Josephine County Coordinated Population Forecast - 2014 Update

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%

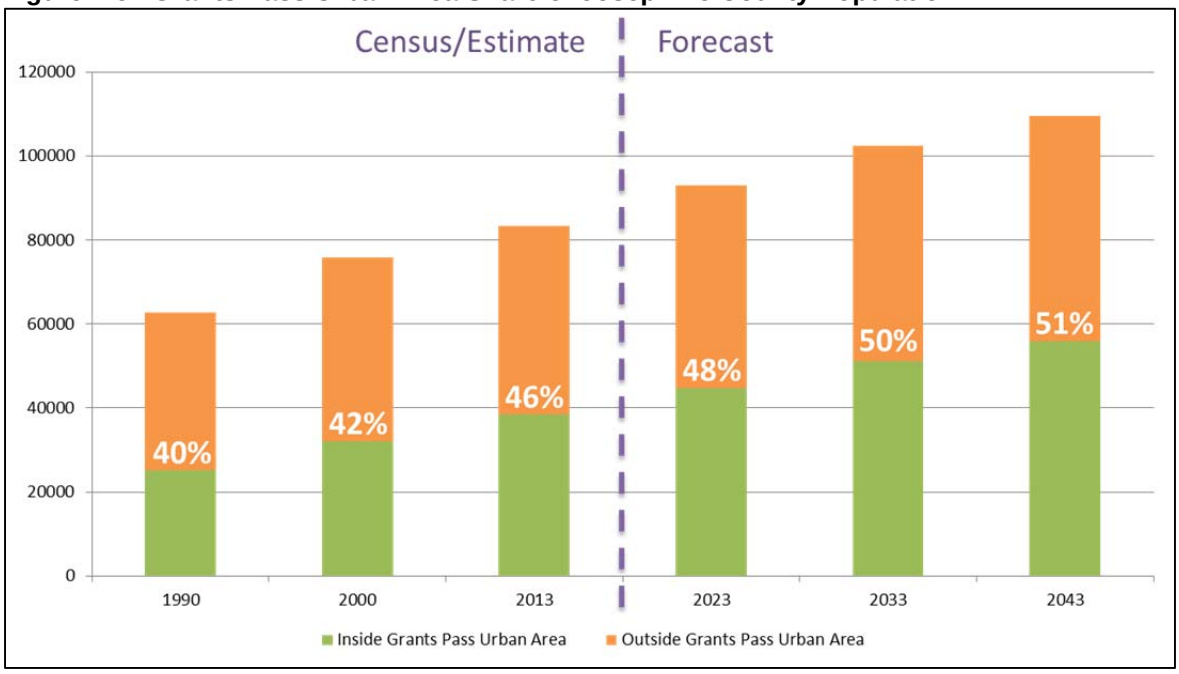
Share of population can only change when growth is occurring and/or when one area is declining relative to another area. Table 2-5 shows the Grants Pass urban area share of the *new* population in Josephine County from 1990-2010. For the 20-year period from 1990-2010, new population growth in the Grants 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

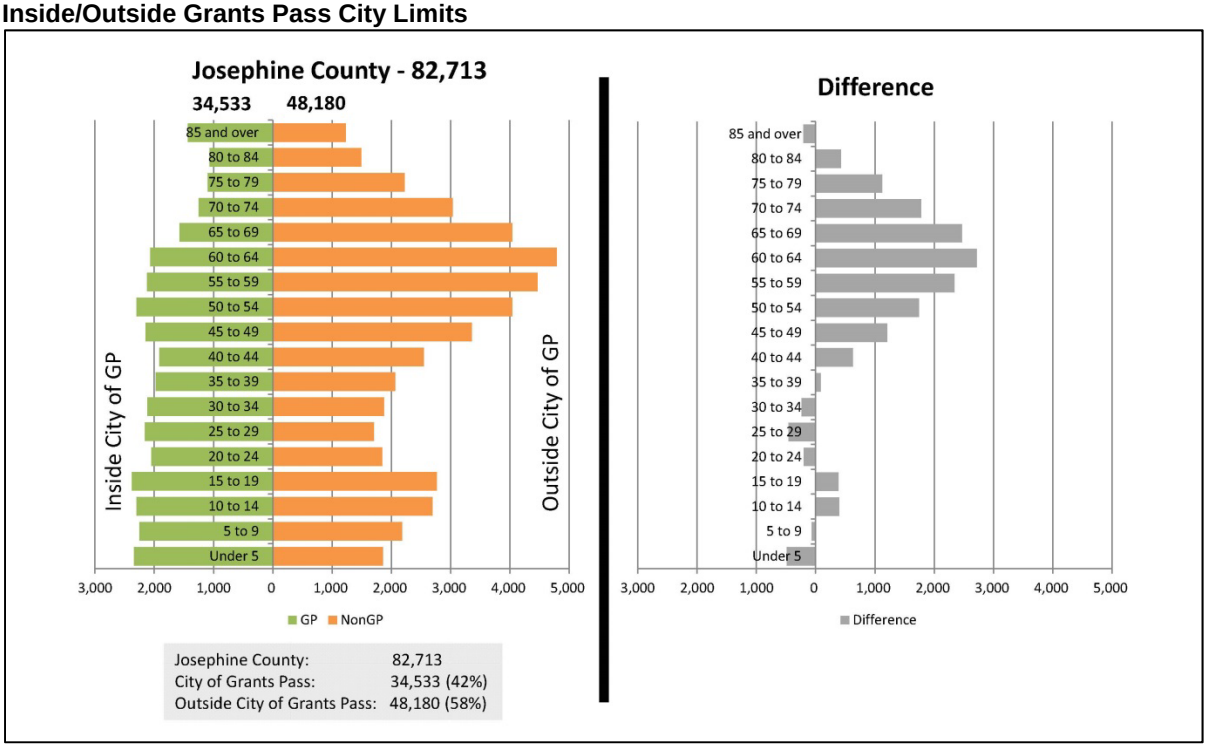


Figure 2-2. 2010 Josephine County Population by 5-Year Age Group, Inside/Outside Grants Pass City Limits + Redwood CDP + Fruitdale CDP

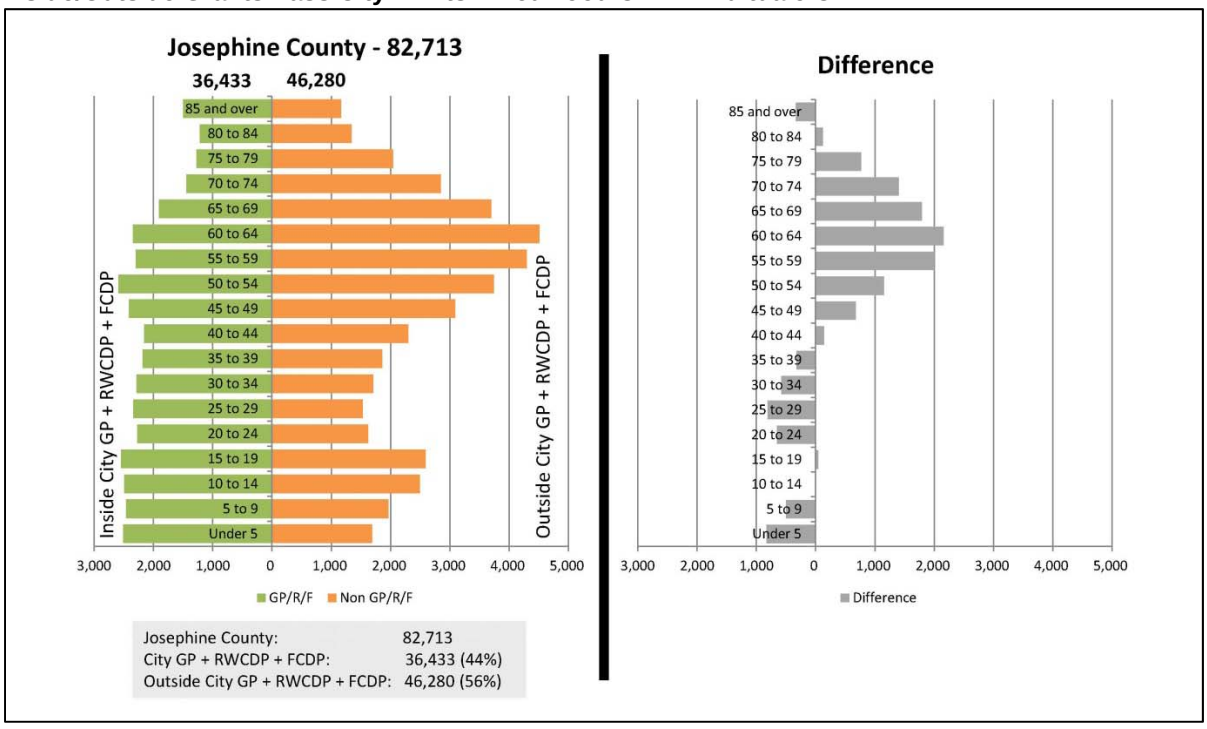


Figure 2-3. 2010 Josephine County Population by 5-Year Age and Sex Cohorts (Percent): County Total, Population in City of Grants Pass, Population Outside City of Grants Pass

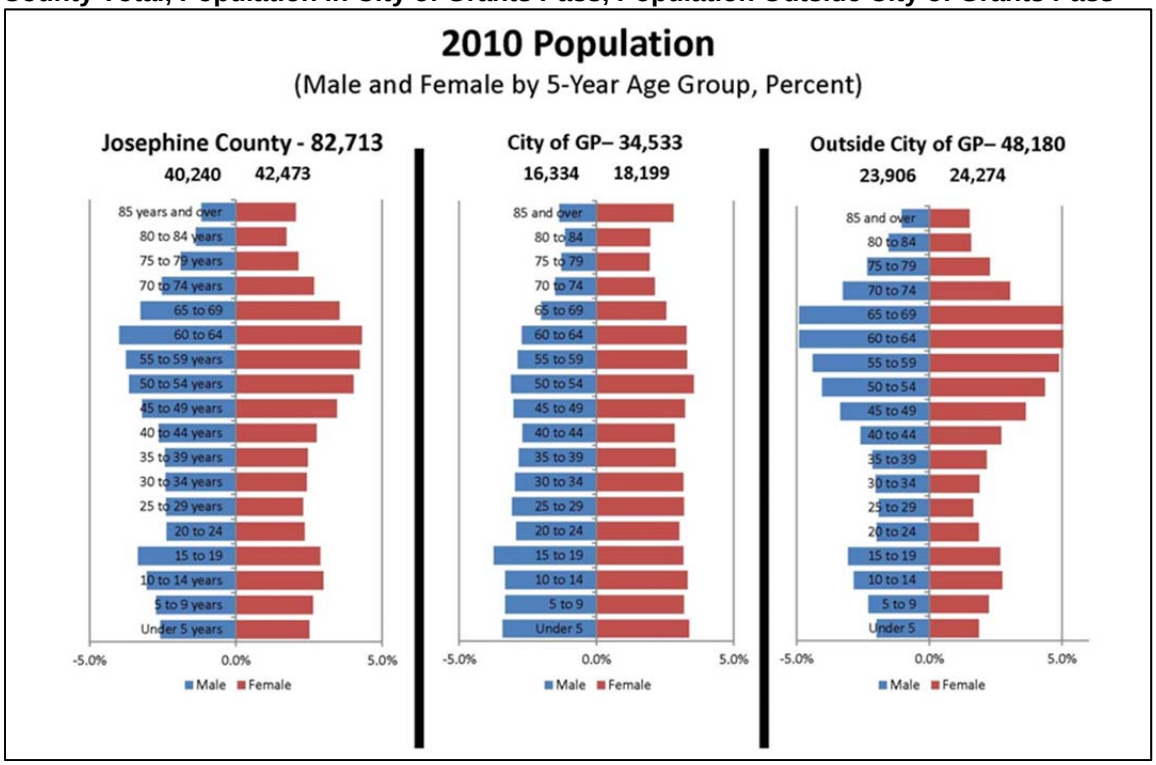
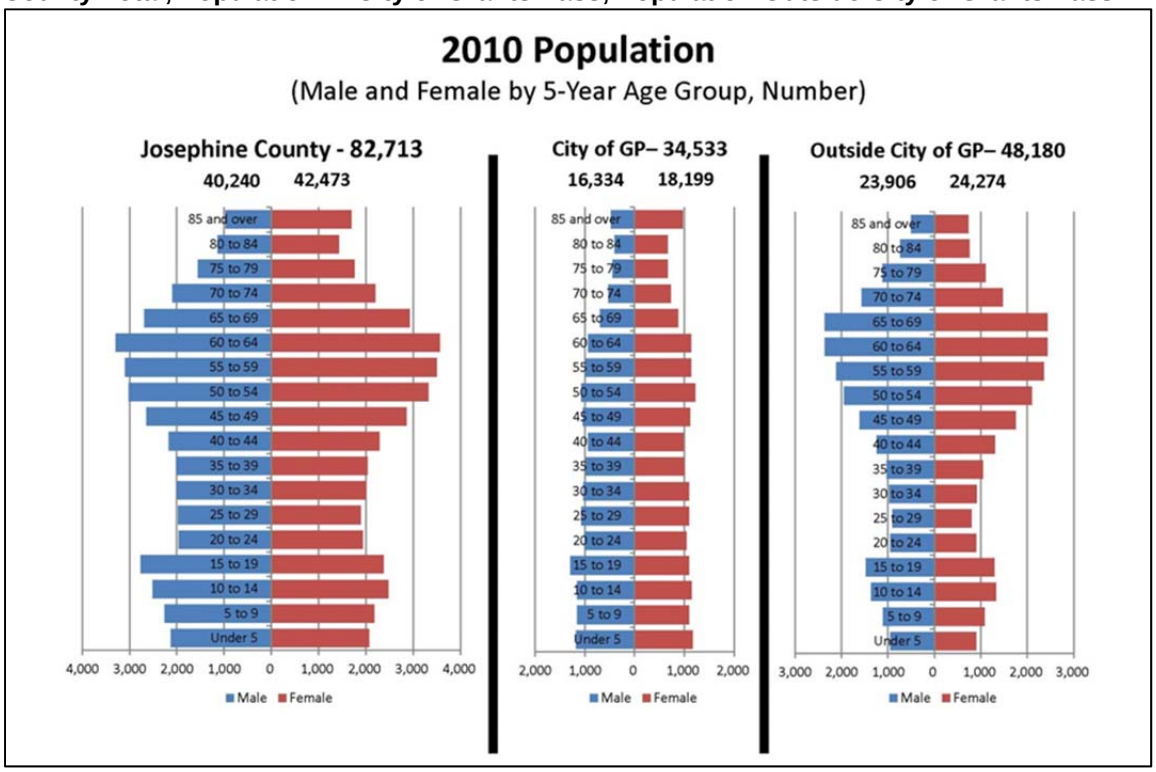


Figure 2-4. 2010 Josephine County Population by 5-Year Age and Sex Cohorts (Number): County Total, Population in City of Grants Pass, Population Outside City of Grants Pass



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)

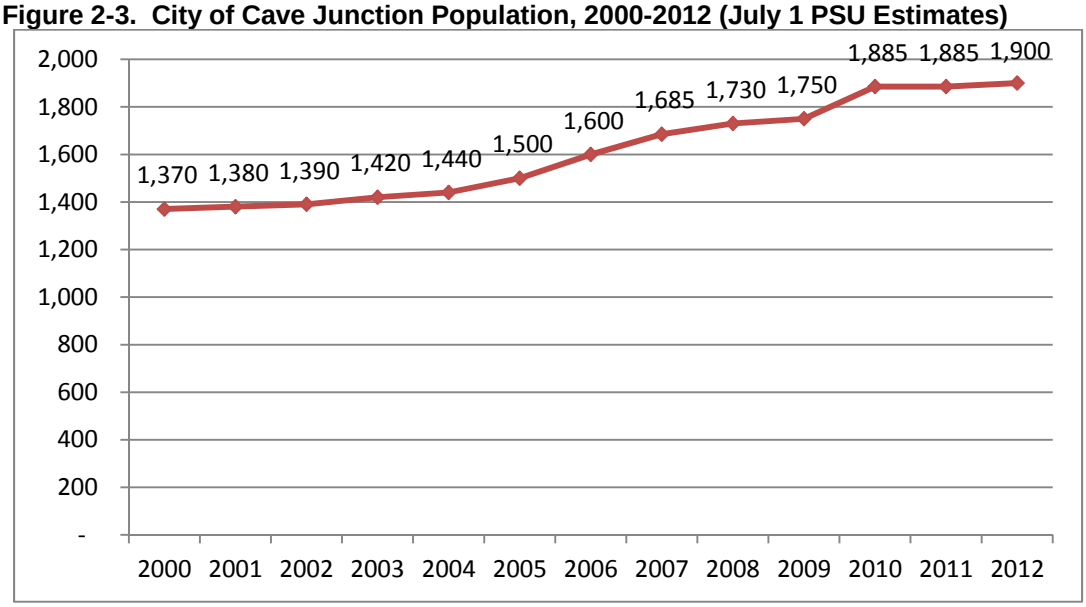
Cave Junction incorporated in 1948. Decennial Census data for the city for each decade since incorporation is provided in Table 2-6. For the UGB population, Census block data was readily available for 2000 and 2010 to estimate the Cave Junction Urban Area population for those years, and those estimates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

				Estimate				FORECAST							
Josephine Co. Population	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

			Estimate				FORECAST							
Components of Change	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

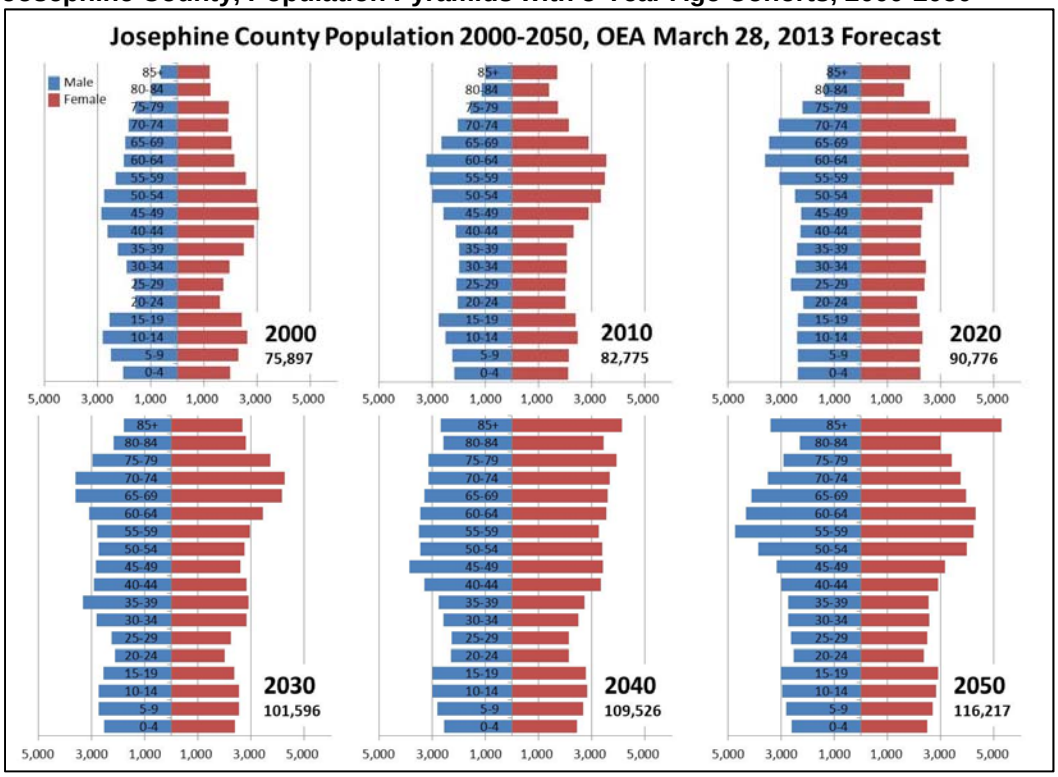
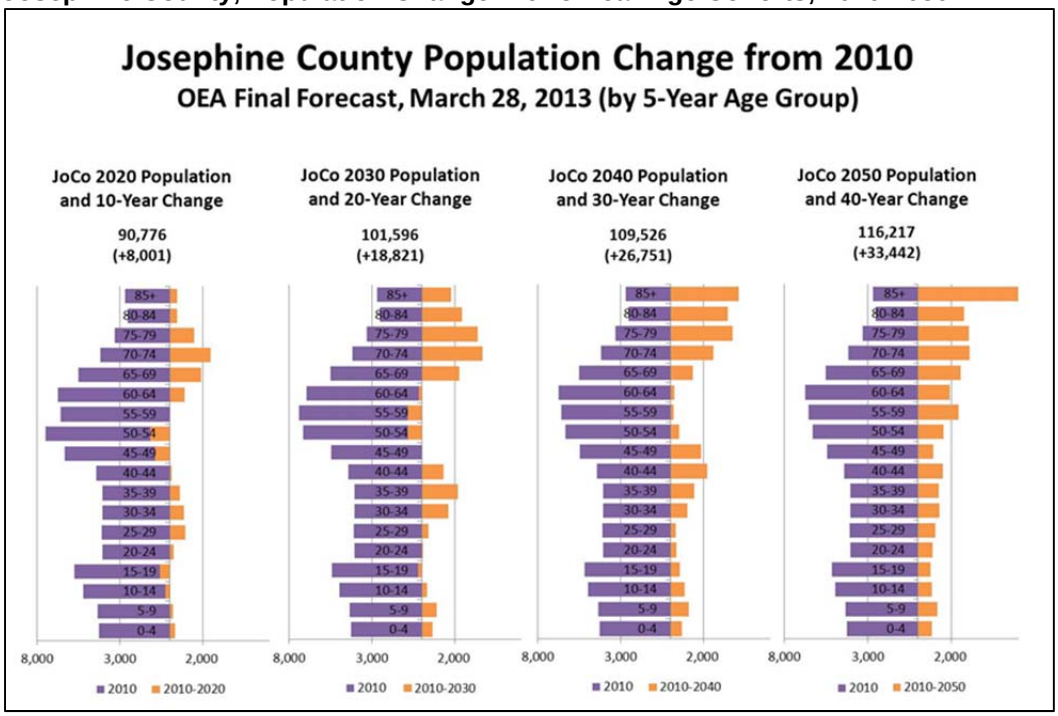


Figure 3-2. Oregon Office of Economic Analysis (OEA) March 28, 2013 Final Population Forecast Josephine County, Population Change with 5-Year Age Cohorts, 2010-1050



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

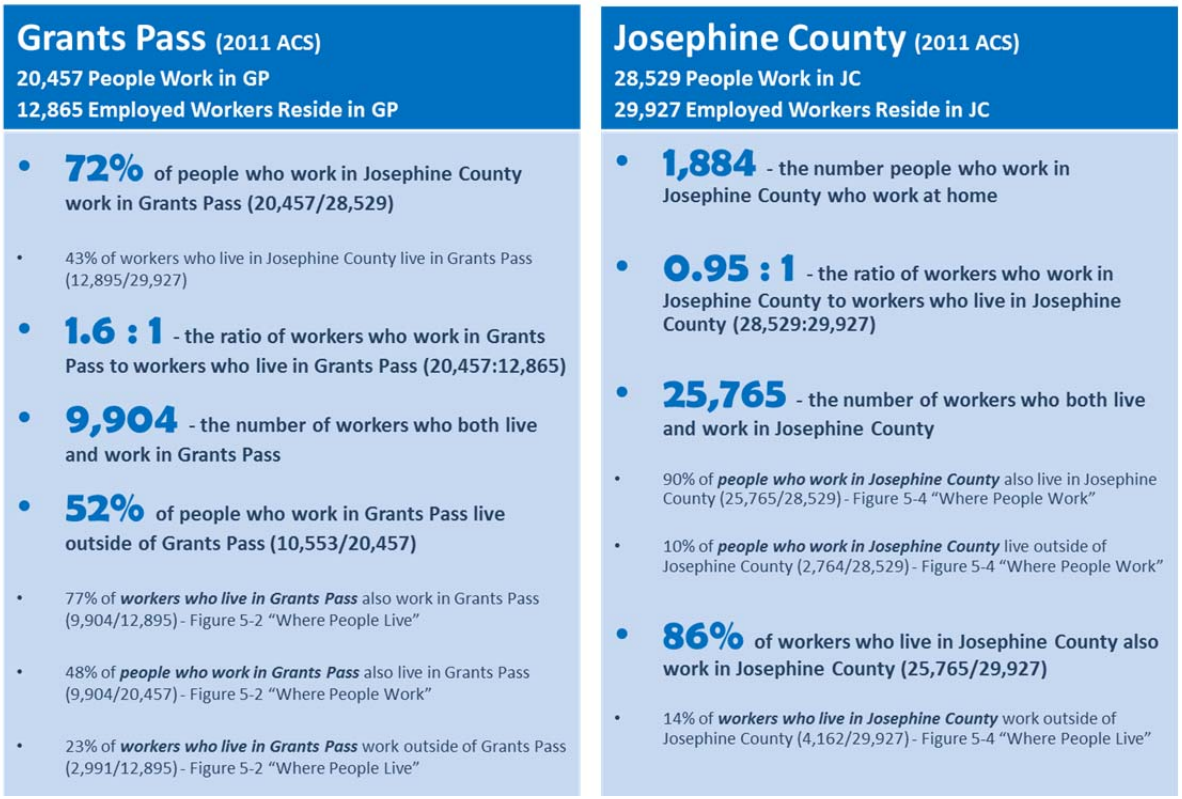
Section 5. 'Daytime' Resident and Worker Population

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

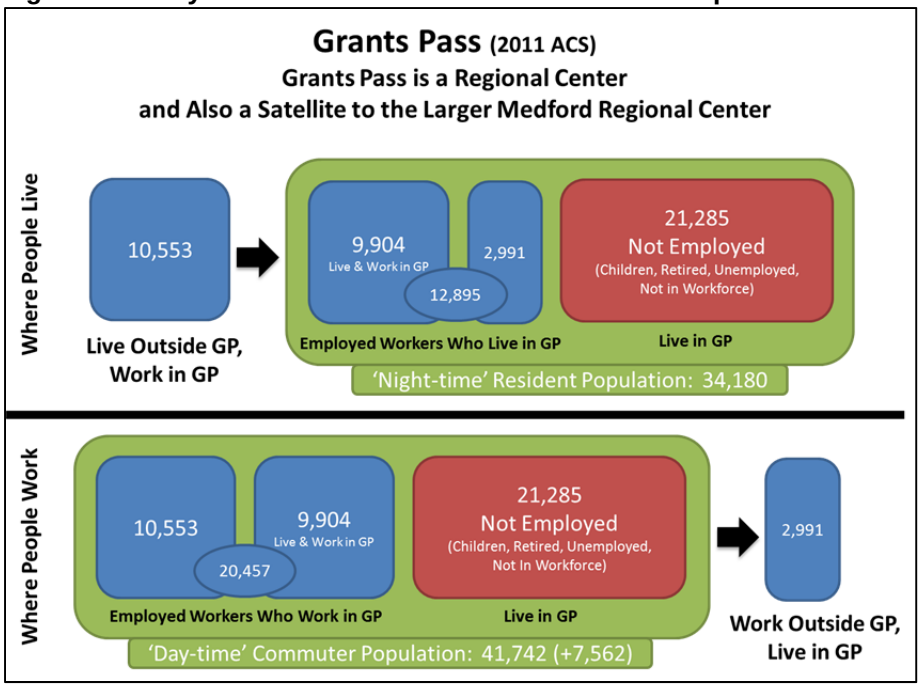


Census Bureau, American Community Survey (ACS) 2011 5-Year Tables
Calculations by City of Grants Pass

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

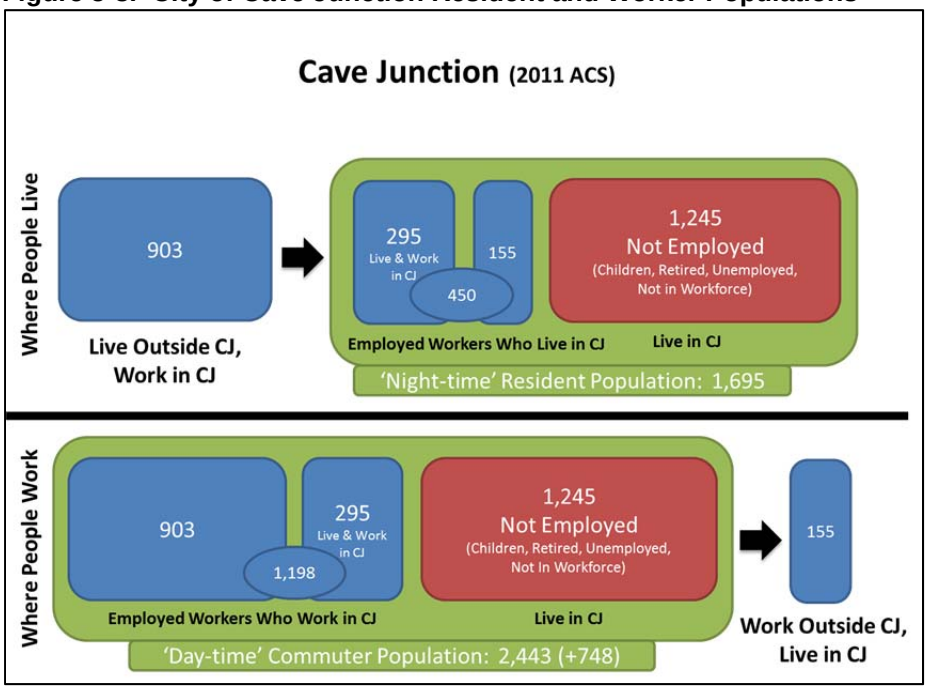


Census Bureau, American Community Survey (ACS) 2011 5-Year Tables
Calculations by City of Grants Pass

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

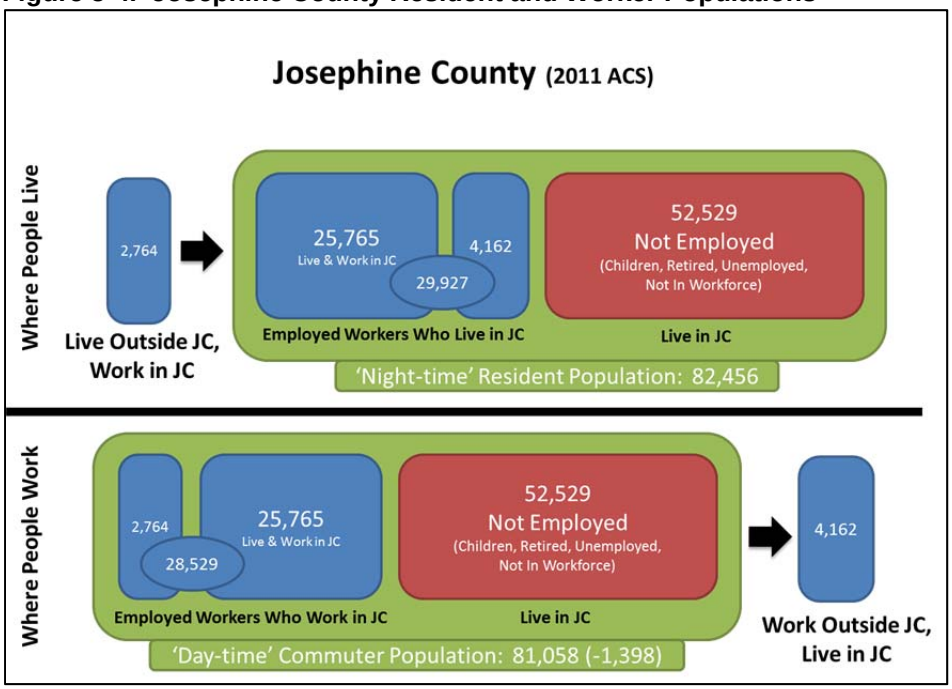
Josephine County Total Resident Population (B01003) 82,456

Workers Who Work in JoCo	Count	Share
1. Employed in JoCo (B08406)	28,529	100.0%
2. Employed in JoCo, But Live Outside JoCo (1-3)	2,764	9.7%
3. Employed and Live in JoCo (B08007)	25,765	90.3%

Workers Who Live in JoCo	Count	Share
4. Live in JoCo (B08007)	29,927	100.0%
5. Live in JoCo, But Employed Outside JoCo (B08007)	4,162	13.9%
6. Live and Employed in JoCo (B08007)	25,765	86.1%

	Total	Diff from Res Pop	
7. Daytime Population Due to Commuting (0+1-4)	81,058	(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