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# Coordinated Population Forecast for Coos County, its Urban Growth Boundaries (UGB), and Area Outside UGBs 2015-2065

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# Coordinated Population Forecast



# 2015

Through

# 2065

# Coos County

Urban Growth Boundaries (UGB) & Area Outside UGBs



# Coordinated Population Forecast for Coos County, its Urban Growth Boundaries (UGB), and Area Outside UGBs 2015-2065

Prepared by

**Population Research Center** 

**College of Urban and Public Affairs** 

**Portland State University** 

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# How to Read this Report

This report should be read with reference to the documents listed below—downloadable on the Forecast Program website (<u>http://www.pdx.edu/prc/opfp</u>).

Specifically, the reader should refer to the following documents:

- *Methods and Data for Developing Coordinated Population Forecasts*—Provides a detailed description and discussion of the forecast methods employed. This document also describes the assumptions that feed into these methods and determine the forecast output.
- Forecast Tables—Provides complete tables of population forecast numbers by county and all subareas within each county for each five-year interval of the forecast period (i.e., 2015-2065). These tables are also located in <u>Appendix C</u> of this report.

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# **Executive Summary**

# Historical

Different growth patterns occur in different parts of the county, and these local trends within the UGBs and the area outside UGBs collectively influence population growth rates for the county as a whole.

Coos County's total population has grown slowly since 2000; with average annual growth rates of nearly zero between 2000 and 2010 (Figure 1); however some of its sub-areas experienced more population growth during the 2000s. Lakeside and Bandon, for example, posted the highest average annual growth rates at 2.2 and 0.6 percent, respectively, during the 2000 to 2010 period.

Coos County's positive population growth in the 2000s was the result of sporadic net in-migration. Meanwhile an aging population not only led to an increase in deaths, but also resulted in a smaller proportion of women in their childbearing years. This along with more women choosing to have fewer children and have them at older ages has led to fewer births in recent years. The larger number of deaths relative to births caused natural decrease (more deaths than births) in every year from 2000 to 2014. While periods of net in-migration outweighed natural decrease during the last decade, the gap between these two numbers shrank during the later years—bringing population decline from 2009 to 2013.

# Forecast

Total population in Coos County as a whole, as well as within its sub-areas, will likely grow at a slightly faster pace in the first 20 years of the forecast period, and more slowly in the last 30 years (Figure 1). The tapering of growth rates is largely driven by an aging population—a demographic trend already yielding natural decrease (births minus deaths). As natural decrease persists and becomes more pronounced over time, population growth in Coos County is expected to become increasingly reliant on net in-migration.

Even so, Coos County's total population is forecast to increase by more than 1,200 over the next 20 years (2015-2035) and by more than 2,500 over the entire 50 year forecast period. Sub-areas that showed strong population growth in the 2000s will likely experience similar rates of population growth during the forecast period. Some sub-areas that experienced population loss in the 2000s are expected to show population gains throughout the forecast period, although these gains will likely be small.

		Historical			Forecast				
			AAGR				AAGR	AAGR	
	2000	2010	(2000-2010)	2015	2035	2065	(2015-2035)	(2035-2065)	
Coos County	62,779	63,043	0.0%	63,122	64,331	65,624	0.1%	0.1%	
Bandon	3,001	3,197	0.6%	3,422	4,252	5,640	1.1%	0.9%	
Coos Bay	15,376	15,967	0.4%	16,207	17,362	19,000	0.3%	0.3%	
Coquille	4,334	3,962	-0.9%	3,965	4,120	4,207	0.2%	0.1%	
Lakeside	1,371	1,699	2.2%	1,704	2,465	3,796	1.9%	1.4%	
Myrtle Point	2,506	2,553	0.2%	2,631	2,928	3,125	0.5%	0.2%	
North Bend	9,537	9,717	0.2%	9,752	10,390	10,749	0.3%	0.1%	
Powers	743	707	-0.5%	730	767	761	0.3%	0.0%	
Outside UGBs	25,911	25,241	-0.3%	24,711	22,047	18,348	-0.6%	-0.6%	

Figure 1. Coos County and Sub-Areas—Historical and Forecast Populations, and Average Annual Growth Rates (AAGR)

Sources: U.S. Census Bureau, 2000 and 2010 Censuses; Forecast by Population Research Center (PRC).

<sup>1</sup> For simplicity each UGB is referred to by its primary city's name.

# **Historical Trends**

Different growth patterns occur in different parts of the county. Each of Coos County's sub-areas was examined for any significant demographic characteristics or changes in population or housing growth that might influence the individual forecasts. Factors that were analyzed include; age composition of the population, ethnicity and race, births, deaths, migration, the number of <u>housing units</u>, and the <u>occupancy rate</u> and <u>persons per household (PPH)</u>. It should be noted that population trends of individual sub-areas often differ from those of the county as a whole. However, in general, population growth rates for the county are collectively influenced by local trends within its sub-areas.

# Population

Coos County's total population grew by about five percent between 1975 and 2014—from roughly 60,000 in 1975 to about 63,000 in 2014 (Figure 2). During this approximately 40-year period, the county realized the highest growth rates during the late 1970s, which coincided with a period of relative economic prosperity. During the early 1980s, challenging economic conditions, both nationally and within the county, led to population decline. Again, during the late 1990s and most recently between 2010 and 2014, challenging economic conditions led to population decline.





Coos County's population change is the sum of its parts, in this sense countywide population change is the combined population growth or decline within each sub-area. During the 2000s, Coos County's average annual population growth rate stood at a less than one-tenth of one percent. At the same time Lakeside recorded an average annual growth rate of more than two percent, while population in Bandon and Coos Bay also increased at rates well above that of the county as a whole (Figure 3). Myrtle

Point and North Bend saw modest average annual growth in their populations, while Coquille, North Bend and the area outside UGBs recorded population decline between 2000 and 2010.

			AAGR		Share of	Share of
	2000	2010	(2000-2010)	_	County 2000	County 2010
Coos County	62,779	63,043	0.0%		100.0%	100.0%
Bandon <sup>1</sup>	3,001	3,197	0.6%		4.8%	5.1%
Coos Bay	15,376	15,967	0.4%		24.5%	25.3%
Coquille	4,334	3,962	-0.9%		6.9%	6.3%
Lakeside	1,371	1,699	2.2%		2.2%	2.7%
Myrtle Point	2,506	2,553	0.2%		4.0%	4.0%
North Bend	9,537	9,717	0.2%		15.2%	15.4%
Powers	743	707	-0.5%		1.2%	1.1%
Outside UGBs	25,911	25,241	-0.3%		41.3%	40.0%

Figure 3. Coos County and Sub-areas—Total Population and Average Annual Growth Rate (AAGR) (2000 and 2010)

Sources: U.S. Census Bureau, 2000 and 2010 Censuses

<sup>1</sup> For simplicity each UGB is referred to by its primary city's name.

# Age Structure of the Population

Similar to most areas across Oregon, Coos County's population is aging. An aging population significantly influences the number of deaths, but also yields a smaller proportion of women in their childbearing years, which may result in a decline in births. This demographic trend underlies some of the population change that has occurred in recent years. From 2000 to 2010 the proportion of county population 65 or older grew from about 19 percent to 21 percent (Figure 4). Further underscoring the countywide trend in aging—the median age went from about 43 in 2000 to 47 in 2010.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Median age is sourced from the U.S. Census Bureau's 2000 and 2010 Censuses.



Figure 4. Coos County—Age Structure of the Population (2000 and 2010)

# **Race and Ethnicity**

While the statewide population is aging, another demographic shift is occurring across Oregon minority populations are growing as a share of total population. A growing minority population affects both the number of births and average household size. The Hispanic population within Coos County increased substantially from 2000 to 2010 (Figure 5), while the White, non-Hispanic population decreased over the same time period. This increase in the Hispanic population and other minority populations brings with it several implications for future population change. First, both nationally and at the state level, fertility rates among Hispanic and minority women have tended to be higher than among White, non-Hispanic women. Second, Hispanic and minority households tend to be larger relative to White, non-Hispanic households.

					Absolute	Relative
Hispanic or Latino and Race	200	00	203	10	Change	Change
Total population	62,779	100.0%	63,043	100.0%	264	0.4%
Hispanic or Latino	2,133	3.4%	3,391	5.4%	1,258	59.0%
Not Hispanic or Latino	60,646	96.6%	59,652	94.6%	-994	-1.6%
White alone	56,616	90.2%	54,820	87.0%	-1,796	-3.2%
Black or African American alone	169	0.3%	234	0.4%	65	38.5%
American Indian and Alaska Native alone	1,412	2.2%	1,467	2.3%	55	3.9%
Asian alone	553	0.9%	644	1.0%	91	16.5%
Native Hawaiian and Other Pacific Islander alone	99	0.2%	104	0.2%	5	5.1%
Some Other Race alone	66	0.1%	75	0.1%	9	13.6%
Two or More Races	1,731	2.8%	2,308	3.7%	577	33.3%

Figure 5. Coos County—Hispanic or Latino and Race (2000 and 2010)

Sources: U.S. Census Bureau, 2000 and 2010 Censuses

# **Births**

Historical fertility rates for Coos County are different compared to the decline in total fertility observed for Oregon overall (Figure 6). Furthermore fertility for younger women in Coos County remained higher (in 2010) than for younger women statewide (Figure 7 and Figure 8). Even so, as Figure 7 demonstrates, fertility rates for younger women in Coos County are lower in 2010 compared to 2000, and women are choosing to have children at older ages. While the decrease in fertility among younger women largely mirrors statewide changes, county fertility changes are distinct from those of the state in two ways. First, while fertility among younger women statewide. Second, the increase in total fertility in Coos County during the 2000s runs contrary to the statewide decline during this same period. In addition Coos County's total fertility remains just below <u>replacement fertility</u>.

#### Figure 6. Coos County and Oregon—Total Fertility Rates (2000 and 2010)

	2000	2010
Coos County	2.01	2.05
Oregon	1.98	1.79

Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Oregon Health Authority, Center for Health Statistics. Calculations by Population Research Center (PRC).



Figure 7. Coos County—Age Specific Fertility Rate (2000 and 2010)





Figure 9 shows the number of births by the area in which the mother resides. Please note that the number of births fluctuates from year to year. For example a sub-area with an increase in births between two years could easily show a decrease for a different time period; however for the 10 year

period from 2000 to 2010, the county as a whole, the Coos Bay UGB, and the areas outside UGBs recorded an increase in births. The North Bend UGB and other smaller UGBs, on the other hand, recorded a decrease in births (Figure 9).

			Absolute	Relative	Share of	Share of
	2000	2010	Change	Change	County 2000	County 2010
Coos County	619	656	37	6.0%	100.0%	100.0%
Coos Bay	197	224	27	13.9%	31.8%	34.1%
North Bend	125	116	-9	-7.5%	20.3%	17.7%
Smaller UGBs <sup>1</sup>	136	109	-27	-20.1%	22.0%	16.6%
Outside UGBs	161	207	46	29.0%	25.9%	31.6%

#### Figure 9. Coos County and Sub-Areas—Total Births (2000 and 2010)

Sources: Oregon Health Authority, Center for Health Statistics. Aggregated by Population Research Center (PRC).

<sup>1</sup> Smaller UGBs are those with populations less than 8,000 in forecast launch year.

# Deaths

The population in the county, as a whole, is aging and contrary to the statewide trend, people are not necessarily living longer.<sup>2</sup> For Coos County in 2000, life expectancy for males was 74 years and for females was 80 years. By 2010, life expectancy had increased to 75 for males and decreased to 79 for females. For both Coos County and Oregon, the survival rates changed little between 2000 and 2010— underscoring the fact that mortality is the most stable component of population change. Even so the total number of countywide deaths increased as the population aged (Figure 10).

#### Figure 10. Coos County and Sub-Areas—Total Deaths (2000 and 2010)

			Absolute	Relative	Share of	Share of
	2000	2010	Change	Change	County 2000	County 2010
Coos County	812	847	35	4.3%	100.0%	100.0%
Coos Bay	245	216	-29	-11.9%	30.2%	25.5%
North Bend	124	136	13	10.4%	15.2%	16.1%
All other areas <sup>1</sup>	443	495	51	11.6%	54.6%	58.4%

Sources: Oregon Health Authority, Center for Health Statistics. Aggregated by Population Research Center (PRC).

<sup>1</sup> All other areas includes all smaller UGBs (those with populations less than 8,000) and the area outside UGBs. Detailed, point level death data were unavailable for 2000, thus PRC was unable to assign deaths to some UGBs.

<sup>&</sup>lt;sup>2</sup> Researchers have found evidence for a widening rural-urban gap in life expectancy. This gap is particularly apparent between race and income groups. This may be one explanation for the decline in life expectancy in the 2000s. See the following research article for more information. *Singh, Gopal K., and Mohammad Siahpush. "Widening rural–urban disparities in life expectancy, US, 1969–2009." American Journal of Preventive Medicine 46, no. 2 (2014): e19-e29.* 

# Migration

The propensity to migrate is strongly linked to age and stage of life course. As such, age-specific migration rates are critically important for assessing these patterns across five-year age cohorts. Figure 11 shows the historical age-specific migration rates by five-year age group, both for Coos County and Oregon. The migration rate is indicated as the number of net migrants per person by age group.

From 2000 to 2010, younger individuals (ages with the highest mobility levels) moved out of the county in search of employment and education opportunities, as well as military service. At the same time, the county attracted a small number of middle-aged and older migrants who likely moved into the county for work-related reasons, retirement, or to be closer to family members; However, as individuals age and need access to better medical services, there is a marked out-migration of elderly persons.



Figure 11. Coos County and Oregon—Five-year Migration Rates (2000-2010)

# **Historical Trends in Components of Population Change**

In summary, Coos County's positive population growth in the 2000s was the result of sporadic net inmigration (Figure 12). Meanwhile an aging population not only led to an increase in deaths, but also resulted in a smaller proportion of women in their childbearing years. This along with more women choosing to have fewer children and have them at older ages has led to fewer births in recent years. The larger number of deaths relative to births caused natural decrease (more deaths than births) in every year from 2000 to 2014. While periods of net in-migration outweighed natural decrease during the last decade, the gap between these two numbers shrank during the later years—bringing population decline from 2009 to 2013.



Figure 12. Coos County—Components of Population Change (2000-2014)

# Housing and Households

The total number of housing units in Coos County increased rapidly during the middle years of this last decade (2000 to 2010), but this growth slowed with the onset of the Great Recession in 2007. Over the entire 2000 to 2010 period, the total number of housing units increased by five percent countywide; resulting in approximately 1,300 new housing units (Figure 13). Coos Bay captured the largest share of the growth in total housing units, with Bandon and the area outside UGBs also recording large shares of the countywide housing growth. In terms of relative housing growth, Lakeside grew the most during the 2000s: total housing units increased nearly 27 percent (203 housing units).

The rates of increase in the number of total housing units in the county, UGBs, and area outside UGBs are similar to population growth rates, but often differ because: 1) the numbers of total housing units are smaller than the numbers of persons, or, 2) the UGB has experienced changes in the average number of persons per household or in occupancy rates.

	2000	2010	AAGR (2000-2010)	Share of County 2000	Share of County 2010
Coos County	29,247	30,593	0.5%	100.0%	100.0%
Bandon <sup>1</sup>	1,618	1,953	1.9%	5.5%	6.4%
Coos Bay	7,095	7,542	0.6%	24.3%	24.7%
Coquille	1,923	1,866	-0.3%	6.6%	6.1%
Lakeside	764	967	2.4%	2.6%	3.2%
Myrtle Point	1,136	1,150	0.1%	3.9%	3.8%
North Bend	4,288	4,460	0.4%	14.7%	14.6%
Powers	406	385	-0.5%	1.4%	1.3%
Outside UGBs	12,017	12,270	0.2%	41.1%	40.1%

Figure 13. Coos County and Sub-Areas—Total Housing Units (2000 and 2010)

Sources: U.S. Census Bureau, 2000 and 2010 Censuses

<sup>1</sup> For simplicity each UGB is referred to by its primary city's name.

Occupancy rates tend to fluctuate more than PPH; this is particularly true in smaller UGB areas where fewer housing units allow for larger changes (in relative terms) in occupancy rates. From 2000 to 2010, the occupancy rate in Coos County declined slightly (Figure 14); this was most likely due to reduced demand for housing as individuals experienced the effects of the Great Recession. A slight drop in occupancy rates was mostly uniform across all sub-areas. Only two sub-areas deviated from the countywide trend of declining occupancy rates; Coos Bay and Powers both saw marginal increases in their occupancy rates between 2000 and 2010.

Average household size, or PPH, in Coos County was 2.3 in 2010, with no change from 2000 (Figure 14). Coos County's PPH in 2010 was slightly lower than for Oregon as a whole, which had a PPH of 2.5. PPH varied across the sub-areas, with all of them falling between 2.0 and 2.4 persons per household. In 2010 the highest PPH was in Myrtle Point with 2.4 and the lowest in Bandon at 2.0. In general, areas with an older or aging population will, more often than not, experience a decline in PPH over time.

	Persons	Per Househ	old (PPH)	Occupancy Rate			
			Change			Change	
	2000	2010	2000-2010	2000	2010	2000-2010	
Coos County	2.3	2.3	-2.3%	89.6%	88.7%	-0.9%	
Bandon	2.1	2.0	-4.6%	83.9%	78.3%	-5.6%	
Coos Bay	2.3	2.3	-1.2%	91.6%	92.2%	0.6%	
Coquille	2.4	2.3	-1.9%	91.0%	89.8%	-1.2%	
Lakeside	2.1	2.1	-1.5%	84.9%	83.4%	-1.6%	
Myrtle Point	2.4	2.4	-1.2%	89.2%	91.0%	1.9%	
North Bend	2.4	2.3	-1.2%	92.5%	92.4%	-0.1%	
Powers	2.2	2.2	0.2%	83.0%	83.1%	0.1%	
Outside UGBs	2.4	2.3	-3.1%	88.6%	87.1%	-1.5%	

Figure 14. Coos County and Sub-Areas—Persons per Household (PPH) and Occupancy Rate

Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculated by Population Research Center (PRC)

<sup>1</sup> For simplicity each UGB is referred to by its primary city's name.

# **Assumptions for Future Population Change**

Evaluating past demographic trends provides clues about what the future will look like, and helps determine the most likely scenarios for population change. Past trends also explain the dynamics of population growth specific to local areas. Relating recent and historical population change to events that influence population change serves as a gauge for what might realistically occur in a given area over the long-term.

Assumptions about fertility, mortality, and migration were developed for Coos County's population forecast, as well as the forecasts for larger sub-areas.<sup>3</sup> The assumptions are derived from observations based on life course events, as well as trends unique to Coos County and its larger sub-areas. Population change for smaller sub-areas is determined by the change in the number of total housing units and PPH. Assumptions around housing unit growth as well as occupancy rates are derived from observations of historical building patterns and current plans for future housing development. In addition, assumptions for PPH are based on observed historical patterns of household demographics—for example, the average age of householder.

# Assumptions for the County and Larger Sub-Areas

During the forecast period, as the population in Coos County is expected to continue to age, fertility rates will begin to decline in the near-term and continue on this path throughout the remainder of the forecast period. Total fertility in Coos County is forecast to decrease from 2.1 children per woman in 2015 to 1.9 children per woman by 2065. Similar patterns of declining total fertility are expected within the county's larger sub-areas.

Changes in mortality and life expectancy are more stable compared to fertility and migration. One influential factor affecting mortality and life expectancy is advances in medical technology. The county and larger sub-areas are projected to follow the statewide trend of increasing life expectancy throughout the forecast period—progressing from a life expectancy of 77 years in 2010 to 84 in 2060. However, in spite of increasing life expectancy and the corresponding increase in survival rates, Coos County's aging population will likely result in an overall increase in the number of deaths throughout the forecast period. Larger sub-areas within the county are expected to experience a similar increase in deaths as their population ages.

Migration is the most volatile and challenging demographic component to forecast due to the many factors influencing migration patterns. Economic, social, and environmental factors—such as employment, educational opportunities, housing availability, family ties, cultural affinity, climate change, and natural amenities—occurring both inside and outside the study area, can affect both the direction and the volume of migration. Net migration rates are expected to change in line with historical trends unique to Coos County. Net out-migration of younger persons and net in-migration of older

<sup>&</sup>lt;sup>3</sup> County sub-areas with populations greater than 8,000 in the forecast launch year were forecast using the <u>cohort-</u> <u>component method</u>. County sub-areas with populations less than 8,000 in forecast launch year were forecast using the <u>housing-unit method</u>. See Glossary of Key Terms at the end of this report for a brief description of these methods or refer to the <u>Methods</u> document for a more detailed description of these forecasting techniques.

individuals is expected to persist throughout the forecast period. Countywide average annual net migration is expected to increase from 229 net in-migrants in 2015 to 529 net in-migrants in 2035. Over the last 30 years of the forecast period average annual net migration is expected to be more steady, increasing to 599 net in-migrants by 2065. With natural increase diminishing in its potential to contribute to population growth, net in-migration will become an increasingly important component of population growth.

# **Assumptions for Smaller Sub-Areas**

Rates of population growth for the smaller UGBs are assumed to be determined by corresponding growth in the number of housing units, as well as likely changes in housing occupancy rates and PPH. The change in housing unit growth is much more variable than change in housing occupancy rates or PPH. Occupancy rates are assumed to stay relatively stable over the forecast period, while PPH is expected to decline slightly. Smaller household size is associated with an aging population in Coos County and its sub-areas.

In addition, for sub-areas experiencing recent population growth, we assume a higher growth rate in the near-term, with growth stabilizing over the remainder of the forecast period. If planned housing units were reported in the surveys, then we account for them being constructed over the next 5-15 years. Finally, for county sub-areas where population growth has been flat or declined, and there is no planned housing construction, we hold population growth mostly stable with little to no change.

# **Supporting Information and Specific Assumptions**

Assumptions used for developing population forecasts are partially derived from surveys and other information provided by local planners and agencies. See <u>Appendix A</u> for a summary of all submitted surveys and other information that was directly considered in developing the sub-area forecasts. Also, see <u>Appendix B</u> for specific assumptions used in each sub-area forecast.

# **Forecast Trends**

Under the most-likely population growth scenario in Coos County, countywide and UGB populations are expected to increase over the forecast period, but the area outside UGBs is expected to see a decrease in population. The countywide population growth rate is forecast to peak in 2025, decline through 2045, and then rebound through 2065. Forecasting periods of population decline is largely driven by an aging population, which will likely contribute to an increase in deaths, as well as a decrease in births. The aging population is in turn expected to contribute to increasing natural decrease over the forecast period, while net in-migration is expected to remain positive and relatively steady throughout the forecast period. Steady net in-migration is expected to not fully offset the declining natural increase during the middle years (i.e., 2035-2045) of the forecast period. The combination of these factors will likely result in a cyclical pattern of population growth and decline as time progresses through the forecast period.

Coos County's total population is forecast to grow by a little more than 2,500 persons (four percent) from 2015 to 2065, which translates into a total countywide population of 65,624 in 2065 (Figure 15). The population is forecast to grow at approximately 0.2 percent per year in the near-term (2015-2025). This anticipated population growth in the near-term is based on the assumption Coos County's economy will continue to strengthen in the next five years and continue to attract retirement migrants. The single largest component of growth in this initial period is net in-migration. Nearly 3,700 net in-migrants are forecast for the 2015 to 2025 period.





Coos County's two largest UGBs, Coos Bay and North Bend, are expected to record a combined population growth of nearly 1,800 from 2015 to 2035 and nearly 2,000 from 2035 to 2065. The Coos Bay

UGB is forecast to increase by more than 1,100 persons from 2015 to 2035, growing from a total population of 16,207 in 2015 to 17,362 in 2035. The North Bend UGB is expected to increase by about the same rate, growing from 9,752 persons in 2015 to a population of 10,390 in 2035. Growth is forecast to occur more slowly for both Coos Bay and North Bend during the second part of the forecast period, with total population increasing to 19,000 and 10,749 respectively by 2065. Both Coos Bay and North Bend UGBs are expected to grow as a share of total county population.

Population outside UGBs is expected to decline by more than 6,300 people throughout the entire forecast period. Consequently, the population of the area outside UGBs is forecast to decline as a share of total countywide population over the forecast period, composing 39 percent of the countywide population in 2015 and dropping to roughly 28 percent in 2065.

				AAGR	AAGR	Share of	Share of	Share of
	2015	2035	2065	(2015-2035)	(2035-2065)	County 2015	County 2035	County 2065
Coos County	63,122	64,331	65,624	0.1%	0.1%	100.0%	100.0%	100.0%
Coos Bay <sup>1</sup>	16,207	17,362	19,000	0.3%	0.3%	25.7%	27.0%	29.0%
North Bend	9,752	10,390	10,749	0.3%	0.1%	15.4%	16.2%	16.4%
Smaller UGBs <sup>2</sup>	12,452	14,533	17,528	0.8%	0.6%	19.7%	22.6%	26.7%
Outside UGBs	24,711	22,047	18,348	-0.6%	-0.6%	39.1%	34.3%	28.0%

#### Figure 16. Coos County and Larger Sub-Areas—Forecast Population and AAGR

Source: Forecast by Population Research Center (PRC)

<sup>1</sup> For simplicity each UGB is referred to by its primary city's name.

<sup>2</sup> Smaller UGBs are those with populations less than 8,000 in forecast launch year.

Coos Bay, Coos County's largest UGB, is expected to capture an increasing share of total countywide population growth over the forecast period (Figure 17), while North Bend is forecast to capture a decreasing share of countywide population growth. The area outside UGBs is expected to record population decline throughout the entire forecast period. The population increase in the county's UGBs is expected to offset the decrease in population outside UGBs, leading to overall population increase for the county as a whole.

#### Figure 17. Coos County and Larger Sub-Areas—Share of Countywide Population Growth

	2015-2035	2035-2065
Coos County	100.0%	100.0%
Coos Bay <sup>1</sup>	95.6%	126.6%
North Bend	52.7%	27.8%
Smaller UGBs <sup>2</sup>	172.1%	231.7%
Outside UGBs	-220.4%	-286.1%

Source: Forecast by Population Research Center (PRC)

<sup>1</sup> For simplicity each UGB is referred to by its primary city's name.

<sup>2</sup> Smaller UGBs are those with populations less than 8,000 in forecast launch year.

The remaining smaller UGBs are expected to grow by a combined number of a little less than 2,100 persons from 2015 to 2035, with a combined average annual growth rate of just under one percent (Figure 16). This growth rate is driven by expected rapid growth in Bandon and Lakeside (Figure 18).

Coquille, Myrtle Point, and Powers are all forecast to have population increase over the first 20 years of the forecast period. Similar to the larger UGBs and the county as a whole, population growth rates for smaller UGBs are forecast to decline for the second half of the forecast period. Powers is expected to have slight population decline while the remaining smaller UGBs are expected collectively to add a little less than 3,000 people from 2035 to 2065.

				AAGR	AAGR	Share of	Share of	Share of
	2015	2035	2065	(2015-2035)	(2035-2065)	County 2015	County 2035	County 2065
Coos County	63,122	64,331	65,624	0.1%	0.1%	100.0%	100.0%	100.0%
Bandon <sup>1</sup>	3,422	4,252	5,640	1.1%	0.9%	5.4%	6.6%	8.6%
Coquille	3,965	4,120	4,207	0.2%	0.1%	6.3%	6.4%	6.4%
Lakeside	1,704	2,465	3,796	1.9%	1.4%	2.7%	3.8%	5.8%
Myrtle Point	2,631	2,928	3,125	0.5%	0.2%	4.2%	4.6%	4.8%
Powers	730	767	761	0.3%	0.0%	1.2%	1.2%	1.2%
Larger UGBs <sup>2</sup>	25,959	27,752	29,748	0.3%	0.2%	41.1%	43.1%	45.3%
Outside UGBs	24,711	22,047	18,348	-0.6%	-0.6%	39.1%	34.3%	28.0%

#### Figure 18. Coos County and Smaller Sub-Areas—Forecast Population and AAGR

Source: Forecast by Population Research Center (PRC)

<sup>1</sup> For simplicity each UGB is referred to by its primary city's name.

<sup>2</sup> Larger UGBs are those with populations greater than 8,000 in forecast launch year.

Coos County's smaller sub-areas are expected to compose a substantial share of countywide population growth over the forecast period (Figure 19), with Bandon and Lakeside capturing the largest share of countywide population growth.

	2015-2035	2035-2065
Coos County	100.0%	100.0%
Bandon <sup>1</sup>	68.7%	107.3%
Coquille	12.8%	6.7%
Lakeside	63.0%	102.9%
Myrtle Point	24.6%	15.2%
Powers	3.1%	-0.5%
Larger UGBs <sup>2</sup>	148.3%	154.4%
Outside UGBs	-220.4%	-286.1%

Figure 19. Coos County and Smaller Sub-Areas—Share of Countywide Population Growth

Source: Forecast by Population Research Center (PRC)

<sup>1</sup> For simplicity each UGB is referred to by its primary city's name.

<sup>2</sup> Larger UGBs are those with populations greater than 8,000 in forecast launch year.

# **Forecast Trends in Components of Population Change**

As previously discussed, a key factor in both declining births and increasing deaths is Coos County's aging population. From 2015 to 2035 the proportion of county population 65 or older is forecast to grow from a little under 24 percent to about 33 percent. By 2065 about 35 percent of the total population is expected to be 65 or older (Figure 20). For a more detailed look at the age structure of Coos County's population see the final forecast table published to the forecast program website (http://www.pdx.edu/prc/opfp).



#### Figure 20. Coos County—Age Structure of the Population (2015, 2035, and 2065)

As the countywide population ages—contributing to a slow-growing population of women in their years of peak fertility—and more women choose to have fewer children and have them at an older age, average annual births are expected to decrease slightly over the forecast period; this combined with the rising number of deaths, is expected to cause natural decrease to persist (Figure 21). The total number of deaths countywide are expected to increase more rapidly in the near-term, followed by slower growth during the later years of the forecast period. This pattern of initial growth in the numbers of deaths is explained by the relative size and aging patterns of the Baby Boom and Baby Boom Echo generations. For example, in Coos County, deaths are forecast to begin to increase significantly during the 2025-2035 period as Baby Boomers age out, and peak again in the 2040-2050 period as children of Baby Boomers (i.e. the Baby Boom Echo) succumb to the effects of aging.

As the increase in the numbers of deaths outpaces births, population growth in Coos County will become increasingly reliant on net in-migration; and in fact positive net in-migration is expected to persist throughout the forecast period. The majority of these net in-migrants are expected to be middle-aged and older individuals.

In summary, fluctuating natural decrease and net in-migration is expected to result in population growth reaching its peak in 2025, declining through 2045, and then reaching a peak again in 2065 (Figure 21). An aging population is not only expected to lead to an increase in deaths, but a smaller proportion of women in their childbearing years will likely result in a long-term decline in births. Net in-migration is expected to remain positive throughout the forecast period, but will likely not fully offset the declining natural increase during the middle years (i.e., 2035-2045) of the forecast period. The combination of

these factors is expected to result in a cyclical pattern of population growth and decline as time progresses through the forecast period.



Figure 21. Coos County—Components of Population Change, 2015-2065

# **Glossary of Key Terms**

**Cohort-Component Method**: A method used to forecast future populations based on changes in births, deaths, and migration over time.

**Coordinated population forecast**: A population forecast prepared for the county along with population forecasts for its city urban growth boundary (UGB) areas and non-UGB area.

**Housing unit**: A house, apartment, mobile home or trailer, group of rooms, or single room that is occupied or is intended for occupancy.

**Housing-Unit Method**: A method used to forecast future populations based on changes in housing unit counts, vacancy rates, the average numbers of persons per household (PPH), and group quarter population counts.

**Occupancy rate**: The proportion of total housing units that are occupied by an individual or group of persons.

**Persons per household (PPH)**: The average household size (i.e. the average number of persons per occupied housing unit for a particular geographic area).

**Replacement Level Fertility**: The average number of children each woman needs to bear in order to replace the population (to replace each male and female) under current mortality conditions in the U.S. This is commonly estimated to be 2.1 children per woman.

# **Appendix A: Supporting Information**

Supporting information is based on planning documents and reports, and from submittals to PRC from city officials and staff, and other stakeholders. The information pertains to characteristics of each city area, and to changes thought to occur in the future. The cities of Bandon, Coquille, Lakeside, and North Bend, as well as Coos County did not submit survey responses.

Coos Bay—Coos	County					
Observations about Population Composition (e.g. about children, the elderly, racial ethnic groups)	Observations about Housing (including vacancy rates)	Planned Housing Development/Es t. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population and Housing Growth; Other notes
	Less than 2% vacancy rate based on local realtor data	Ocean Grove		LNG Jordan Cove Bimart Indian Tribe Gaming Facility Village at Hollering Place	WWTP II – 2017 Cape Arago Hwyy improvements Parks Master Plan – City Docks.CCAT Transit station	Promos: Hinders:

Coos Bay—Coos	County
Highlights or	
summary of	
influences on or	
anticipation of	
nonulation and	
bousing growth	
from planning	
documents and	
studios	
studies	
Other information	Ocean Grove LLC is developing a 69-acre site for 679 new homes. Most of these will be duplex and triplex structures targeted at
(e.g. planning	workforce housing. Ocean Grove is discussing partnering with the Jordan Cove LNG terminal for workforce housing—as Jordan
documents, email	Cove will need to find housing for more than 2,000 workers during construction.
correspondence,	
housing	
development	
survey)	

Myrtle Point—C	oos County					
Observations about Population Composition (e.g. about children, the elderly, racial ethnic groups)	Observations about Housing (including vacancy rates)	Planned Housing Development/Es t. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population and Housing Growth; Other notes
The number of children per grade at the elementary school has increased by 15% to 20% over the past 10 years. Our community is becoming more of a retirement community than it has been in the past. Retirees are moving in from other areas, particularly from California.	The housing market is improving somewhat. Remodels are increasing and it appears that occupancy is increasing. We don't have any specific numbers at this time.	None planned.	None planned.	Not aware of any.	Wastewater Treatment Plant is under construction. This is to replace existing to meet environmental regulations.	Promos: Hinders: Lack of developable land; Water & Sewer SDC's for existing undeveloped parcels; limited housing demand.

Myrtle Point-C	oos County
Highlights or	Although there are some sectors of the population that appear to be growing the overall population may still be relatively steady.
summary of	Young adults appear to mostly move away following graduation from High School.
influences on or	
anticipation of	
population and	
housing growth	
from planning	
documents and	
studies	
Other information	
(e.g. planning	
documents, email	
correspondence,	
housing	
development	
survey)	

Powers—Coos C	ounty					
Observations about Population Composition (e.g. about children, the elderly, racial ethnic groups)	Observations about Housing (including vacancy rates)	Planned Housing Development/Es t. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population and Housing Growth; Other notes Promos: Hinders:
Highlights or summary of influences on or anticipation of population and housing growth from planning documents and studies						

Powers—Coos C	ounty
Other information	According an email received on 12/05/2014, a wastewater infrastructure project is underway, but it is not expected to impact
(e.g. planning	housing or employment opportunities within the community in any way.
documents, email	
correspondence,	
housing	
development	
survey)	

# **Appendix B: Specific Assumptions**

### Bandon

The average annual housing unit growth rate is assumed to remain a little above one percent—the average annual rate observed during the 2000s—throughout the entire forecast period. The occupancy rate is assumed to slightly vary, but will average 80 percent throughout the forecast period. Household size is assumed to decline slightly over the forecast period, beginning with two persons per household (PPH) and ending with just fewer than two PPH. Group quarters population is assumed to increase from 120 to more than 150 over the forecast period.

## Coos Bay

Total fertility rates (TFR) are assumed to decline slightly over the forecast period—this is consistent with recent historical trends. Survival rates for 2060 are assumed to be a little above those for the county as a whole. Coos Bay has historically had slightly higher survival rates than observed countywide; this corresponds with a slightly longer life expectancy. Age-specific net migration rates are assumed to generally follow historical patterns for Coos Bay, but at slightly higher rates over the forecast period.

## Coquille

The annual housing unit growth rate is assumed to slightly decline over the forecast period, even so the average annual growth rate will be positive throughout the entire forecast period—a divergence from the negative average annual growth rate observed for the 2000s. The occupancy rate is assumed to steadily decline over the forecast period, with an average of about 88 percent. Average household size is assumed to slightly decrease over the forecast period, averaging about 2.2 persons per household. Group quarters population is assumed to remain at the number observed in 2010.

### Lakeside

Average annual housing unit growth is assumed to remain at two percent over the forecast period, substantially lower than the rate observed in the 2000s. The occupancy rate is assumed to slightly decline over the 50-year forecast period, with an average of about 81 percent. Average household size is assumed to steadily increase over the forecast period, with an average of about 2.4 persons per household. Group quarters population is assumed to steadily increase over the forecast period, with an average of about 81 percent period, with an average of about 2.4 persons per household. Group quarters population is assumed to steadily increase over the forecast period, with an average of about 81 percent period, with an average of about 81 percent.

# Myrtle Point

The annual housing unit growth rate is assumed to slightly decline over the forecast period, even so the average annual housing unit growth rate is assumed to be slightly above a historical average annual rate. The occupancy rate is assumed to slightly decline and will average about 90 percent over the 50-year forecast period. Average household size is assumed to slightly decrease over the forecast period and will average about 2.4 persons per household. Group quarters population is assumed to stay steady at about 40 persons over the forecast period.

### North Bend

Total fertility rates are assumed to follow a historical trend (observed for the 2000 to 2010 period), gradually declining over the forecast period. Survival rates for 2060 are assumed to be a little below

those forecast for the county as a whole. North Bend has historically had slightly lower survival rates than observed countywide; this corresponds with a slightly shorter life expectancy. Age-specific net migration rates are assumed to generally follow historical patterns for North Bend, but at slightly higher rates over the forecast period.

#### **Powers**

The annual housing unit growth rate is assumed to decline over the forecast period, with an average annual rate only slightly above zero. The occupancy rate is assumed to slightly decline over the forecast period and will average about 82 percent. Average household size is assumed to slightly decrease over the forecast period and will average about 2.2 persons per household. Group quarters population is assumed to remain at zero.

#### **Outside UGBs**

Total fertility rates are assumed to follow the countywide historical trend (observed for the 2000 to 2010 period), gradually declining over the forecast period. Survival rates for 2060 are assumed to be a little above those forecast for the county as a whole. The area outside UGBs has historically had slightly lower survival rates than observed countywide; this corresponds with a slightly longer life expectancy. Age-specific net migration rates are assumed to generally follow countywide historical patterns, but at slightly higher rates over the forecast period.

# Appendix C: Detailed Population Forecast Results

Age Group	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
00-04	3,133	2,964	2,924	2,875	2,876	2,888	2,879	2,837	2,792	2,757	2,765
05-09	3,284	3,078	3,114	2,999	2,967	2,981	2,995	2,977	2,924	2,875	2,880
10-14	3,273	3,265	3,280	3,242	3,143	3,124	3,141	3,148	3,119	3,062	3,055
15-19	3,347	3,253	3,474	3,408	3,391	3,302	3,285	3,294	3,291	3,259	3,247
20-24	3,199	2,765	2,883	3,012	2,978	2,978	2,903	2,879	2,879	2,874	2,889
25-29	2,964	2,718	2,524	2,569	2,700	2,683	2,687	2,612	2,584	2,583	2,617
30-34	3,582	3,517	3,105	2,787	2,854	3,014	2,998	2,994	2,903	2,870	2,911
35-39	3,290	4,054	3,467	3,331	3,009	3,095	3,272	3,247	3,234	3,134	3,145
40-44	3,038	3,638	3,920	3,595	3,479	3,158	3,254	3,432	3,397	3,383	3,328
45-49	3,405	3,415	3,500	4,087	3,774	3,669	3,335	3,428	3,607	3,569	3,608
50-54	4,488	3,809	3,287	3,677	4,325	4,013	3,909	3,546	3,638	3,828	3,846
55-59	5,399	4,530	3,696	3,437	3,878	4,589	4,263	4,144	3,748	3,845	4,111
60-64	5,684	5,525	4,962	3,952	3,700	4,192	4,965	4,600	4,460	4,031	4,196
65-69	5,056	5,600	5,858	5,155	4,145	3,911	4,452	5,278	4,892	4,758	4,378
70-74	4,024	4,795	5,727	5,877	5,224	4,233	4,012	4,572	5,424	5,041	4,995
75-79	2,833	3,418	4,419	5,209	5,279	4,889	3,871	3,810	4,368	5,222	4,964
80-84	1,937	2,177	2,848	3,629	4,348	4,469	4,173	3,318	3,286	3,797	4,643
85+	1,187	1,111	1,300	1,679	2,262	2,961	3,490	3,732	3,551	3,571	4,046
Total	63,122	63,632	64,289	64,521	64,331	64,148	63,884	63,848	64,098	64,459	65,624

Figure 22. Coos County—Population by Five-Year Age Group

	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
Bandon UGB	3,422	3,575	3,907	4,100	4,252	4,475	4,715	4,971	5,181	5,371	5,640
Coos Bay UGB	16,207	16,524	16,804	17,083	17,362	17,641	17,921	18,200	18,479	18,759	19,000
Coquille UGB	3,965	4,047	4,072	4,096	4,120	4,144	4,168	4,192	4,217	4,241	4,207
Lakeside UGB	1,704	1,837	2,046	2,255	2,465	2,674	2,883	3,092	3,301	3,511	3,796
Myrtle Point UGB	2,631	2,731	2,810	2,876	2,928	2,978	3,005	3,018	3,039	3,059	3,125
North Bend UGB	9,752	9,942	10,149	10,298	10,390	10,450	10,475	10,483	10,517	10,534	10,749
Powers UGB	730	745	756	763	767	768	764	761	759	757	761
Outside UGBs	24,711	24,230	23,745	23,050	22,047	21,019	19,953	19,131	18,605	18,229	18,348

Figure 23. Coos County's Sub-Areas—Total Population

Photo Credit: The coastline at Cape Arago. (Photo No. cooD0064) Gary Halvorson, Oregon State Archives;

http://arcweb.sos.state.or.us/pages/records/local/county/scenic/coos/1.html