to 64 years and 5 to 17 years. The slowest growing group was 65 years and older.

**TABLE 6.50.2
POPULATION BY AGE,
Grants Pass, 1990 and 2000**

Age Group	1990		2000		Change		
	Number	Percent	Number	Percent	Number	Percent	Share
Under 5	1,257	7%	1,613	7%	356	28%	0%
5-17	3,087	18%	4,377	19%	1,290	42%	1%
18-24	1,406	8%	1,872	8%	466	33%	0%
25-44	4,902	28%	5,917	26%	1,015	21%	-2%
45-64	2,995	17%	4,760	21%	1,765	59%	4%
65 and over	3,841	22%	4,464	19%	623	16%	-3%
Total	17,488	100%	23,003	100%	5,515	32%	0%

Source: U.S. Census, 1990 and 2000

The Census data suggest that Grants Pass attracted recent retirees or people nearing retirement and families with older children. This suggests that Grants Pass is attractive to families and retirees. This may be due, in part, to differential housing costs between California and Grants Pass.

The age structure of residents of Grants Pass is likely to get older as the baby-boomers age, following State and national trends. According to the OEA's forecast of population growth by age group in Josephine County, nearly half of population growth will be in people aged 65 and over between 2000 and 2025, with this age group accounting for about one-third of population growth between 2025 and 2040. The OEA forecasts that growth in people under 19 years will account for 9% of population growth between 2000 and 2040. Assuming that the demographics of Grants Pass residents change is similar to Josephine County, the City can expect to have a growing number of retirees, especially through 2025.

Table 6.50.3 shows household composition for Oregon, Josephine County, and Grants Pass. Grants Pass households show the following characteristics when compared with Josephine County and the State:

- Grants Pass had fewer people per household, with an average household size of 2.36 people, compared to the County average of 2.41 and State average of 2.51 people per household.
- Grants Pass had a larger share of households with children (32%) compared with Josephine County (27%) and Oregon (31%). Grants Pass also had a larger share of female householders with children and no husband, 9% compared with the County and State averages of 6%.
- Grants Pass had a smaller share of households with married couples, with and without children, than the State and County averages.
- Grants Pass had a larger share of non-family households (36%) than the County average (30%) or State average (34%).

**TABLE 6.50.3
HOUSEHOLD COMPOSITION
Oregon, Josephine County, and Grants Pass, 2000**

Household Type	Oregon		Josephine County		Grants Pass	
	Number	Percent	Number	Percent	Number	Percent
Households with children	410,803	31%	8,454	27%	3,003	32%
Married couples	296,404	22%	5,929	19%	1,980	21%
Female householder, no husband present	83,131	6%	1,929	6%	865	9%
Other families	31,268	2%	596	2%	158	2%
Households without children	922,920	69%	22,573	73%	6,442	68%
Married couples	396,128	30%	11,458	37%	2,393	25%
Other families	70,740	5%	1,657	5%	628	7%
Nonfamilies	456,052	34%	9,458	30%	3,421	36%
Total Households	1,333,723	100%	31,027	100%	9,445	100%
Average Household Size	2.51		2.41		2.36	
Average Family Size	3.02		2.85		2.94	

Source: U.S. Census, 2000

Table 6.50.4 shows the number of persons of Hispanic or Latino origin in Oregon, Josephine County, and Grants Pass for 1990 and 2000. The Census data show that Grants Pass had a larger share of Hispanic population (5.4%) compared to the County (4.3%) but a smaller share compared to the State (8.0%). Grants Pass Hispanic population grew from 494 residents in 1990 to 1,236 residents in 2000, an increase of 742 people or 150%.

The Hispanic population grew faster in Grants Pass than the overall population, which is similar to State trends. National demographic trends suggest that this trend will continue in Grants Pass. By 2050, the Census forecasts that Hispanics will account for 24% of the population nationwide.

**TABLE 6.50.4
PERSONS OF HISPANIC OR LATINO ORIGIN
Oregon, Josephine County, and Grants Pass, 1990 and 2000**

	Oregon	Josephine County	Grants Pass
1990			
Total Population	2,842,321	62,649	17,488
Hispanic or Latino	112,707	1,749	494
Percent Hispanic or Latino	4.0%	2.8%	2.8%
2000			
Total Population	3,421,399	75,726	22,865
Hispanic or Latino	275,314	3,229	1,236
Percent Hispanic or Latino	8.0%	4.3%	5.4%
Change 1990-2000			
Hispanic or Latino	162,607	1,480	742
Percent Hispanic or Latino	144%	85%	150%

Source: U.S. Census, 1990 and 2000

Richard Bjelland, State Housing Analyst at the Housing and Community Services Department of the State of Oregon, analyzed recent demographic changes taking place in Oregon and discussed their implications in a 2006 presentation “Changing Demographics: Impacts to Oregon and the US.” Bjelland’s findings with the most significant implications for population growth are summarized below:

- Oregon’s **minority population is growing** quickly. Minorities made up 9.2% of the population in 1990 and 16.4% of the population in 2000, a 52% increase.
- **Hispanics and Latinos make up a large share of that population** and their growth rate is higher than non-Hispanics/ Latinos. The growth rate of Oregon’s non-Hispanic/ Latino population between 1990 and 2000 was 15.3% compared to 144.3% for Hispanics and Latinos.
- The **birth rates** of Hispanic/ Latino residents are higher than non-Hispanic/ Latino residents. In 1998, for the US, white non-Hispanic/ Latino residents had a birth rate of 12.3 per 1,000, lower than Asians and Pacific Islanders (16.4 per 1,000), black non-Hispanics (18.2 per 1,000) and Hispanic/ Latino (24.3 per 1,000).
- The share of resident births and deaths in Oregon shows the implications of that birthrate: Hispanic/ Latino residents accounted for 17.4% of births but only 1.4% of deaths in Oregon for 2001. In addition, **Hispanic/ Latino Oregonians are younger than non-Hispanic/ Latino residents**: in 2000, 75.9% of Hispanic/ Latino residents of Oregon are under age 35, compared to 45.7% of non-Hispanic/ Latino residents.

Table 6.50.4 shows race for Oregon, Josephine County, and Grants Pass in 2000. Grants Pass and Josephine County were less racially diverse than Oregon, which had less racial diversity than the nation. About 93% of Grants Pass’ residents were white, compared to 87% of Oregon’s residents and 75% of U.S. residents. Less than 0.3% of Grants Pass were black or African American, compared to 2% of Oregon’s residents and 12% of U.S. residents.

TABLE 6.50.4
RACE
Oregon, Josephine County, and Grants Pass, 2000

Race	Oregon		Josephine County		Grants Pass	
	Number	Percent	Number	Percent	Number	Percent
White	2,961,623	87%	71,103	94%	21,386	93%
Black or African American	55,662	2%	202	0%	76	0%
American Indian & Alaska Native	45,211	1%	949	1%	251	1%
Asian	101,350	3%	476	1%	226	1%
Native Hawaiian & Other Pacific Islander	7,976	0%	83	0%	27	0%
Some other race	144,832	4%	883	1%	375	2%
Two or more races	104,745	3%	2,030	3%	662	3%
Total	3,421,399	100%	75,726	100%	23,003	100%

Source: U.S. Census, 2000

The Census collects information about migration patterns. Specifically, it asks households where their residence was in 1995 (5 years prior to the Census count). Table 6.50.6 shows the place of residence in 1995 for Oregon, Josephine County, and Grants Pass. Table 6.50.6 shows that residents of Grants Pass were more mobile than the County or State averages. Residents of Grants Pass in 2000 were more likely to have lived in a different state in 1995. Sixty-percent of Grants Pass residents lived in a different house in 1995, compared with 49% of Josephine County residents and 53% of Oregon residents. Seventeen percent of Grants Pass residents lived in a different state in 1995, compared with 15% of Josephine County and 12% of Oregon residents.

TABLE 6.50.6
PLACE OF RESIDENCE IN 1995
Oregon, Josephine County, and Grants Pass,
Persons 5 years and over

Location	Oregon		Josephine County		Grants Pass	
	Persons	Percent	Persons	Percent	Persons	Percent
Population 5 years and older	3,199,323	100%	71,725	100%	21,283	100%
Same house in 1995	1,496,938	47%	36,636	51%	8,570	40%
Different house in 1995:	1,702,385	53%	35,089	49%	12,713	60%
Same county	863,070	27%	18,814	26%	7,087	33%
Different county:	755,954	24%	15,946	22%	5,531	26%
Same state	356,626	11%	5,207	7%	1,865	9%
Different state	399,328	12%	10,739	15%	3,666	17%

Source: U.S. Census, 2000

6.60 POPULATION FORECASTS

Forecasting population for the Grants Pass UGB required development of (1) a base population estimate for the UGB and (2) annual population growth rate assumptions. This section presents the methods and assumptions used to develop these components of the forecast and the population forecast based on these assumptions for the Grants Pass UGB from 2006 to 2060.

6.61 Base population estimate

Data about population change in Grants Pass city limits is available from the Population Research Center at Portland State University on an annual basis. Data about population living within the Urban Area within the UGB but outside of the city limits is less readily available. The base population estimate for the UGB presented in this section is based on information from the following sources: the City of Grants Pass, PSU, and the 2000 Census.

Figure 6.40.1 shows the number of new dwelling units permitted within the Grants Pass UGB between 2000 to 2006. Based on building permit data, it appears that the PSU estimates of population within the city limits of Grants Pass from 2001 to 2006 have been consistently low. Permits for 2,572 new dwelling units, excluding group quarters, were issued in within the UGB between 2000 and 2006.

Table 6.60.1 shows an estimate of the new population in the Grants Pass UGB living in the dwelling units. The number of new dwelling units was reduced by the number of demolitions of existing dwelling units. The average household size and occupancy rate assumptions are based on 2000 Census data. Table 6.60.1 shows that the Grants Pass UGB population increased by an estimated 5,375 residents since 2000.

**TABLE 6.60.1
ESTIMATE OF NEW POPULATION BASED
ON NEW DWELLING UNITS
Grants Pass UGB, 2000-2006**

	Grants Pass UGB
New Units	2,572
Demolitions	160
HH size	2.34
Occupancy	95%
New Population	5,375

Source: City of Grants Pass; U.S. Census;
Calculations by ECONorthwest

Table 6.60.2 shows a comparison of population estimates for the Grants Pass UGB. The information in Table 6.60.2 includes the following rows:

- **2000 Census.** The City of Grants Pass developed the 2000 estimate of the population within the UGB by matching 2000 Census Block data with the UGB boundaries and aggregating population within these blocks.
- **2007 Estimate.** The 2007 estimates were developed by adding the 2000 Census population to the new population shown in Table 6.60.1. Based on this information, the Grants Pass UGB is estimated to have 37,460 people. This estimate serves as the base population for the forecast for the Grants Pass UGB.
- **2006 Estimate: PSU estimate and Grants Pass UGB estimate.** The 2006 Grants Pass UGB estimate is based on PSU’s July 1, 2006 estimate for Grants Pass city limits (30,930 people) and a 2006 staff analysis of population located in the Urbanizing Area (UA), which is the area within the UGB but outside City limits (3,223 people).
- **Increase of 2006 estimate.** This shows the difference in population in the “2007 Estimate” from the “2006 Estimate.”

TABLE 6.60.2
COMPARISON OF POPULATION ESTIMATES,
Grants Pass UGB and city limits, 2007

	Grants Pass UGB	Grants Pass city limits
2000 Census	32,085	23,003
2007 Estimate	37,460	34,237
2006 Estimate	34,153	30,930
Increase over PSU est.	3,307	3,307

Source: U.S. Census; Population Research Center; ECONorthwest, City of Grants Pass

6.62 Growth rate assumptions

The forecast uses two growth rate assumptions: one for the period 2007-2027 and the other for the 2027 to 2060 period. This section presents the rationale for the growth rate assumptions.

The assumed growth rate for Grants Pass between 2007 to 2027 is 2.2% average annual growth. This growth rate is based on the assumption that the future will be similar to the past and the following trends:

- **Population growth.** Grants Pass grew at an average annual rate of 3.6% between 1990 and 2006. Excluding population increases resulting from annexations, the City grew by an average annual rate of 2.6% between 1990 and 2006. Both of these growth rate assumptions are higher than the forecast of 2.2% average annual growth. The 2.2% annual growth rate may be a conservative forecast but it is reasonable to expect a decline in the average annual rate of population growth as population increases because a larger population base requires a larger increase in the *number* of people in the City to achieve the same *rate* of increase.
- **Recent development trends.** Since 2000, Grants Pass has issued building permits for an average of 367 dwelling units annually. The number of permits issued annually and lots created through subdivision has increased since 2002 peaking in 2005 and declining in 2006. These development trends do not include group quarters, such as retirement communities or nursing homes. However, the City has experienced an increase in development of group quarters, as well as other residential units.
- **Demographic changes.** Grants Pass has a larger share of retirees and families with children than the County and State averages. These trends suggest that Grants Pass is attracting retirees and families with children. In addition, Grants Pass has become more ethnically diverse since 2000, attracting an increasing number of Hispanic residents. National trends suggest that this trend will continue.
- **Migration.** About 70% of Oregon’s population growth between 1990 and 2006 resulted from in-migration. All population growth in Southern Oregon and Josephine County between 2000 and 2006 was the result of migration.

The assumed growth rate for Grants Pass between 2027 and 2060 is 1.05%, which is the same as OEA’s forecast for population growth in Josephine County between 2030 and 2040.

6.63 Population forecast

Table 6.60.3 presents the population forecast for the Grants Pass UGB between 2006 and 2060. Table 6.60.3 shows that the Grants Pass UGB will grow from 37,460 people in 2007 to 57,888 people in 2027, an increase of 20,428 people at an average annual growth rate of 2.2%. Between 2007 to 2057, the forecast projects that the Grants Pass UGB will grow to 79,275 people, an increase of 41,815 people at an average annual growth rate of 1.51% over the 50-year period.

**TABLE 6.60.3
POPULATION FORECAST
Grants Pass UGB, 2007-2060**

Year	Population
2006	34,153
2007	37,460
2010	39,987
2015	44,584
2020	49,708
2025	55,422
2027	57,888
2030	59,737
2035	62,951
2040	66,337
2045	69,906
2050	73,667
2055	77,631
2057	79,275
2060	81,807
Change 2007 to 2027	
Number	20,428
Percent	55%
AAGR	2.20%
Change 2007 to 2057	
Number	41,815
Percent	112%
AAGR	1.51%

Source: ECONorthwest

6.70 POPULATION ELEMENT FINDINGS

This section summarizes the findings in support the Grants Pass UGB population forecast. The following are key findings identified through analyzing historic population and demographic trend data and through developing population forecasts for the City of Grants Pass.

1. Josephine County experienced substantial population growth between 1980 and 2006. Josephine County grew from 58,855 people in 1980 to 81,125 people in 2006, an increase of more than 22,000 people at an average annual growth rate of 1.29%. Over the twenty-six year period, Josephine County grew at approximately the same rate as the State average.
2. The State projects that Josephine County will continue growing but at a lower rate than the historic average. The State forecast for population growth in Josephine County projects that the County will grow from 76,050 people in 2000 to 117,216 people in 2040, an increase of 41,166 people at an average annual growth rate of 1.09%. Extending the State's forecast for population growth in Josephine County out to 2060 based on an average annual growth rate of 1.05%, Josephine County can be expected to grow to about 144,500 people, an increase of about 64,600 people between 2005 and 2060.
3. The majority of population growth in Josephine County occurred in Grants Pass. Population within the Grants Pass city limits grew from 15,032 residents in 1980 to 30,930 residents in 2006, an increase of 15,898 people at an average annual rate of 2.81%.
4. Grants Pass experienced faster population growth than the County average. Grants Pass' population more than doubled between 1960 and 2006, growing by 20,812 residents at an average annual rate of 2.46%. Grants Pass grew at an average annual rate of 2.81% between 1980 and 2006, faster than the County average. Excluding population growth from annexations, the average annual growth rate for Grants Pass between 1990 and 2006 was 2.6%.
5. Migration was the largest source of population growth in Oregon and Josephine County. For the 1990 to 2006 period, about 70% of population growth in Oregon resulted from net migration. All population growth in Josephine County between 2000 to 2006 was the result of net migration because Josephine County experienced negative population growth from natural causes, with about 1,500 more deaths than births during this period. In addition, Census data show that residents of Grants Pass were more likely to have lived in a different state in 1995 compared with the County and State averages.
6. The City issued permits in the Urban Growth Boundary for a total of 2,572 dwelling units between 2000 and 2006, averaging 367 permits issued annually.
7. Residential subdivision activity suggests that residential development is likely to continue in Grants Pass. Between 2000 and 2006, Grants Pass had 109 subdivisions and more than 2,000 lots created in the Urban Growth Boundary. The number of subdivisions platted and lots created peaked in 2005 and 2006.

8. Grants Pass is attracting retirees or near retirees and families with children. Grants Pass has a larger share of residents under 19 years and 70 years and older than Josephine County or Oregon. During the 1990's the fastest growing groups were 45 to 64 years and 5 to 17 years. The slowest growing group was 65 years and older. According to the OEA's forecast of population growth by age group in Josephine County, nearly half of population growth will be in people aged 65 and over between 2000 and 2025, with age group accounting for about one-third of population growth between 2025 and 2040. Assuming that the demographics of Grants Pass residents change is similar to Josephine County, the City can expect to have a growing number of retirees, especially through 2025.
9. Grants Pass has a smaller average household size (2.36) compared to the County (2.41) or State (2.51) averages. Grants Pass has a larger share of households with children (32%) compared with Josephine County (27%) and Oregon (31%). Grants Pass has a larger share of non-family households (36%) than the County average (30%) or State average (34%). National trends suggest that Grants Pass may see small decreases in household size.
10. Grants Pass is becoming more ethnically diverse. Grants Pass Hispanic population grew from 494 residents in 1990 to 1,236 residents in 2000, an increase of 742 people or 150%. In 2000, Grants Pass had a lower share Hispanic residents (5.4%) compared to the State average (8.0%) but higher than Josephine County's average (4.3%). National trends suggest that Grants Pass will continue to become more ethnically diverse.
11. Grants Pass and Josephine County was less racially diverse than Oregon, which had less racial diversity than the nation. In 2000, about 93% of Grants Pass' residents were white, compared to 87% of Oregon's residents and 75% of U.S. residents. Less than 0.3% of Grants Pass were black or African American, compared to 2% of Oregon's residents and 12% of U.S. residents.
12. The key assumptions used to develop the population forecast for the Grants Pass UGB were the base population of the UGB and growth rate assumptions. The base population used in this forecast for the Grants Pass UGB was 37,460 people in 2007. The growth rate assumption for population growth over the 2007 to 2027 period was 2.2%. This rate was based on historic population growth, recent development trends, demographic changes, and migration trends. The growth rate assumption for the forecast for 2027 to 2060 was 1.05%, which is the OEA's forecast for population growth in Josephine County between 2030 and 2040.
13. The forecast for population growth in the Grants Pass UGB projects that population in the UGB will grow from 37,460 people in 2007 to 57,888 people in 2027, an increase of 20,428 people at an average annual growth rate of 2.2%. Between 2007 to 2057, the forecast projects that the Grants Pass UGB will grow to 79,275 people, an increase of 41,815 people at an average annual growth rate of 1.51% over the 50-year period.

**Grants Pass and Urbanizing Area Community Comprehensive Plan
Element 6. Population Element**

Addendum 1: 2014 Update

Section 1. Background

Section 2. Summary of Methodology

2.1. County Total

2.2. Sub-County Allocations

2.3. Base Year Urban Area Population Estimate Methodology

2.4. Grants Pass Urban Area Forecast Methodology

2.5. Cave Junction Urban Area Forecast Methodology

Section 3. Oregon Office of Economic Analysis (OEA) 2010-2050 Forecast for Josephine County

Section 4. Josephine County Coordinated Forecast

Section 5. 'Daytime' Resident and Worker Population

Josephine County Coordinated Population Forecast - 2014 Update

This addendum updates the Josephine County coordinated forecast and the urban area forecasts for the incorporated cities of Grants Pass and Cave Junction previously adopted in 2007 and 2008 (Josephine County Ordinance 2008-001, Grants Pass Ordinance 5432, Cave Junction Resolution 694). **The updated coordinated countywide forecast is provided in Table 4-1 in Section 4 of this report.**

Section 1. Background

On March 19, 2008, Josephine County adopted Ordinance 2008-001, which included a coordinated population forecast for Josephine County, including urban area forecasts for the cities of Grants Pass and Cave Junction. The ordinance included a 20-year forecast for 2007-2027 and a longer forecast through 2057. The cities of Grants Pass and Cave Junction adopted urban area forecasts consistent with the coordinated forecast. The City of Grants Pass adopted a population forecast by Ordinance 5432 in February 2008. The City of Cave Junction adopted a population forecast by Resolution 694 in February 2007.

The Oregon Office of Economic Analysis (OEA) issued new draft statewide and county forecasts in January 2013 and final statewide and county forecasts in March 2013. The OEA forecast starts with 2010 using Census data and forecasts future years through 2050.

In 2013 and 2014, Josephine County, the City of Grants Pass, and the City of Cave Junction discussed revisions to the forecasts adopted in 2008 and consulted with the Oregon Department of Land Conservation and Development (DLCD). Resolutions were adopted by the respective jurisdictions in support of a new coordinated forecast and the associated forecast methodology. (Josephine County Resolution 2013-032 in May 2013, Grants Pass Resolution 13-6075 in May 2013, Cave Junction Resolution 776 in August 2013).

Section 2. Summary of Methodology

2.1. County Total. The countywide forecast total is based on the OEA forecast for Josephine County. However, OEA began forecasting from 2010 Census year population data. The Josephine County coordinated forecast includes adjustments to the OEA forecast for the initial years. It substitutes population estimates produced by Portland State University for 2011 and 2012, replacing the OEA forecast data for those years. The growth rates from the OEA forecast are then applied starting with the updated 2012 population estimate to forecast the subsequent years. This doesn't significantly affect the forecast increment of new growth, but it better reflects the total county population (current population added to forecast new population).

**Table 2-1. Comparison of OEA Forecast and PSU Estimates
Josephine County Population, 2010-2012**

Year	OEA Forecast	Subsequent PSU Estimate
2010	82,775 (Census)	82,775 (Census)
2011	83,276	82,820
2012	83,781	82,775

2.2. Sub-County Allocations. The OEA forecast is for counties and the state total. It doesn't include forecasts for areas smaller than counties, such as cities or urban areas within urban growth boundaries. Therefore, it was necessary to develop forecasts for the sub-county areas.

2.3. Base Year Urban Area Population Estimate Methodology. The forecasts for the cities must be based on their urban areas, not their city limits. Both cities have decided to update the base year for the planning periods to 2013. For each city, the base year population was developed by using 2010 Census block data and aggregating the data correspond to the urban growth boundary. PSU population estimates for 2011 and 2012 were used to adjust the population from the 2010 Census totals.

Table 2-2. Grants Pass City Limits and UGB Population, 2010-2012

Year	City of Grants Pass (Census & PSU)	Unincorporated UGB Estimate	Total UGB Estimate
2010	34,533	3,395	37,928
2011	34,660	3,395	38,055
2012	34,740	3,395	38,135

Table 2-3. Cave Junction City Limits and UGB Population, 2010-2012

Year	City of Cave Junction (Census & PSU)	Unincorporated UGB Estimate	Total UGB Estimate
2010	1,885	314	2,199
2011	1,885	314	2,199
2012	1,890	314	2,204

Cave Junction determined it does not need to expand its urban growth boundary (UGB) to accommodate its 20-year forecast growth. Therefore, no further adjustments were needed to its base year population.

Grants Pass determined it needs to expand its urban growth boundary (UGB) to accommodate the 20-year forecast growth. Therefore, the existing population within the proposed UGB expansion areas was also added to the existing population within the current UGB so the base year UGB population will reflect the initial population within the expanded boundary. These are shown separately in Table 4-1. Grants Pass is also planning for an additional 10-year urban reserve (30-year total together with the UGB). The population of the proposed urban reserve area is also identified, shown separately in Table 4-1 and added to the other totals for the period from 2033-2043.

2.4. Grants Pass Urban Area Forecast Methodology. The updated forecast for Grants Pass is based on a 'share' methodology. The Grants Pass UGB population has historically comprised a growing share of the total county population, from 40% in 1990 to 42% in 2000 to 46% in 2010. This is shown in Table 2-4. The Urban Growth Boundary location has remained relatively constant during this period, so most of the population change for the UGB area is attributed to population growth rather than transfers of existing population from outside the boundary to inside the boundary. For the city limits, the change includes both new population growth and inclusion of existing population resulting from annexation. Some of the annexed population was also new population growth that occurred outside city limits during the analysis period.

Table 2-4. Grants Pass City Limits and Urban Area Share of County Population

Area	1990	2000	2010
City of Grants Pass	17,488	23,003	34,533
Grants Pass Unincorporated UGB Estimate	7,581	9,082	3,395
Grants Pass Total UGB Estimate	25,069	32,085	37,928
Josephine County	62,649	75,726	82,713
Grants Pass City Limits Share of County	28%	30%	42%
Grants Pass Total UGB Share of County	40%	42%	46%

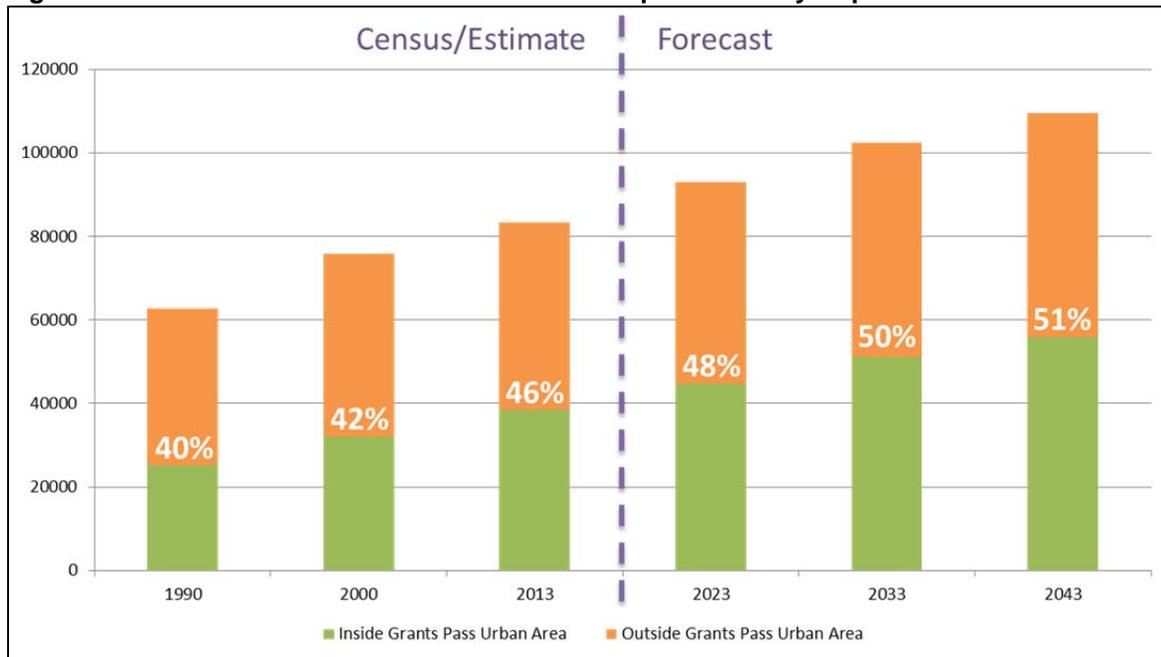
Share of population can only change when growth is occurring and/or when one area is declining relative to another area. Table 2-5 shows the Grants Pass urban area share of the *new* population in Josephine County from 1990-2010. For the 20-year period from 1990-2010, new population growth in the Grants Pass urban area represented 64% of the new population growth in Josephine County (12,859 of 20,064 additional people). This was approximately 54% of new county population for the 10-year period from 1990-2000 and approximately 84% for the 10-year period from 2000-2010. While population movement patterns within the county haven't been analyzed for this period, it is possible some of this change from 2000-2010 during the recession could also represent some movement from rural areas to the Grants Pass urban area, and/or more stable population growth in the Grants Pass urban area concurrent with some movement from the rural areas to locations outside the county.

Table 2-5. Grants Pass Urban Area Share of New County Population (Share of Population Change)

Area	10-Year Change 1990-2000	10-Year Change 2000-2010	20-Year Change 1990-2010
Grants Pass Total UGB Estimate	7,016	5,843	12,859
Josephine County	13,077	6,987	20,064
Grants Pass Total UGB Share of County Change	54%	84%	64%

The forecast continues the trend of the Grants Pass urban area increasing as a share of the county population similar to historic rates, with the urban area share growing from the 2013 base year share of 46% to a 50% share by 2033, an average increase in share of approximately 1% each five years. This also reflects a slower initial recovery from the recession. After 2033, as the overall county growth rate slows, the increase in share for the Grants Pass urban area also slows accordingly, growing to 51% share by 2043, a slower increase in share of 1% for the 10 year period from 2033 to 2043. See Figure 2-5. For the forecast periods, the Grants Pass urban area share of *new* growth represents 67% of new county population for the 20-year period from 2013-2033, 65% for the 10-year period from 2033-2043, and 66% for the 30-year period from 2013-2043. This is similar to the historic share of *new* county population for the 20-year period from 1990-2010 provided in Table 2-5.

Figure 2-5. Grants Pass Urban Area Share of Josephine County Population



The existing population within the UGB expansion area and Urban Reserve area is then added; this only affects the calculations for total population, and not for the new increment of growth. The ‘share’ methodology is not based directly on a growth rate for the urban area, but it is indirectly based on a total county ‘control’ population and the county growth rate. However, equivalent Average Annual Growth Rates (AAGRs) can be calculated for specified periods using the forecast population figures.

The effective growth rates for the Grants Pass Urban Area are summarized below:

2013-2033 (20-year): +13,125 people (approximately 1.48% 20-year AAGR)

2033-2043 (10-year): +4,771 people (approximately 0.89% 10-year AAGR)

2013-2043 (30-year): +17,896 people (approximately 1.29% 30-year AAGR)

Once the UGB is expanded, the base year UGB population will initially increase due solely to the boundary change which will mean there are initially more people within the expanded UGB. The forecast additional population growth increment noted above is the same whether the subtraction occurs before or after the additional base year population is added. Those figures are broken out separately in the forecast in Table 4-1 to avoid any confusion.

Additional Comparative Information. The following information is not part of the Grants Pass forecast methodology, but it explains some key relationships and components of population.

Proximity. In addition to the population within the Grants Pass UGB, a significant percentage of the total Josephine County population lives near the Grants Pass urban area. Table 2-6 shows the percentage of Josephine County population in proximity to the Grants Pass UGB. In 2010, a majority of the Josephine County Population (54.8%) lived in or within about one mile of the Grants Pass UGB. Nearly 74% lived in or within about five miles of the UGB, and nearly 85% lived in or within about ten miles of the UGB.

**Table 2-6. 2010 Josephine County Population in Proximity to Grants Pass UGB
(Population of Census Blocks with Centroids within Specified Distance of Grants Pass UGB)**

Miles from GP UGB	Josephine County Population	Add'l Pop.	% of Jo County Population	Add'l %
in GP UGB	37,928	-	45.9%	-
1	45,355	7,427	54.8%	9.0%
2	50,601	5,246	61.2%	6.3%
3	54,709	4,108	66.1%	5.0%
4	58,835	4,126	71.1%	5.0%
5	60,858	2,023	73.6%	2.4%
6	64,308	3,450	77.7%	4.2%
7	66,195	1,887	80.0%	2.3%
8	67,930	1,735	82.1%	2.1%
9	68,752	822	83.1%	1.0%
10	69,984	1,232	84.6%	1.5%
11	70,552	568	85.3%	0.7%
12	71,447	895	86.4%	1.1%
13	72,519	1,072	87.7%	1.3%
14	73,512	993	88.9%	1.2%
15	74,094	582	89.6%	0.7%
16	74,728	634	90.3%	0.8%
17	75,121	393	90.8%	0.5%
18	75,278	157	91.0%	0.2%
19	75,510	232	91.3%	0.3%
20	76,212	702	92.1%	0.8%
21	77,922	1,710	94.2%	2.1%
22	79,322	1,400	95.9%	1.7%
23	79,853	531	96.5%	0.6%
24	80,347	494	97.1%	0.6%
25	81,339	992	98.3%	1.2%
26	81,526	187	98.6%	0.2%
27	81,572	46	98.6%	0.1%
28	82,139	567	99.3%	0.7%
29	82,437	298	99.7%	0.4%
30	82,549	112	99.8%	0.1%
31	82,639	90	99.9%	0.1%
32	82,685	46	100.0%	0.1%
33	82,713	28	100.0%	0.0%

Note: This only includes Josephine County population and doesn't include population in other counties within these distances

Age Distribution. While the 2010 population data by age group is not provided for the UGB, Figure 2-1 provides a comparison of the 2010 population within the Grants Pass City limits (42% of the county population) and the rest of the county by 5-year age group. Figure 2-2 provides a similar comparison, but adds the population of the contiguous Redwood and Fruitdale Census Designated Places (CDPs) to the Grants Pass City limits data for Grants Pass and a mostly urbanized vicinity (44% of the county population) in comparison to the rest of the county by 5-year age group. Note: The area comprised in Figure 2-2 is not the same as the Urban Growth Boundary.

Population by age group is not proportionally distributed within the Grants Pass City limits and the rest of the county.

- More than half of the county population in nearly every 5-year age group ages 39 and below lives within Grants Pass or the contiguous Redwood and Fruitdale Census Designated Places (CDPs).
- More than half of the county population in every 5-year age group between ages 40-84 lives outside Grants Pass and the contiguous Redwood and Fruitdale Census Designated Places (CDPs).
- More than half of the county population age 85 and older lives within Grants Pass and the contiguous Redwood and Fruitdale Census Designated Places (CDPs).

Figures 2-3 and 2-4 show the 2010 Josephine County population by 5-year age and sex cohorts in separate population pyramids for the total county population, the population within the City of Grants Pass, and the population outside the City of Grants Pass.

Figure 2-1. 2010 Josephine County Population by 5-Year Age Group, Inside/Outside Grants Pass City Limits

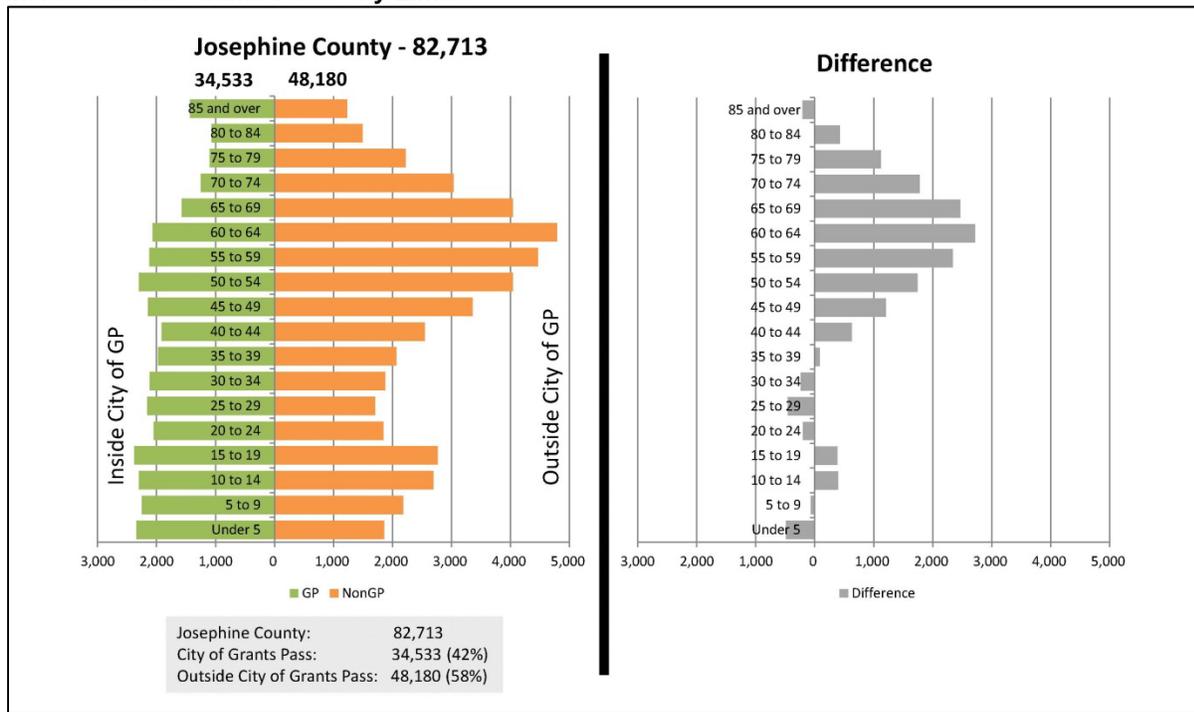


Figure 2-2. 2010 Josephine County Population by 5-Year Age Group, Inside/Outside Grants Pass City Limits + Redwood CDP + Fruitdale CDP

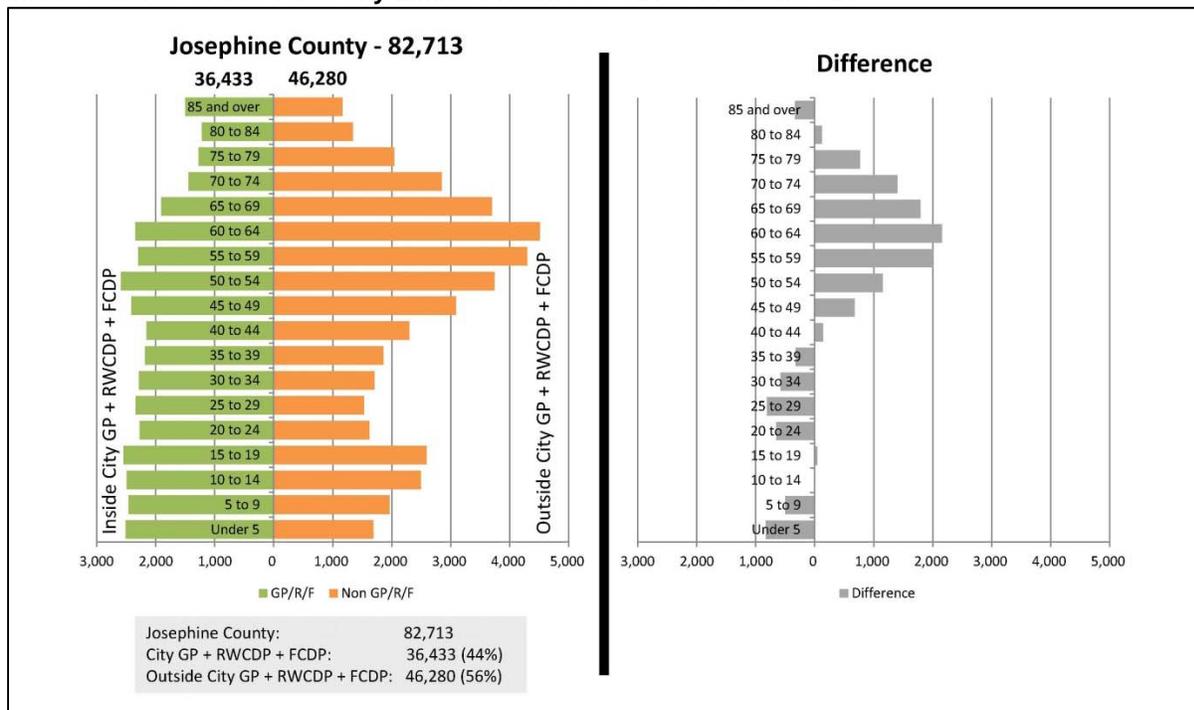


Figure 2-3. 2010 Josephine County Population by 5-Year Age and Sex Cohorts (Percent): County Total, Population in City of Grants Pass, Population Outside City of Grants Pass

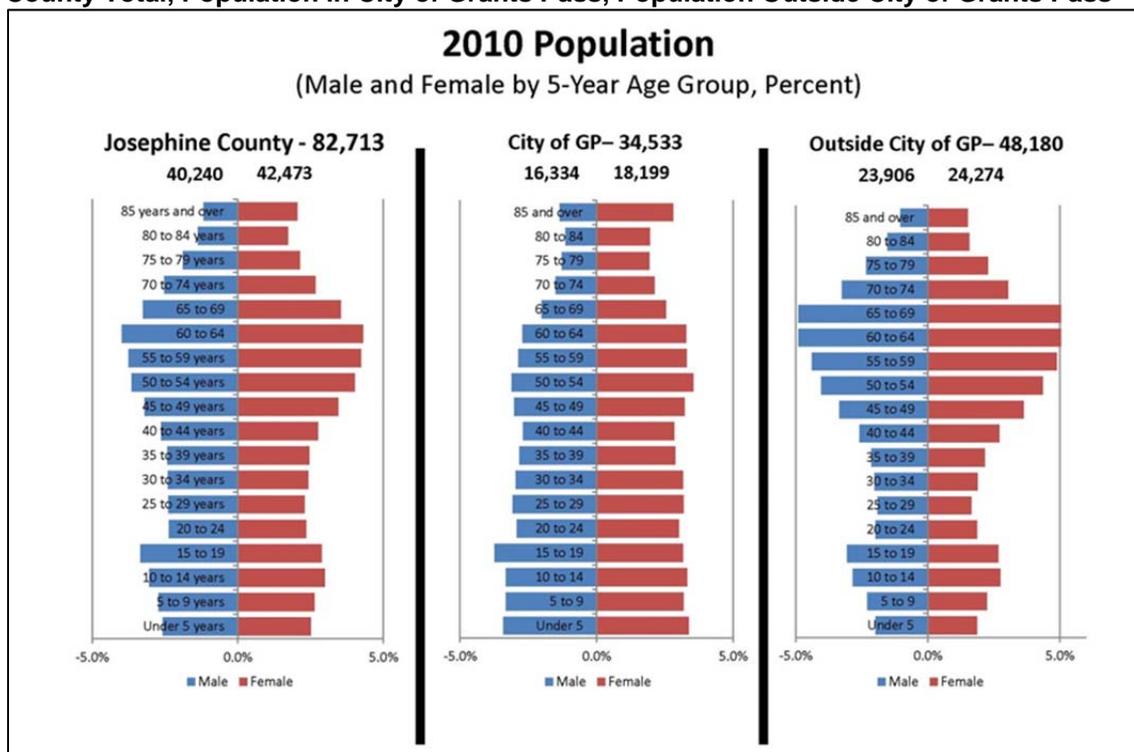
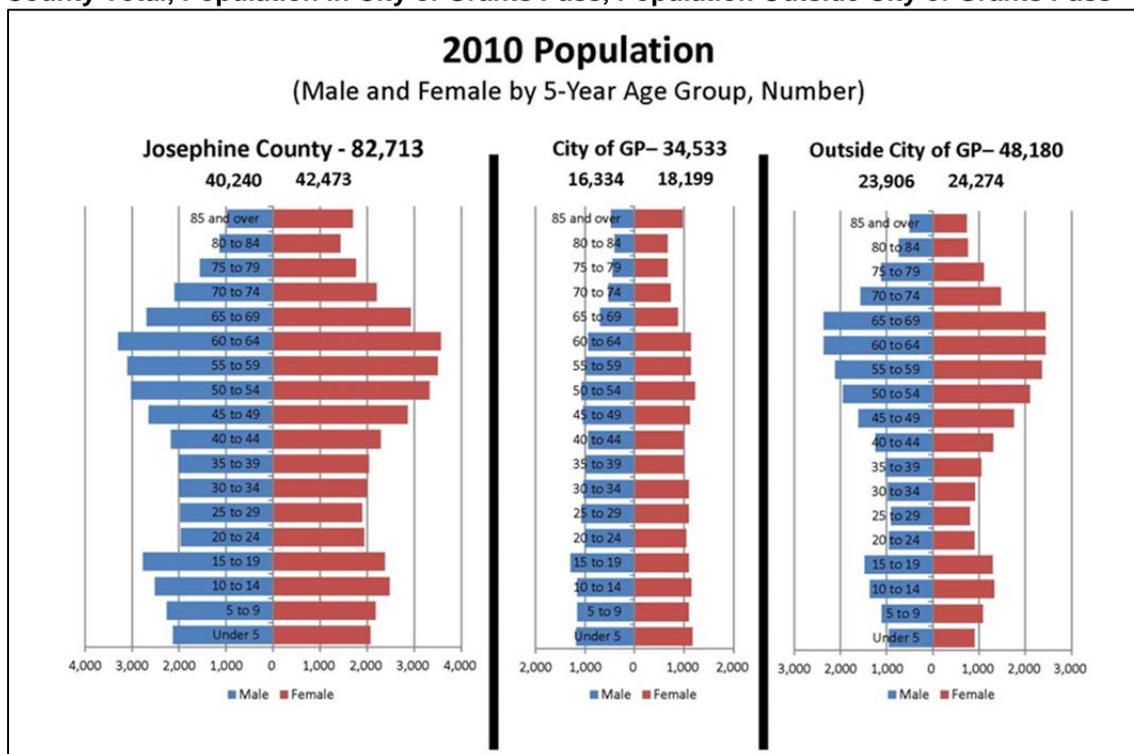


Figure 2-4. 2010 Josephine County Population by 5-Year Age and Sex Cohorts (Number): County Total, Population in City of Grants Pass, Population Outside City of Grants Pass



2.5. Cave Junction Urban Area Forecast Methodology. The updated forecast for Cave Junction utilizes a growth rate methodology. The new forecast uses a slower growth rate than the original 2008 forecast.

The 2007 forecast for the Cave Junction urban area set a 2027 maximum population of 5,500 people. This meant growth of the UGB population from 2,241 people in 2007 to 5,500 people in 2027 at an Average Annual Growth Rate (AAGR) of 4.46%. Adjusting the base year to actual population estimates for 2012 and growing to 5,500 people by 2027 would have meant a growth rate of 6.29%. The previous forecast noted the historical growth rates for the city. It noted an AAGR of 4.1% from 1960-2006. It further noted a slower AAGR of 1.93% during the 1990s because of a building moratorium.

Cave Junction decided to adopt a new forecast and growth rate based on the actual 2012 population and a revised average growth rate that reflects the slower initial recovery. The Cave Junction urban area forecast has an Average Annual Growth Rate (AAGR) of 2.5% from 2013-2033 and 1.054% after 2033. The slower AAGR after 2033 corresponds to trends for slower growth reflected in the OEA forecast associated with the aging of the Baby Boom bubble. For the 2013-2033 planning period, the additional forecast population growth increment is an additional 1,443 people.

2013-2033 (20-year): +1,443 people (2.5% AAGR)

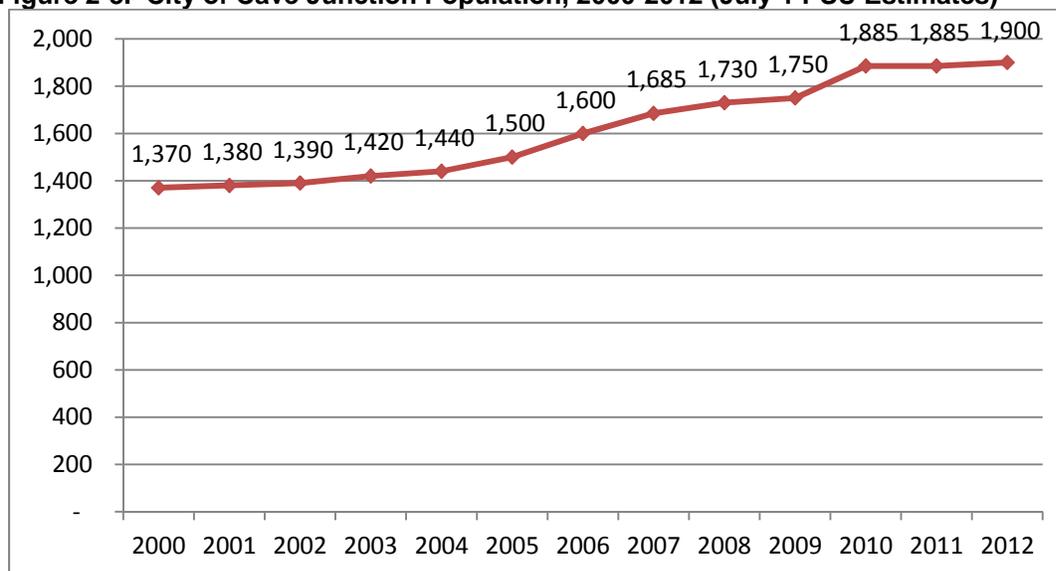
Cave Junction incorporated in 1948. Decennial Census data for the city for each decade since incorporation is provided in Table 2-6. For the UGB population, Census block data was readily available for 2000 and 2010 to estimate the Cave Junction Urban Area population for those years, and those estimates are provided in Table 2-6. The Cave Junction Urban Area population grew at 2.14% AAGR from 2000 to 2010.

With any small area forecast, there is potential for significant fluctuation in growth rate associated with increment of growth, because the new growth is compared to a small total population base. When considered only relative to one another as a percentage, small changes in population base or growth increment may appear to be more significant than they are if only the growth rates are considered without recognizing what these represent in actual population.

Table 2-6. City of Cave Junction Population 1950-2010 and Estimated UGB Population 2000-2010

Year	April 1 Census, City of Cave Junction	Unincorporated UGB Estimate, Cave Junction	Total UGB Estimate, Cave Junction
1950	283		
1960	248		
1970	415		
1980	1,023		
1990	1,126		
2000	1,363	417	1,780
2010	1,883	316	2,199

Figure 2-3. City of Cave Junction Population, 2000-2012 (July 1 PSU Estimates)



Section 3. Oregon Office of Economic Analysis (OEA) 2010-2050 Forecast for Josephine County

Table 3-1 provides the Office of Economic Analysis (OEA) 2010-2050 forecast for Josephine County, which was issued as part of the forecast for Oregon and its counties in March 2013. The table provides the population in 5-year increments and the components of change. The growth rate and population for each year is provided in Table 3-2. Figures 3-1 and 3-2 provide population pyramids showing the forecast population and population change by 5-year age cohort. Additional data and a summary of the methodology are available on OEA’s website at <http://www.oregon.gov/DAS/OEA Pages/ demographic.aspx>

The continued aging of the population means deaths are forecast to continue to outpace births during this period (deaths began to outpace births in the mid-1990s), and net migration is forecast to continue to outpace this trend, resulting in net population growth.

Table 3-1. Oregon Office of Economic Analysis (OEA) March 28, 2013 Final Population Forecast Josephine County, 2010-2050, with Components of Change

Josephine Co. Population	1980	1985	1990	Estimate			FORECAST								
	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Population	58,982	60,666	62,985	71,313	75,897	79,134	82,775	85,313	90,776	96,468	101,596	105,829	109,526	112,906	116,217

Components of Change	1980-85	1985-90	Estimate				FORECAST							
	1980-85	1985-90	1990-95	1995-00	2000-05	2005-10	2010-15	2015-20	2020-25	2025-30	2030-35	2035-40	2040-45	2045-50
Population Change	1,684	2,319	8,328	4,584	3,237	3,641	2,538	5,463	5,692	5,128	4,233	3,697	3,381	3,311
Annualized Growth Rate	0.56%	0.75%	2.48%	1.25%	0.84%	0.90%	0.60%	1.24%	1.22%	1.04%	0.82%	0.69%	0.61%	0.58%
Number of Births	4,158	3,990	3,984	3,978	3,857	4,238	4,039	4,352	4,592	4,659	4,702	4,714	4,789	4,848
Number of Deaths	3,107	3,626	4,109	4,739	5,100	5,429	5,605	5,973	6,556	7,295	8,209	8,747	9,130	9,252
Natural Increase (Births - Deaths)	1,051	364	-125	-762	-1,243	-1,191	-1,566	-1,621	-1,964	-2,636	-3,507	-4,033	-4,341	-4,404
Death/Birth Ratio	0.75	0.91	1.03	1.19	1.32	1.28	1.39	1.37	1.43	1.57	1.75	1.86	1.91	1.91
Net Migration	634	1,955	8,453	5,499	4,480	4,832	4,103	7,084	7,656	7,763	7,740	7,730	7,723	7,714

(Calculations by City of Grants Pass in Italics)

Table 3-2. Oregon Office of Economic Analysis (OEA) March 28, 2013 Final Population Forecast Josephine County, 2010-2050, by Year

Year	AAGR	Population
2010		82,775
2011	0.6058%	83,276
2012	0.6058%	83,781
2013	0.6058%	84,289
2014	0.6058%	84,799
2015	0.6058%	85,313
2016	1.2491%	86,379
2017	1.2491%	87,458
2018	1.2491%	88,550
2019	1.2491%	89,656
2020	1.2491%	90,776
2021	1.2238%	91,887
2022	1.2238%	93,011
2023	1.2238%	94,150
2024	1.2238%	95,302
2025	1.2238%	96,468
2026	1.0412%	97,472
2027	1.0412%	98,487
2028	1.0412%	99,513
2029	1.0412%	100,549
2030	1.0412%	101,596
2031	0.8198%	102,429
2032	0.8198%	103,268
2033	0.8198%	104,115
2034	0.8198%	104,969
2035	0.8198%	105,829
2036	0.6891%	106,558
2037	0.6891%	107,293
2038	0.6891%	108,032
2039	0.6891%	108,776
2040	0.6891%	109,526
2041	0.6097%	110,194
2042	0.6097%	110,866
2043	0.6097%	111,542
2044	0.6097%	112,222
2045	0.6097%	112,906
2046	0.5797%	113,561
2047	0.5797%	114,219
2048	0.5797%	114,881
2049	0.5797%	115,547
2050	0.5797%	116,217

Figure 3-1. Oregon Office of Economic Analysis (OEA) March 28, 2013 Final Population Forecast Josephine County, Population Pyramids with 5-Year Age Cohorts, 2000-2050

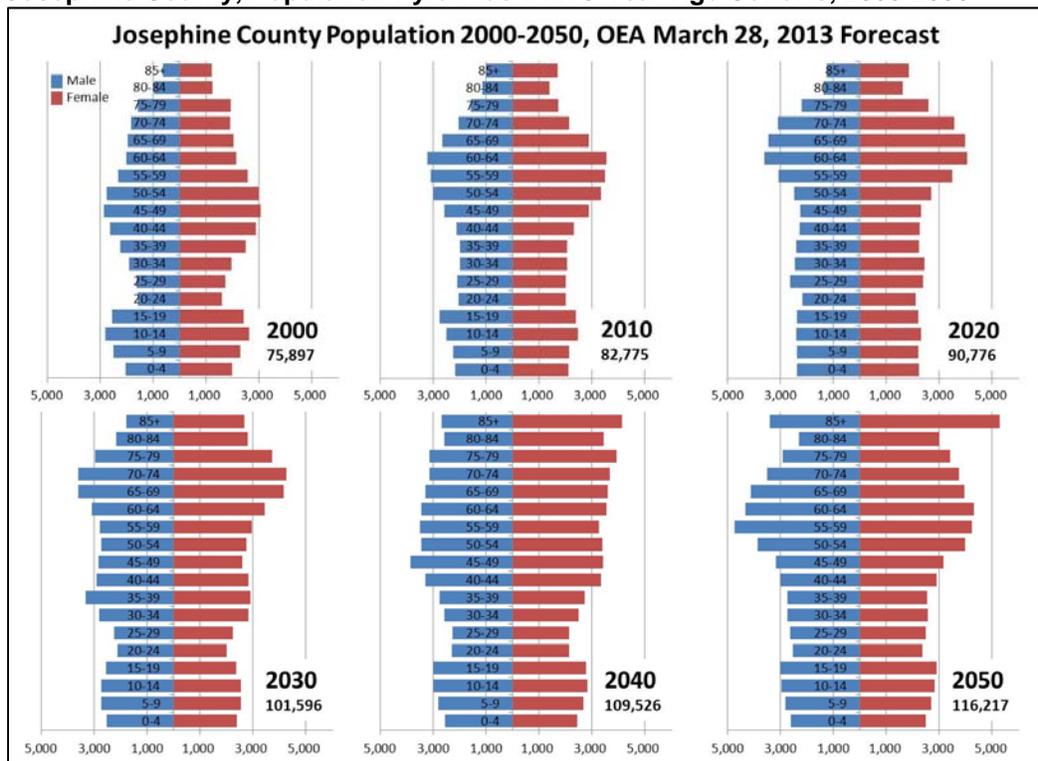
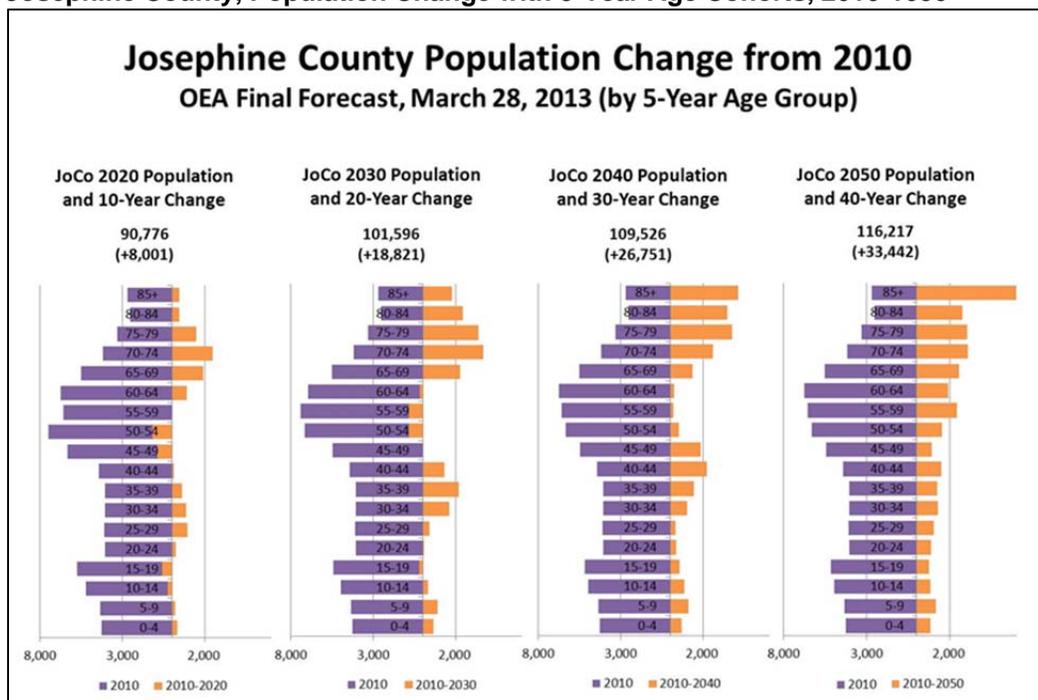


Figure 3-2. Oregon Office of Economic Analysis (OEA) March 28, 2013 Final Population Forecast Josephine County, Population Change with 5-Year Age Cohorts, 2010-1050



Section 4. Josephine County Coordinated Forecast

Table 4-1 provides the Josephine County coordinated population forecast, including the following:

- Josephine County total population forecast, based on OEA forecast with adjustments to 2011 and 2012 to reflect PSU population estimates rather than OEA forecast data for those years. Growth rates from the OEA forecast are applied to the adjusted base year population.
- Grants Pass Urban Area forecast using share methodology. Column 5 is the forecast beginning with the estimate of population within the current UGB. Column 6 provides an estimate of the existing population within UGB expansion areas. Column 7 provides an estimate of the existing population within the Urban Reserve areas. Column 8 adds columns 5, 6, and 7. The estimated existing population in the Urban Reserve areas isn't added until 2033, as it is assumed that the Urban Reserve lands would be needed to meet needs for 2033-2043 and added to the UGB population for that time period. That population is subsequently deducted from the population in Column 11, which is the County unincorporated population outside of urban areas, since this is existing or 'replacement' population, not new population growth.
- Cave Junction Urban Area forecast using growth rate methodology. Since Cave Junction has determined there is sufficient buildable land within its UGB to meet the needs for the forecast population through 2033, there no adjustments to include existing base year population beyond the current UGB.

Cells shaded in orange represent the planning periods for the respective jurisdictions. For Grants Pass, the planning period for the Urban Growth Boundary is 2013-2033 and the planning period for the Urban Reserve is 2033-2043. For Cave Junction, the planning period for the Urban Growth Boundary is 2013-2033.

The forecasting requirements are to provide a basis for planning to meet needs for the identified long-term planning horizon. While this forecast provides data for each year, the forecast includes average growth rates. It not intended to account for specific growth rates for individual years within the long-term planning horizon. It is recognized that there may be growth rates that are faster or slower than any straight line averages in the forecast. Deviation from rates for individual years alone is not an indication that the long-term forecast needs be revised.

Table 4-1. Josephine County Population and Coordinated Forecast, 2010-2050

	1	2	3	4	5	6	7	8	9	10	11
	Year	Josephine County		Grants Pass Urban Area				Cave Junction Urban Area		Jo. Co.	
		Growth Rate: OEA	Population: OEA w/ Adj. Base Yr.	Share of Jo. Co. Population	Population: From Base Pop. in Current UGB	Add'l Base Yr. Pop. Estimate: UGB Exp. Areas	Add'l Base Yr. Pop. Estimate: UR Areas	Population: Current UGB + UGB Exp + UR	Growth Rate	Population	Population Outside Urban Areas
Census/PSU Est.	2007									2,241	
	2008										
	2009										
	2010		82,775	0.4582	37,928					2,199	42,648
	2011		82,820	0.4595	38,055					2,199	42,566
	2012		82,775	0.4607	38,135					2,204	42,436
Forecast	2013	0.6058%	83,276	0.460	38,307	665		38,972	2.5%	2,259	42,045
	2014	0.6058%	83,781	0.462	38,707	665		39,372	2.5%	2,316	42,094
	2015	0.6058%	84,289	0.464	39,110	665		39,775	2.5%	2,373	42,140
	2016	1.2491%	85,341	0.466	39,769	665		40,434	2.5%	2,433	42,475
	2017	1.2491%	86,407	0.468	40,439	665		41,104	2.5%	2,494	42,810
	2018	1.2491%	87,487	0.470	41,119	665		41,784	2.5%	2,556	43,147
	2019	1.2491%	88,580	0.472	41,810	665		42,475	2.5%	2,620	43,485
	2020	1.2491%	89,686	0.474	42,511	665		43,176	2.5%	2,685	43,824
	2021	1.2238%	90,784	0.476	43,213	665		43,878	2.5%	2,752	44,153
	2022	1.2238%	91,895	0.478	43,926	665		44,591	2.5%	2,821	44,483
	2023	1.2238%	93,019	0.480	44,649	665		45,314	2.5%	2,892	44,813
	2024	1.2238%	94,157	0.482	45,384	665		46,049	2.5%	2,964	45,144
	2025	1.2238%	95,310	0.484	46,130	665		46,795	2.5%	3,038	45,477
	2026	1.0412%	96,302	0.486	46,803	665		47,468	2.5%	3,114	45,720
	2027	1.0412%	97,305	0.488	47,485	665		48,150	2.5%	3,192	45,963
	2028	1.0412%	98,318	0.490	48,176	665		48,841	2.5%	3,272	46,205
	2029	1.0412%	99,342	0.492	48,876	665		49,541	2.5%	3,354	46,447
	2030	1.0412%	100,376	0.494	49,586	665		50,251	2.5%	3,437	46,688
	2031	0.8198%	101,199	0.496	50,195	665		50,860	2.5%	3,523	46,816
	2032	0.8198%	102,028	0.498	50,810	665		51,475	2.5%	3,612	46,942
	2033	0.8198%	102,865	0.500	51,432	665		52,097	2.5%	3,702	47,066
	2034	0.8198%	103,708	0.501	51,958	665	536	53,159	1.054%	3,741	46,809
	2035	0.8198%	104,558	0.502	52,488	665	536	53,689	1.054%	3,780	47,089
	2036	0.6891%	105,279	0.503	52,955	665	536	54,156	1.054%	3,820	47,302
	2037	0.6891%	106,004	0.504	53,426	665	536	54,627	1.054%	3,860	47,517
	2038	0.6891%	106,735	0.505	53,901	665	536	55,102	1.054%	3,901	47,732
	2039	0.6891%	107,470	0.506	54,380	665	536	55,581	1.054%	3,942	47,947
	2040	0.6891%	108,211	0.507	54,863	665	536	56,064	1.054%	3,984	48,163
	2041	0.6097%	108,871	0.508	55,306	665	536	56,507	1.054%	4,026	48,338
	2042	0.6097%	109,534	0.509	55,753	665	536	56,954	1.054%	4,068	48,512
	2043	0.6097%	110,202	0.510	56,203	665	536	57,404	1.054%	4,111	48,687
	2044	0.6097%	110,874	0.511	56,657	665	536	57,858	1.054%	4,154	48,862
	2045	0.6097%	111,550	0.512	57,114	665	536	58,315	1.054%	4,198	49,037
2046	0.5797%	112,197	0.513	57,557	665	536	58,758	1.054%	4,242	49,197	
2047	0.5797%	112,847	0.514	58,004	665	536	59,205	1.054%	4,287	49,356	
2048	0.5797%	113,502	0.515	58,453	665	536	59,654	1.054%	4,332	49,515	
2049	0.5797%	114,160	0.516	58,906	665	536	60,107	1.054%	4,378	49,674	
2050	0.5797%	114,822	0.517	59,363	665	536	60,564	1.054%	4,424	49,834	

Blue = Census/Estimate
 Black = Forecast
 UGB/UR planning periods for jurisdictions shaded orange

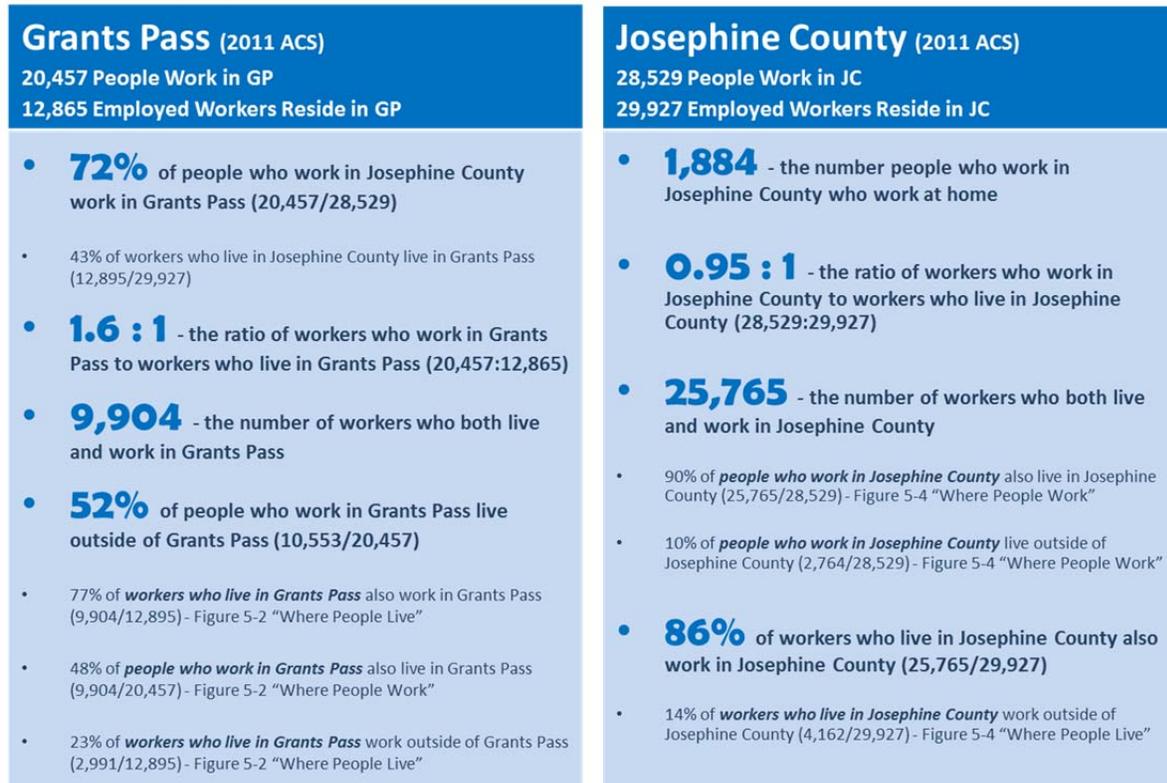
Section 5. ‘Daytime’ Resident and Worker Population

This section only provides an estimate of ‘daytime’ population and a comparison to ‘nighttime’ residential population, and it does not provide a forecast. Employment forecasting is conducted separately. Population estimates and forecasts typically provide information about the resident population that lives within the specified geographic area (City, UGB, or County), primarily in housing units and group quarters. Other types of estimates and forecasts may provide additional information about how many people work, shop, recreate, access services, and/or use lodging in an area.

The following data provides an estimate of ‘daytime’ population of resident and worker population, using commuter data about where people work that may differ from where people live. For example, a regional employment or commercial center may have a ‘daytime’ resident and worker population that exceeds the ‘nighttime’ resident population due to commuters. A bedroom community of commuters may have a ‘nighttime’ resident population that exceeds the daytime population.

This estimate only addresses place of residence and place of work. It doesn’t provide information about how many people shop, recreate, access services, or use lodging in an area. Also, there are some limitations associated with part-time workers, shift work, and work hours, etc. Further, this data is from the Census Bureau American Community Survey (ACS) 5-year tables, and it is important to recognize margin of error, especially for smaller areas. This data is only available for the cities and county, and is not available for the UGB boundaries.

Figure 5-1. Highlights of Resident & Worker Populations, Grants Pass and Josephine County

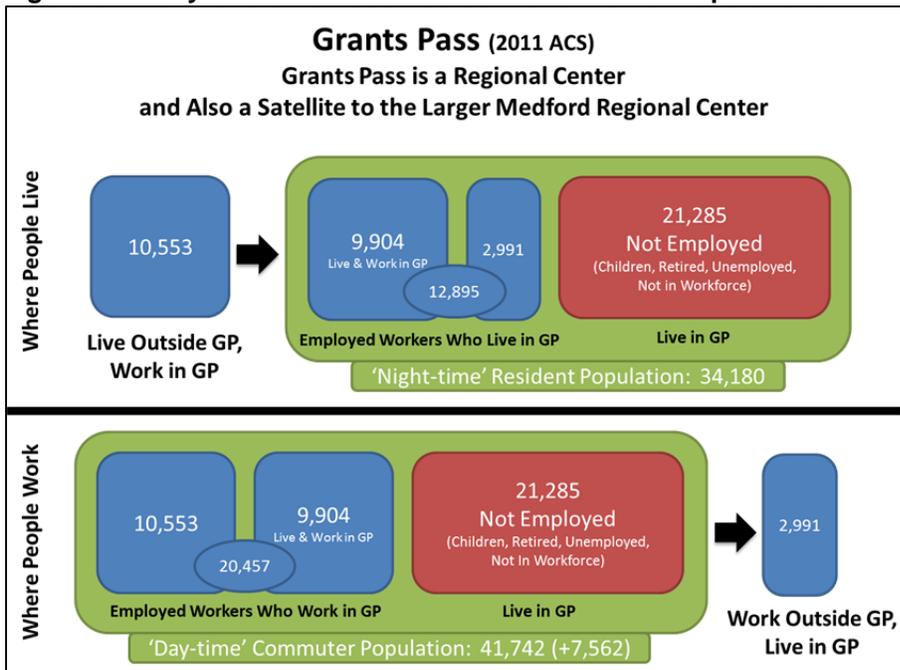


Census Bureau, American Community Survey (ACS) 2011 5-Year Tables
Calculations by City of Grants Pass

Table 5-1. City of Grants Pass Resident and Worker Populations

Grants Pass Total Resident Population (B01003)		34,180	
Workers Who Work in City of GP			
	Count	Share	
1. Employed in GP (B08406)	20,457	100.0%	
2. Employed in GP, But Live Outside GP (1-3)	10,553	51.6%	
3. Employed and Live in GP (B08008)	9,904	48.4%	
Workers Who Live in City of GP			
	Count	Share	
4. Live in GP (B08008)	12,895	100.0%	
5. Live in GP, But Employed Outside GP (B08008)	2,991	23.2%	
6. Live and Employed in GP (B08008)	9,904	76.8%	
		Total	Diff from Res Pop
7. Daytime Population Due to Commuting (0+1-4)	41,742	7,562	122%

Figure 5-2. City of Grants Pass Resident and Worker Populations

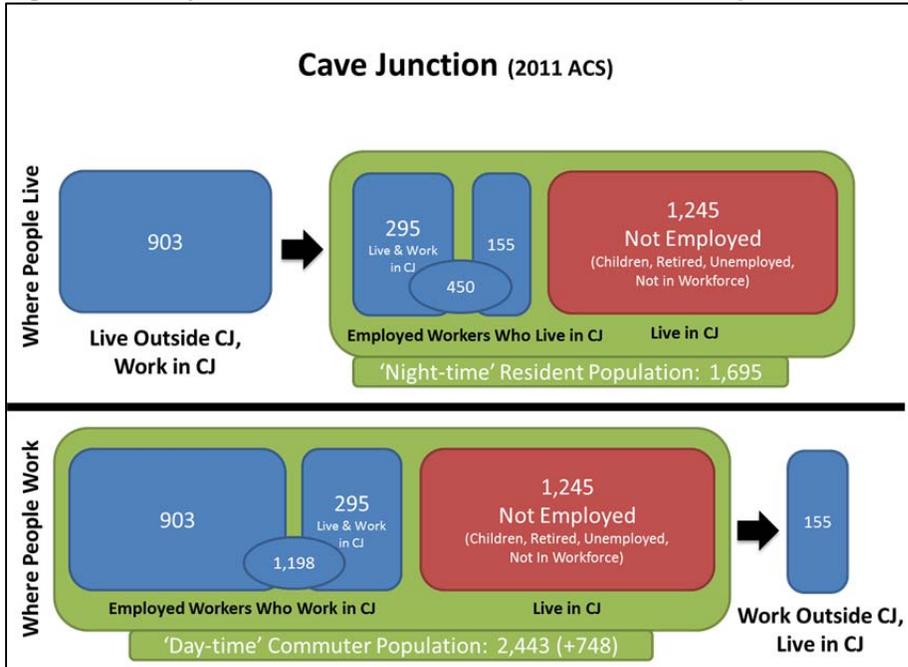


Census Bureau, American Community Survey (ACS) 2011 5-Year Tables
Calculations by City of Grants Pass

Table 5-2. City of Cave Junction Resident and Worker Populations

Cave Junction Total Resident Population (B01003)			
		1,695	
Workers Who Work in City of CJ			
	Count	Share	
1. Employed in CJ (B08406)	1,198	100.0%	
2. Employed in CJ, But Live Outside CJ (1-3)	903	75.4%	
3. Employed and Live in CJ (B08008)	295	24.6%	
Workers Who Live in City of CJ			
	Count	Share	
4. Live in CJ (B08008)	450	100.0%	
5. Live in CJ, But Employed Outside CJ (B08008)	155	34.4%	
6. Live and Employed in CJ (B08008)	295	65.6%	
		Total	Diff from Res Pop
7. Daytime Population Due to Commuting (0+1-4)	2,443	748	144%

Figure 5-3. City of Cave Junction Resident and Worker Populations

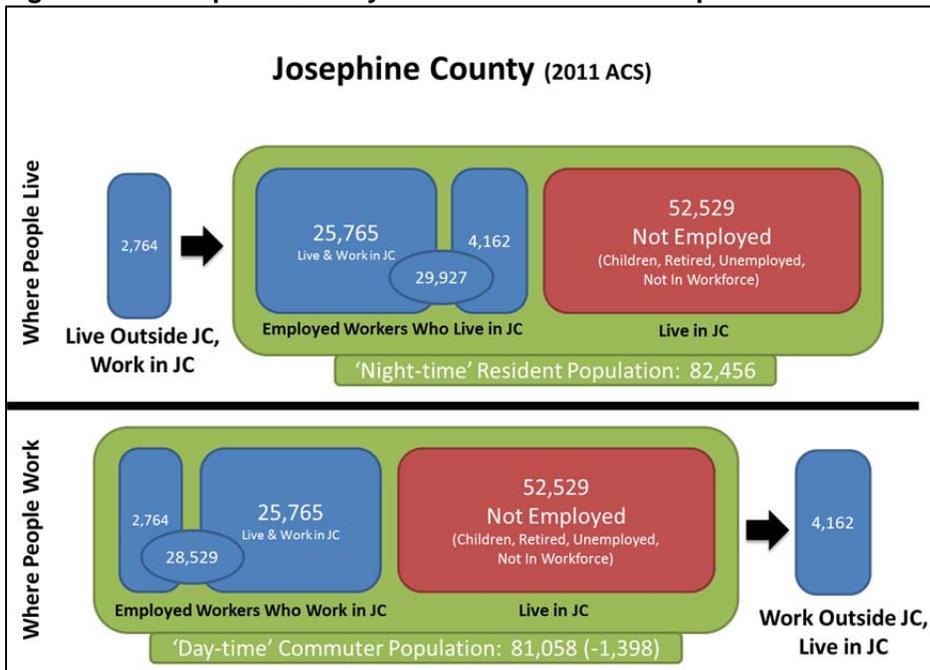


Census Bureau, American Community Survey (ACS) 2011 5-Year Tables
 Calculations by City of Grants Pass

Table 5-3. Josephine County Resident and Worker Populations

Josephine County Total Resident Population (B01003)		82,456	
Workers Who Work in JoCo			
1. Employed in JoCo (B08406)	Count	28,529	Share
			100.0%
2. Employed in JoCo, But Live Outside JoCo (1-3)	Count	2,764	Share
			9.7%
3. Employed and Live in JoCo (B08007)	Count	25,765	Share
			90.3%
Workers Who Live in JoCo			
4. Live in JoCo (B08007)	Count	29,927	Share
			100.0%
5. Live in JoCo, But Employed Outside JoCo (B08007)	Count	4,162	Share
			13.9%
6. Live and Employed in JoCo (B08007)	Count	25,765	Share
			86.1%
	Total	81,058	Diff from Res Pop
7. Daytime Population Due to Commuting (0+1-4)		(1,398)	98%

Figure 5-4. Josephine County Resident and Worker Populations



Census Bureau, American Community Survey (ACS) 2011 5-Year Tables
 Calculations by City of Grants Pass