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Coordinated Population Forecast for Coos County, its Urban Growth Boundaries (UGB), and Area Outside UGBs 2018-2068

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Coordinated Population Forecast

2018

Through

2068

Coos County

Urban Growth Boundaries (UGB) & Area Outside UGBs

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Photo Credit: Boats in the harbor at Bandon. Gary Halvorson, Oregon State Archives

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Prepared by

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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 (http://www.pdx.edu/prc/opfp).

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 sub-areas within each county for each five-year interval of the forecast period (2018-2068).

Table of Contents

Table of Figures

Modified Methodology

The Population Research Center, in consultation with DLCD, has identified cost savings associated with a modified methodology for the latter half of the 50-year forecast period (years 26 to 50). Based on feedback we have received, a 25-year forecast fulfills most requirements for local planning purposes and, in an effort to improve the cost effectiveness of the program; we will place more focus on years 1 through 25. Additionally, the cost savings from this move will allow DLCD to utilize additional resources for local government grants. To clarify, we use forecast methods to produce sub-area and county populations for the first 25 years and a modified projection method for the remaining 25 years. The description of our forecast methodology can be accessed through the forecast program website (www.pdx.edu/prc/opfp), while the summary of our modified projection method is below.

For years 26-50, PRC projects the county population using the annual growth rate from the 24th-25th year. For example, if we forecast a county to grow .4% between the 24th and 25th year of the forecast, we would project the county population thereafter using a .4% AAGR. To allocate the projected county population to its sub-areas, we extrapolate the change in sub-area shares of county population observed in years 1-25 and apply them to the projected county population.

Comparison to Cycle 1 (2015-17)

To keep up to date with local trends and shifting demands, OPFP regularly updates coordinated population forecasts for Oregon's areas. Beyond the modification to our methodology and additional forecast region (from three regions to four), there are differences between the 2018 updated forecast for Coos County and the 2015 version. Overall, the 2018 forecast is lower for Coos County for the 25 year period (2018-2043). While our expectations of births and deaths have not changed from last round, we expect slower net in-migration for Coos County. These county-level differences translate to the sub-areas, though our expectations of future sub-area shares of county population are generally consistent with last round. The full breakdown of differences by county and sub-area is stored here: www.pdx.edu/prc/cycle-2-region-1-documents.

Executive Summary

Historical

Different parts of the county experience different growth patterns. Local trends within UGBs and the area outside them collectively influence population growth rates for the county as a whole.

Coos County's total population had minimal growth in the 2000s (**Figure 1**); however, some of its sub-areas experienced faster population growth during this period. Lakeside, for example, posted the highest average annual growth rates at 2.2 percent during the 2000 to 2010 period.

The population growth that did occur in Coos County in the 2000s was largely the result of net in-migration. 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 having children at older ages has led to births stagnating in recent years. A larger number of deaths relative to births caused a natural decrease (more deaths than births) in every year from 2001 to 2016. While net in-migration outweighed natural decrease slightly during the 2000-10 period, in recent years (2014-16) net in-migration has increased, leading to meager population growth (**Figure 12**).

Forecast

Total population in Coos County as a whole, as well as within its sub-areas, will likely decrease at a slower pace in the near-term (2018 to 2043) compared to the long-term (**Figure 1**). Population decline is largely driven by an aging population and natural decrease outpacing net in-migration. Coos County's total population is forecast to decline by roughly 725 people over the next 25 years (2018-2043) and by more than 3,300 over the entire 50-year period (2018-2068).

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

	Historical			Forecast					
	2000	2010	AAGR (2000-2010)	2018	2043	2068	AAGR (2010-2018)	AAGR (2018-2043)	AAGR (2043-2068)
Coos County	**62,779**	**63,043**	***0.0%***	**63,471**	**62,747**	**60,157**	***0.1%***	***0.0%***	***-0.1%***
Bandon	3,104	3,333	*0.7%*	3,422	3,934	4,319	*0.3%*	*0.6%*	*0.4%*
Coos Bay	15,376	15,967	*0.4%*	16,824	18,393	19,300	*0.6%*	*0.4%*	*0.2%*
Coquille	4,358	3,963	*-0.9%*	3,950	4,031	4,061	*0.0%*	*0.1%*	*0.0%*
Lakeside	1,371	1,699	*2.2%*	1,696	2,376	2,984	*0.0%*	*1.4%*	*0.9%*
Myrtle Point	2,485	2,553	*0.3%*	2,575	2,734	2,836	*0.1%*	*0.2%*	*0.1%*
North Bend	9,537	9,717	*0.2%*	9,919	10,108	9,989	*0.2%*	*0.1%*	*0.0%*
Powers	743	707	*-0.5%*	707	741	756	*0.0%*	*0.2%*	*0.1%*
Outside UGBs	25,805	25,104	*-0.3%*	24,378	20,429	15,912	*-0.4%*	*-0.7%*	*-1.0%*

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

Note: For simplicity each UGB is referred to by its primary city's name.

14-Year Population Forecast

In accordance with House Bill 2254, which streamlined the UGB process based on long-term housing and employment needs, **Figure 2** provides a 14-year population forecast (2018-2032) for the County and its sub-areas. Populations at the 14th year of the forecast were interpolated using the average annual growth rate between the 2030-2035 period. The population interpolation template is stored here: www.pdx.edu/prc/cycle-2-region-1-documents.

Figure 2. Coos County and Sub-Areas—14-Year Population Forecast

	2018	2032	14-Year Change	AAGR (2018-2032)
Coos County	**63,471**	**63,734**	**262**	***0.0%***
Bandon	3,422	3,766	345	*0.7%*
Coos Bay	16,824	17,972	1,148	*0.5%*
Coquille	3,950	3,973	22	*0.0%*
Lakeside	1,696	2,059	363	*1.4%*
Myrtle Point	2,575	2,649	73	*0.2%*
North Bend	9,919	10,150	232	*0.2%*
Powers	707	729	21	*0.2%*
Outside UGBs	24,378	22,437	-1,942	*-0.6%*

Note: For simplicity each UGB is referred to by its primary city's name.

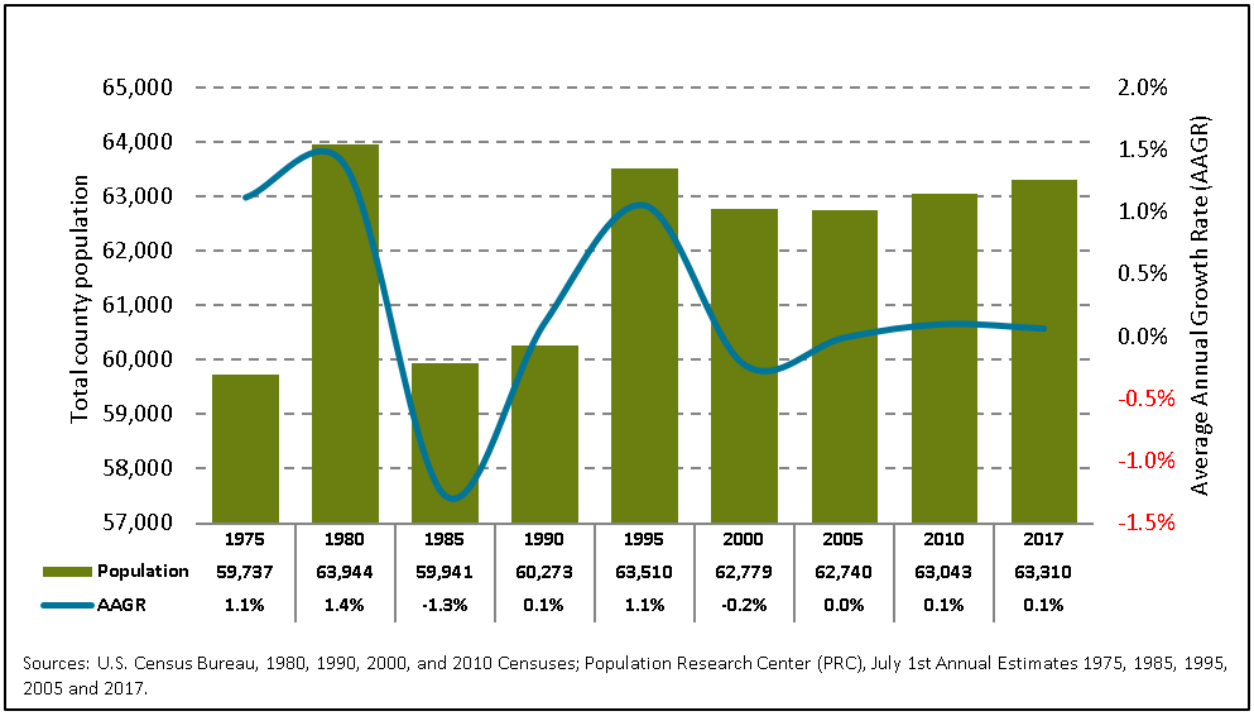
Historical Trends

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

Population

Coos County's total population grew from roughly 60,000 in 1975 to about 63,000 in 2017 (**Figure 3**). During this 40-year period, the county experienced 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 negative population growth rates. During the early 1990s population growth rates again increased but challenging economic conditions late in the decade again yielded declines. Following the turn of the century, Coos County experienced negligible population growth between 2000 and 2017—averaging less than .1 percent per year.

Figure 3. Coos County—Total Population by Five-year Intervals (1975-2017)



Sources: U.S. Census Bureau, 1980, 1990, 2000, and 2010 Censuses; Population Research Center (PRC), July 1st Annual Estimates 1975, 1985, 1995, 2005 and 2017.

During the 2000s, Coos County's average annual population growth rate stood at a less than one-tenth of 1 percent (**Figure 4**). Lakeside recorded an average annual growth rate of 2.2 percent, while population in Bandon and Coos Bay also increased at rates well above that of the county as a whole. Myrtle Point and North Bend experienced slow growth in their populations, while the area outside the

UGBs experienced moderate population decline. Coquille and Powers both saw relatively larger declines in their total population.

Figure 4. Coos County and Sub-areas—Total Population and Average Annual Growth Rate (AAGR) (2000 and 2010)[1]

	2000	2010	AAGR (2000-2010)	Share of County 2000	Share of County 2010	Change (2000-2010)
Coos County	*62,779*	*63,043*	*0.0%*	*100.0%*	*100.0%*	*0.0%*
Bandon	*3,104*	*3,333*	0.7%	4.9%	5.3%	0.3%
Coos Bay	*15,376*	*15,967*	0.4%	24.5%	25.3%	0.8%
Coquille	*4,358*	*3,963*	-0.9%	6.9%	6.3%	-0.7%
Lakeside	*1,371*	*1,699*	2.2%	2.2%	2.7%	0.5%
Myrtle Point	*2,485*	*2,553*	0.3%	4.0%	4.0%	0.1%
North Bend	*9,537*	*9,717*	0.2%	15.2%	15.4%	0.2%
Powers	*743*	*707*	-0.5%	1.2%	1.1%	-0.1%
Outside UGBs	*25,805*	*25,104*	-0.3%	41.1%	39.8%	-1.3%

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

Note: For simplicity each UGB is referred to by its primary city's name.

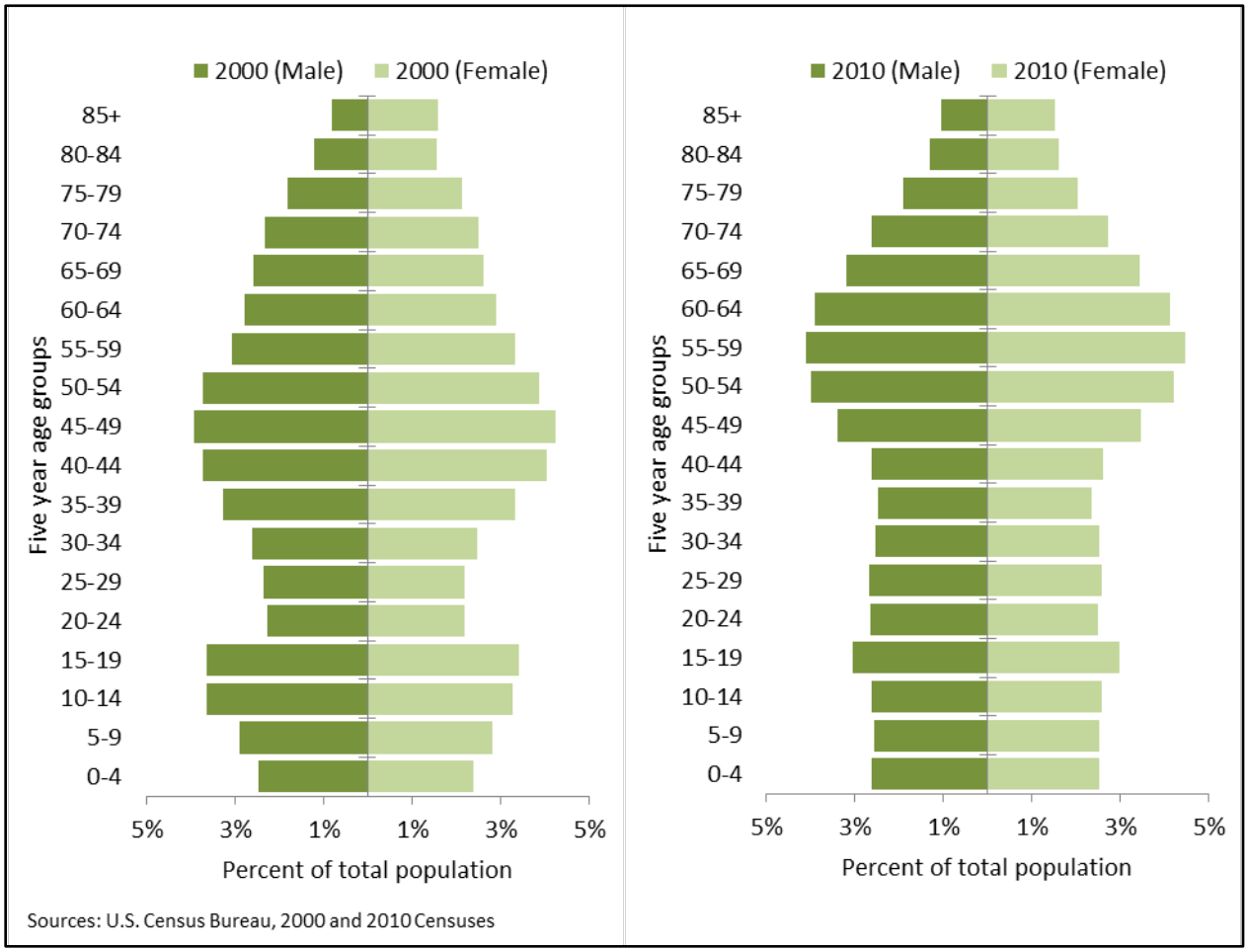
Age Structure of the Population

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 slowdown or decline in births. The shift in the age structure from 2000 to 2010 illustrates this phenomenon (**Figure 5**). Further underscoring the countywide trend in aging—the median age went from about 43.1 in 2000 to 47.3 in 2010[2].

[1] When considering growth rates and population growth overall, it should be noted that a slowing of growth rates does not necessarily correspond to a slowing of population growth in absolute numbers. For example, if a UGB with a population of 100 grows by another 100 people, it has doubled in population. If it then grows by another 100 people during the next year, its relative growth is half of what it was before even though absolute growth stays the same.

[2] Median age is sourced from the U.S. Census Bureau's 2000 and 2010 Censuses.

Figure 5. 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 modestly from 2000 to 2010 (**Figure 6**), while the White; not 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 tend to be higher than among White; not Hispanic women. However, it is important to note more recent trends show these rates are quickly decreasing. Second, Hispanic and minority households tend to be larger relative to White; not Hispanic households.

Figure 6. Coos County—Hispanic or Latino and Race (2000 and 2010)

Hispanic or Latino and Race	2000		2010		Absolute Change	Relative 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%

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

Births

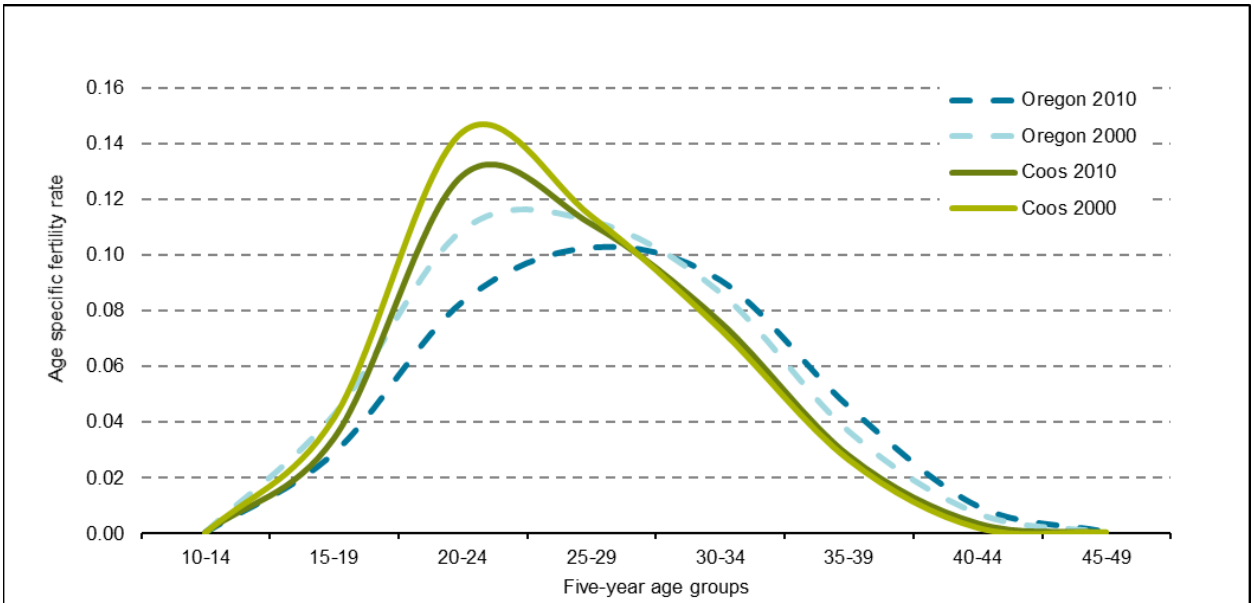
Historic fertility rates for Coos County mirror statewide trends in Oregon as a whole (**Figure 7**). Total fertility rates were lower in Coos County in 2010 compared to 2000, similar to the state, because of delayed childbearing. At the same time, fertility for women over 30 was stable in both Coos County and Oregon (**Figure 8**). Total fertility in both the county and the state remain below replacement fertility (2.1), indicating that future cohorts of women in their birth-giving years will shrink overtime without net in-migration.

Figure 7. Coos County and Oregon—Total Fertility Rates (2000 and 2010)

	2000	2010
Coos County	2.01	1.91
Oregon	1.98	1.81

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

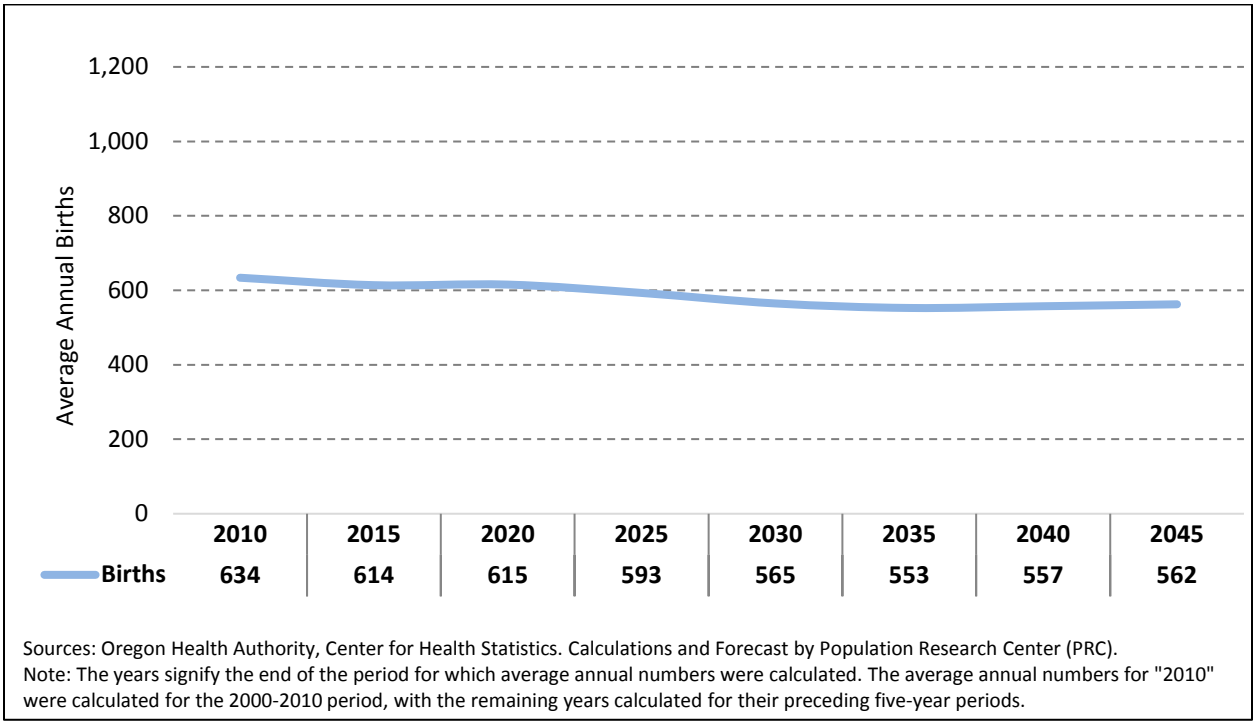
Figure 8. Coos County—Age Specific Fertility Rate (2000 and 2010)



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

Figure 9 shows the number of historic and forecasted births for the county. The number of annual births from 2000-10 to 2010-15 remained relatively unchanged. Due to a shrinking share of women in their birth giving years, births are expected to decline slightly throughout the forecast period.

Figure 9. Coos County—Average Annual Births (2010-2045)

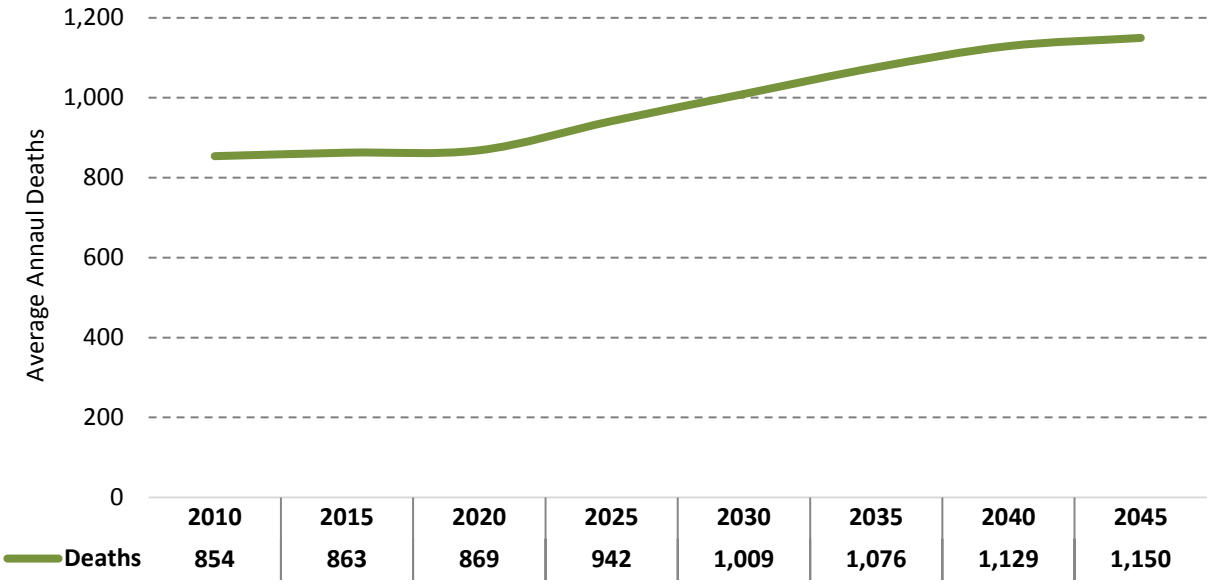


Sources: Oregon Health Authority, Center for Health Statistics. Calculations and Forecast by Population Research Center (PRC).
Note: The years signify the end of the period for which average annual numbers were calculated. The average annual numbers for "2010" were calculated for the 2000-2010 period, with the remaining years calculated for their preceding five-year periods.

Deaths

The population in the county, as a whole, is aging and contrary to the statewide trend, people of all ages are not necessarily living longer[3]. 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, relative to birth and migration rates, of population change. Total annual deaths increased slightly from 2000-10 and 2010-15 and are expected to increase steadily overtime (**Figure 10**).

Figure 10. Coos County—Average Annual Deaths (2010-2045)



Sources: Oregon Health Authority, Center for Health Statistics. Calculations and Forecast by Population Research Center (PRC).
Note: The years signify the end of the period for which average annual numbers were calculated. The average annual numbers for "2010" were calculated for the 2000-2010 period, with the remaining years calculated for their preceding five-year periods.

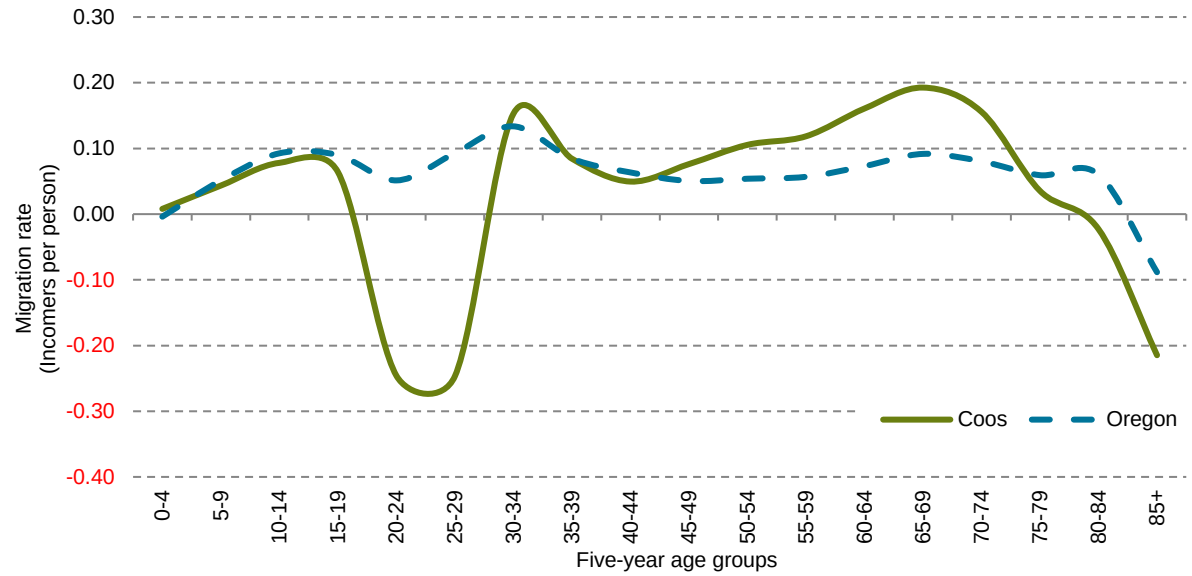
Migration

The propensity to migrate is strongly linked to age and stage of life. 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 for Oregon. The migration rate is shown as the number of net migrants per person by age group.

Coos County's migration rates reflect the patterns of many other Oregon counties. Young adults (20-29) leave the county seeking higher education and employment opportunities, but return in their 30's and 40's with their children. Retirees made up a large proportion of net in-migrants in the 00's, but left the county shortly thereafter to areas with medical facilities and end-of-life care.

[3] Researchers have found evidence for a widening rural-urban gap in life expectancy. This gap is particularly apparent between race and income groups and 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 Preventative Medicine 46, no. 2 (2014): e19-e29.*

Figure 11. Coos County and Oregon—Age Specific Migration Rates (2000-2010)

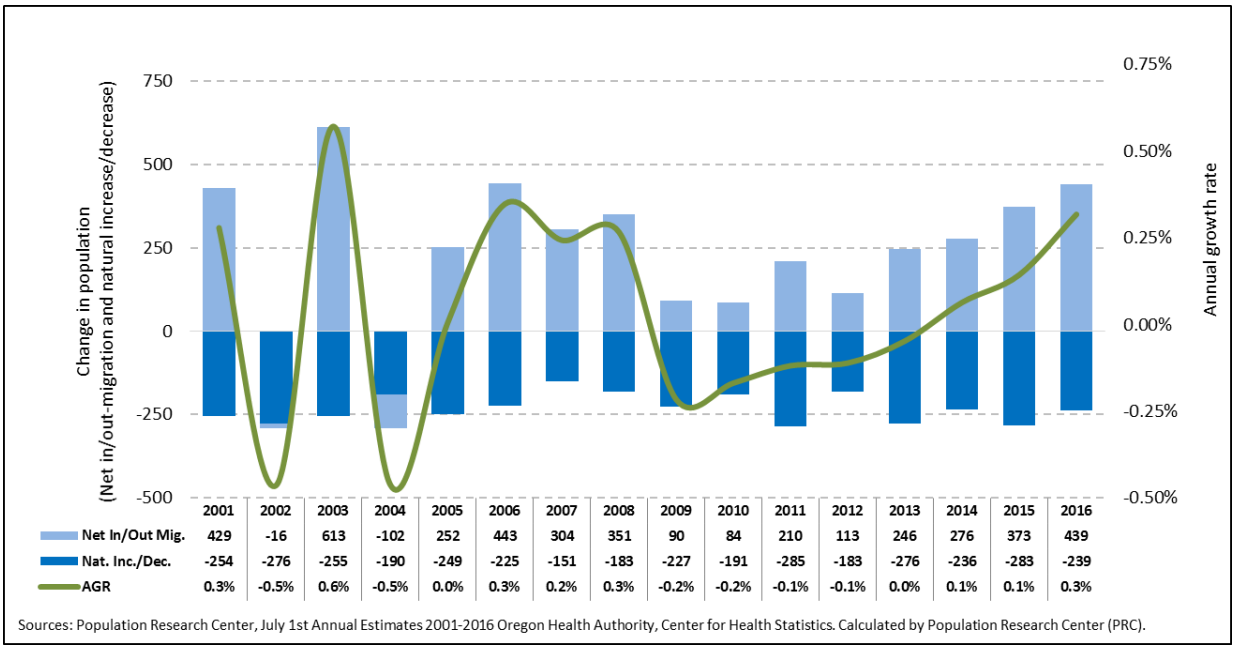


Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculated by Population Research Center (PRC).

Historical Trends in Components of Population Change

In summary, Coos County's positive population growth during the 2000s was the result of sporadic net in-migration (**Figure 12**). The larger number of deaths relative to births led to a consistent natural decrease in every year from 2001 to 2016. While net in-migration fluctuated dramatically, especially during the early years of the last decade, the number of net in-migrants recently has been steadily increasing since 2012. Net in-migration has accounted for all of the population growth in the county and has led to a meager, but stable, growth in recent years.

Figure 12. Coos County—Components of Population Change (2001-2016)



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Net In/Out Mig.	429	-16	613	-102	252	443	304	351	90	84	210	113	246	276	373	439
Nat. Inc./Dec.	-254	-276	-255	-190	-249	-225	-151	-183	-227	-191	-285	-183	-276	-236	-283	-239
AGR	0.3%	-0.5%	0.6%	-0.5%	0.0%	0.3%	0.2%	0.3%	-0.2%	-0.2%	-0.1%	-0.1%	0.0%	0.1%	0.1%	0.3%

Sources: Population Research Center, July 1st Annual Estimates 2001-2016 Oregon Health Authority, Center for Health Statistics. Calculated by Population Research Center (PRC).

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 2008. Over the entire 2000 to 2010 period, the total number of housing units increased by 5 percent countywide; this was more than 1,300 new housing units (**Figure 13**). Nearly a third of the new housing units (447) were built in Coos Bay accounting for a 6 percent increase to the total housing stock within the UGB. Bandon and Lakeside saw the largest increase in housing units of nearly 20 percent and 27 percent, respectively. Powers and Coquille UGBs both experienced declines in their housing unit inventory of 5 percent and 4 percent, respectively.

Housing growth rates may differ from population growth rates because (1) the numbers of total housing units are smaller than the numbers of people; (2) the UGB has experienced changes in the average number of persons per household; or (3) occupancy rates have changed (typically most pronounced in coastal locations with vacation-oriented housing). However, the patterns of population and housing change in Coos County are relatively similar.

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

	2000	2010	AAGR (2000-2010)	Share of County 2000	Share of County 2010	Change (2000-2010)
Coos County	*29,247*	*30,593*	*0.5%*	*100.0%*	*100.0%*	*0.0%*
Bandon	1,684	2,017	1.8%	5.8%	6.6%	0.8%
Coos Bay	7,095	7,542	0.6%	24.3%	24.7%	0.4%
Coquille	1,935	1,867	-0.4%	6.6%	6.1%	-0.5%
Lakeside	764	967	2.4%	2.6%	3.2%	0.5%
Myrtle Point	1,127	1,150	0.2%	3.9%	3.8%	-0.1%
North Bend	4,288	4,460	0.4%	14.7%	14.6%	-0.1%
Powers	406	385	-0.5%	1.4%	1.3%	-0.1%
Outside UGBs	11,948	12,205	0.2%	40.9%	39.9%	-1.0%

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

Note: For simplicity each UGB is referred to by its primary city's name.

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 Oregon's 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

Occupancy rates tend to fluctuate more than PPH. This is particularly true in smaller UGBs where fewer housing units allow for larger relative changes in occupancy rates. From 2000 to 2010, the occupancy rate in Coos County decreased slightly (**Figure 14**). A slight drop in occupancy rates was mostly uniform across all sub-areas. Three sub-areas deviated from the countywide trend of declining occupancy rates; Coos Bay, Powers, and Myrtle Point both saw marginal increases in their occupancy rates between 2000 and 2010.

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

	Persons Per Household (PPH)			Occupancy Rate		
	2000	2010	Change 2000-2010	2000	2010	Change 2000-2010
Coos County	*2.3*	*2.3*	*-2.3%*	*89.6%*	*88.7%*	*-0.9%*
Bandon	2.3	2.0	-13.5%	83.3%	78.7%	-4.6%
Coos Bay	2.1	2.3	7.1%	91.6%	92.2%	0.6%
Coquille	2.3	2.3	0.7%	91.1%	89.8%	-1.2%
Lakeside	2.4	2.1	-11.7%	84.9%	83.4%	-1.6%
Myrtle Point	2.1	2.4	13.9%	89.2%	91.0%	1.9%
North Bend	2.4	2.3	-4.2%	92.5%	92.4%	-0.1%
Powers	2.4	2.2	-6.2%	83.0%	83.1%	0.1%
Outside UGBs	2.2	2.3	5.6%	88.7%	87.0%	-1.6%

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

Note: 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 assumptions of likely scenarios for population change. Assumptions about fertility, mortality, and migration were developed for Coos County's forecast and for each of its larger sub-areas[4]. Population change for smaller sub-areas is determined by the change in the number of total housing units, PPH, occupancy rates, and group quarters population. Assumptions around these components of growth are derived from observations of historic building patterns, current plans for future housing development, and household demographics. Our forecast period is 2018-2068.

Coos County's larger sub-areas include Coos Bay and North Bend, while smaller sub-areas include Bandon, Coquille, Lakeside, Myrtle Point, and Powers.

Assumptions for the County and Larger Sub-Areas

During the forecast period, the population in Coos County is expected to age more quickly during the first half of the forecast period and then remain relatively stable over the forecast horizon. The total fertility rate is expected to remain stable throughout the forecast period (2.01 in 2015 to 2.00 in 2043), though fertility rates for women under 30 are expected to decline. Our assumptions of fertility for the county's larger sub-areas vary and are detailed in Appendix B.

Changes in survival rates are more stable than fertility and migration rates; overall life expectancy is expected to increase slightly over the forecast period. In spite of this trend, Coos County's aging population will increase the overall number of deaths throughout the forecast period.

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.

We assume rates will change in line with historic trends unique to Coos County. Net out-migration of young adults and net in-migration of middle-aged individuals and retirees will persist throughout the forecast period. Countywide average annual net in-migration is expected to increase from 414 net in-migrants in 2015 to 481 net in-migrants in 2043. A growing natural decrease is expected to curb net in-migration, which results in a slight population decline.

Assumptions for Smaller Sub-Areas

Rates of population growth for the smaller UGBs are determined by corresponding growth in the number of housing units as well as 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.

[4] County sub-areas with populations greater than 7,000 in the forecast launch year were forecast using the cohort-component method. County sub-areas with populations less than 7,000 in forecast launch year were forecast using the housing-unit method. See Glossary of Key Terms at the end of this report for a brief description of these methods or refer to the *Methods* document for a more detailed description of these forecasting techniques.

We assume occupancy rates and PPH will remain relatively stable over the forecast period. Smaller household size is associated with an aging population in Coos County and its sub-areas.

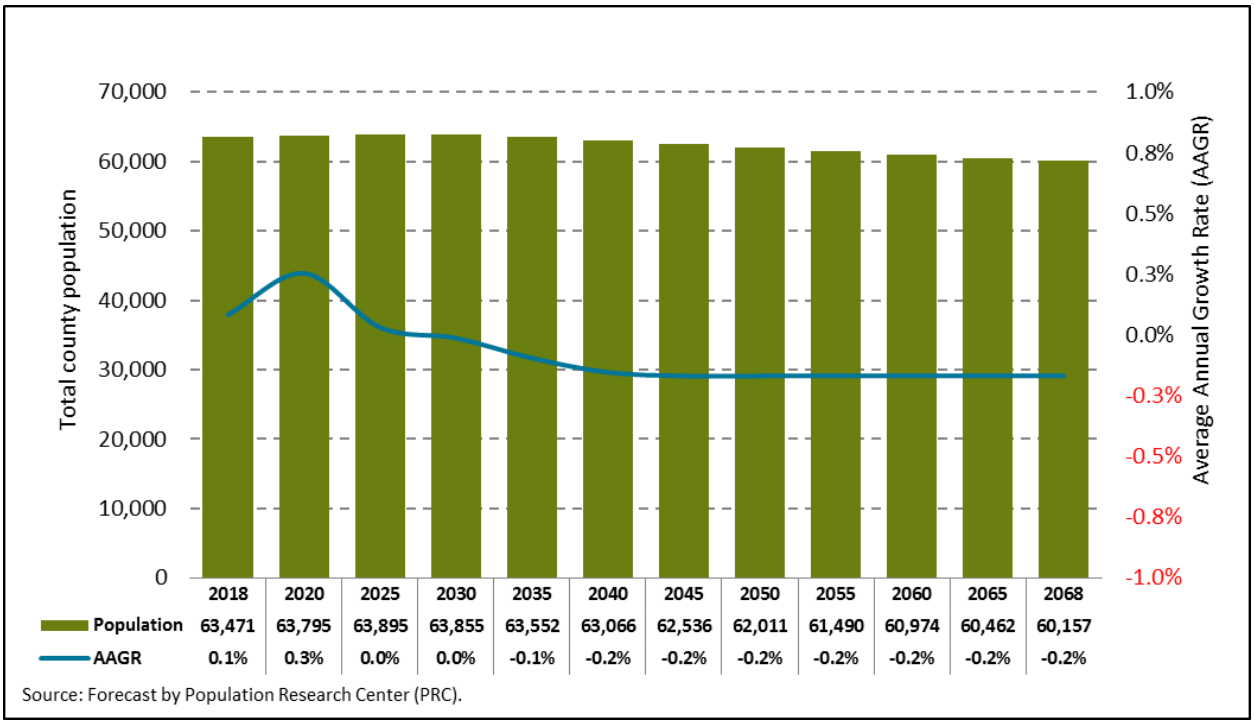
If planned housing units were reported in the surveys, we accounted for them being constructed over the next 5-15 years (or as specified by local officials). Finally, for sub-areas where population growth has been flat or declining, and there is no planned housing construction, we temper population change.

Forecast Trends

Under the most-likely population growth scenario for Coos County, we expect minimal change to countywide and sub-area populations over the forecast period. The countywide population growth rate is forecast to peak in 2020 and then slowly decline throughout the forecast period. Population decline is driven by both (1) an aging population—contributing to steady increase in deaths—as well as (2) net in-migration tapering in the long run to account for uncertainty.

Coos County's total population is forecast to decrease by roughly 3,600 persons (-5.2 percent) from 2018 to 2068, which translates into a total countywide population of 60,157 in 2068 (**Figure 15**). The population is forecast to grow at the highest rate—.1 percent—during the near-term (2018-2025). This anticipated population growth in the near-term is based on two core assumptions: (1) strong net in-migration and housing construction will continue into 2020; (2) net in-migration of retirees will continue. Over 700 net in-migrants are forecast in the near-term leading to a continued population growth. However, the growth is tapered by the 600 more deaths over births also forecast during the 2018-2025 period.

Figure 15. Coos County—Total Forecast Population by Five-year Intervals (2018-2068)



	2018	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2068
Population	63,471	63,795	63,895	63,855	63,552	63,066	62,536	62,011	61,490	60,974	60,462	60,157
AAGR	0.1%	0.3%	0.0%	0.0%	-0.1%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%

Source: Forecast by Population Research Center (PRC).

Coos County's two largest UGBs—Coos Bay and North Bend—are forecast to experience a combined population growth of more than 1,750 people from 2018 to 2043 and nearly 800 from 2043 to 2068 (**Figure 16**). The majority of the forecasted increase occurs within the Coos Bay UGB as the population is expected to grow by roughly 1,550 people from 2018 to 2043, and by over 900 people from 2043 to 2068. The population of North Bend is expected to grow by nearly 200 people from 2018 to 2043 but then shrink during the second half of the forecast period, declining by roughly 120 people from 2043 to

2068. The shares of the total countywide population are forecast to increase in both Coos Bay and North Bend by 6 percent and 1 percent, respectively during the 2018 to 2068 time period.

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

	2018	2043	2068	AAGR (2018-2043)	AAGR (2043-2068)	Share of County 2018	Share of County 2043	Share of County 2068
Coos County	*63,471*	*62,747*	*60,157*	*0.0%*	*-0.2%*	--	--	--
Coos Bay	16,824	18,393	19,300	*0.4%*	*0.2%*	26.5%	29.3%	32.1%
North Bend	9,919	10,108	9,989	*0.1%*	*0.0%*	15.6%	16.1%	16.6%
Outside UGBs	24,378	20,429	15,912	*-0.7%*	*-1.0%*	38.4%	32.6%	26.5%

Source: Forecast by Population Research Center (PRC)

Note: For simplicity each UGB is referred to by its primary city's name.

Although meager, the smaller UGBs are expected to have positive growth (.4 percent combined AAGR) in both the first and second halves of the forecast (**Figure 17**). The smaller UGBs are expected to grow by a combined number of roughly 1,470 people from 2018 to 2043, and another 1,140 people from 2043 to 2068. While none of the smaller sub-areas show a significant population increase individually, all are forecast to show consistent growth for the first 25 years.

Figure 17. Coos County and Smaller Sub-Areas—Forecast Population and AAGR

	2018	2043	2068	AAGR (2018-2043)	AAGR (2043-2068)	Share of County 2018	Share of County 2043	Share of County 2068
Coos County	*63,471*	*62,747*	*60,157*	*0.0%*	*-0.2%*	--	--	--
Bandon	3,422	3,934	4,319	*0.6%*	*0.4%*	5.4%	6.3%	7.2%
Coquille	3,950	4,031	4,061	*0.1%*	*0.0%*	6.2%	6.4%	6.8%
Lakeside	1,696	2,376	2,984	*1.4%*	*0.9%*	2.7%	3.8%	5.0%
Myrtle Point	2,575	2,734	2,836	*0.2%*	*0.1%*	4.1%	4.4%	4.7%
Powers	707	741	756	*0.2%*	*0.1%*	1.1%	1.2%	1.3%
Outside UGBs	24,378	20,429	15,912	*-0.7%*	*-1.0%*	38.4%	32.6%	26.5%

Source: Forecast by Population Research Center (PRC)

Note: For simplicity each UGB is referred to by its primary city's name.

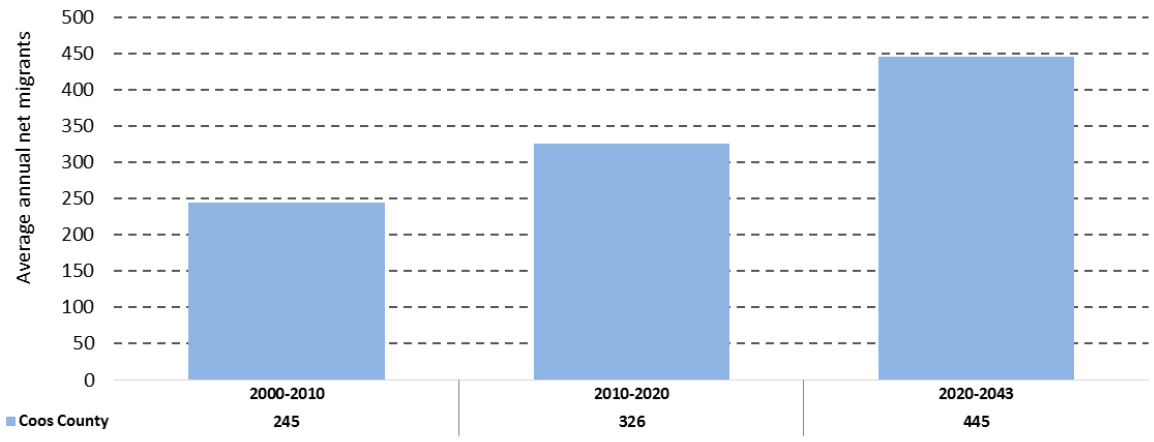
Although both the larger and smaller UGB sub-area populations are expected to increase during the forecast period, the overall Coos County population is expected to experience a minor decline. This is due to the decline in population outside the UGBs by nearly 3,950 people from 2018 to 2043, and by more than 4,500 people from 2043 to 2068.

The decline in population outside of the UGBs, coupled with the minor growth of populations within the UGBs, is expected to create a slight redistribution of the population. The countywide population share for Coos Bay and North Bend is forecast to increase overall from 42 percent in 2018 to nearly 50 percent in 2068. Similarly, the share for the smaller UGBs is also forecast to increase from roughly 20 percent in 2018 to 25 percent in 2068. The majority of the countywide population decrease forecast to occur in the areas outside UGBs from 38 percent in 2018 to roughly 27 percent in 2068.

Forecast Trends in Components of Population Change

As previously discussed, the number of in-migrants is forecasted to outweigh the number of out-migrants in Coos County, creating a positive net in-migration of new residents that is expected to persist throughout the forecast period. Furthermore, the average annual net in-migration is forecasted to increase from the near-term rate of 326 individuals (2010-2020) to 445 individuals later in the forecast (2020-2043) (**Figure 18**). The majority of these net in-migrants are expected to be middle-aged and older individuals.

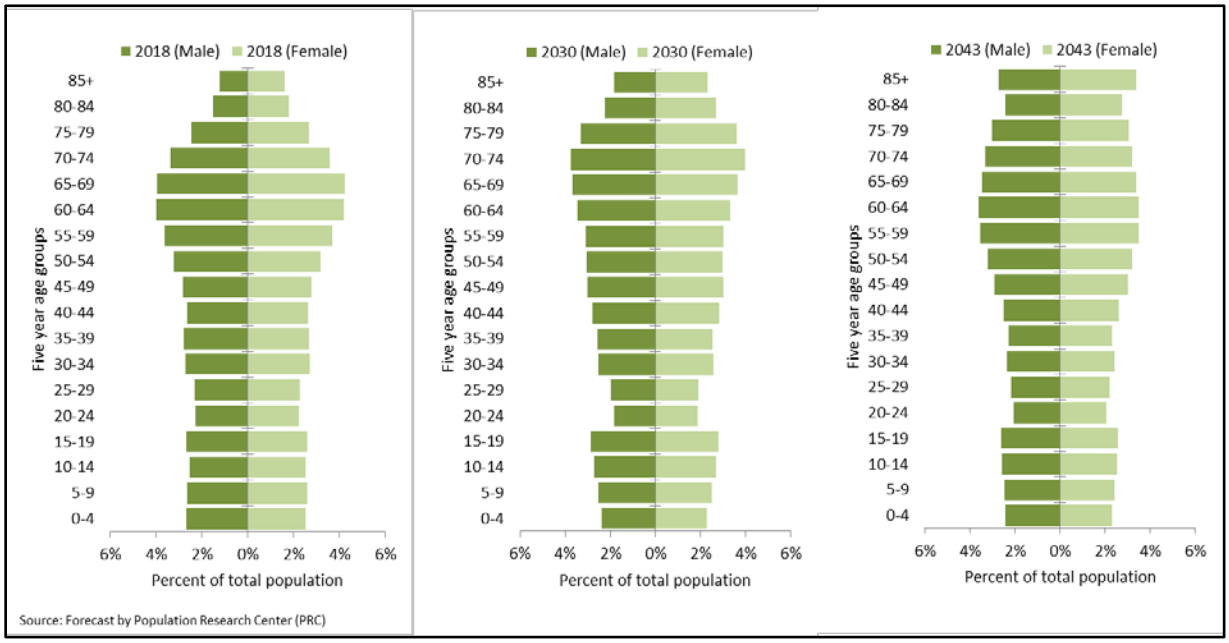
Figure 18. Coos County—Average Annual Net In/Out-Migration (2000-2010, 2010-2020, and 2020-2043)



Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculations and Forecast by Population Research Center (PRC).
Note: The average annual numbers were calculated for the 10 year periods (2000-2010 and 2010-2020) and the 23 year period (2020-2043).

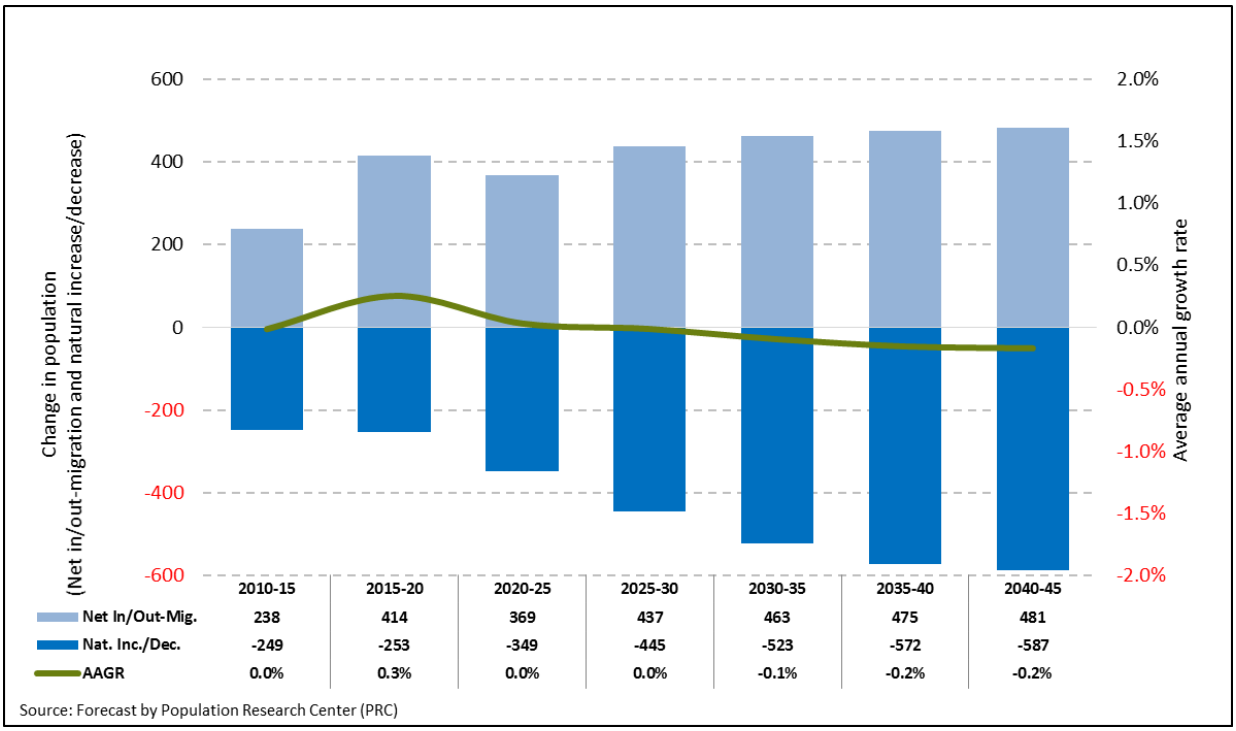
In addition to net in-migration, the other key component shaping Coos County's forecasted population is the aging population. From 2018 to 2030, the proportion of the county population 65 years of age or older is forecast to grow from roughly 27 percent to 31 percent, and to maintain that proportion through 2043 (**Figure 19**). 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 (www.pdx.edu/prc/cycle-2-region-1-documents).

Figure 19. Coos County—Age Structure of the Population (2018, 2030, and 2043)



In summary, current population growth is expected to peak around 2020 before the average annual growth rate begins to decline due to the higher rates of natural decrease (**Figure 20**). While net in-migration is expected to remain relatively steady throughout the forecast period, the natural decrease will eventually outweigh the number of new residents moving to Coos County.

Figure 20. Coos County—Components of Population Change (2015-2045)



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 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).

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: Surveys and Supporting Information

Supporting information is based on planning documents and reports, and from submissions 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, Lakeside, and Myrtle Point did not submit survey responses.

General Survey for Oregon Population Forecast Program	
Jurisdiction: Coos	Date: November 8, 2017
Observations about Population Composition (e.g. children, the elderly, racial and ethnic groups)	The population is majority elderly or aging with a predominantly white race. Coos County has tribal reservation lands for Native American housing and there is an increased amount of Hispanic population working in the agriculture and forestry industry.
Observations about Housing	There is a lack of affordable housing. The housing stock is on average 50 year old. There is housing in some rural areas but not in the populated area. Lack of transportation options leaves higher demands in the Coos Bay/North Bend area. Vacation rentals and homes also impact housing.
Planned Housing Dev./Est. Year Completion (for detailed information submissions please use the Housing Development Survey)	In the county there there has not been any large planned housing developments done. There have been single family developments. Bandon Dunes is planning to build some employee housing.
Planned future construction of Group Quarters facilities	The only approved future group quarters is Bandon Dunes employee housing.
Future Employers Locating to the Area	There is a pending application for an LNG facility. There is a garnet company that will use the ORC chromite plant. The only other inquiry is a Dollar General. Hard to comment on speculated employers. This outside city limits only.
Capacity and condition of infrastructure to accommodate growth.	There is area zoned but there is lack of certain types of infrastructure. The airport is working on expansion. If LNG comes in there will be improvements in infrastructure to help facilitate growth.
Any Promotions (promos) and Hindrances (hinders) to Population Growth; Other notes	The county has tax programs (enterprise zone, urban renewal) to help with business growth. Location is remote from I-5 and that is a hinderance. Attracting younger professional families has been a challenge.

Do you have a buildable lands inventory for your area/UGB? If yes, it would be helpful if you could please share it with our center in GIS format.	We do not have updated buildable lands inventory. Coos County is working on getting grant money to update.
Highlights or summary from planning documents and studies on influences and anticipation of population and housing growth (including any plans for UGB expansion and the stage in the expansion process)	Currently we are working on an comp plan update. I will send information on Monday when I am in the office.

General Survey for Oregon Population Forecast Program	
Jurisdiction: City of Coos Bay Date: 9 January 2018	
Observations about Population Composition (e.g. children, the elderly, racial and ethnic groups)	Population continues to age, more out-migration than in-migration of younger population. Increased focus of Coos Bay as a retirement area although it may be seasonal.
Observations about Housing	Older housing stock with only 16 new sfr in 2017. Experiencing some pressure to convert sfrs to duplexes or accessory dwelling units but many homeowners unwilling to meet building code requirements due to cost.
Planned Housing Dev./Est. Year Completion	None proposed at this time.
Future Group Quarters Facilities	
Future Employers	Natural Grocers, a new retail food market to open in March or April, 2018. Large-scale retail outlet proposed at former Central Dock site working on land use submittal but more likely sometime in mid-2019 for Phase 1.
Infrastructure	
Promotions (promos) and Hindrances (hinders) to Population Growth; Other notes	State of Oregon continues to put little effort in supporting Oregon coastal communities (as well as central and eastern Oregon).
Highlights or summary from planning documents and studies on influences and anticipation of population and housing growth.	Front Street Action Plan adopted in December, 2017 to help spur mixed growth on or near Coos Bay's historic waterfront. So far, only a couple of re-use projects for commercial activities but a visual improvement that will start the process of area-wide enhancements.

General Survey for Oregon Population Forecast Program

Jurisdiction: City of Coquille Date:

Observations about Population Composition (e.g. children, the elderly, racial and ethnic groups)	We seem to have an older, often retired population.
Observations about Housing	Very few homes for sale, and lots are hard to find as well. We did a subdivision (City of Coquille) ourselves just to have some new lots.
Planned Housing Dev./Est. Year Completion (for detailed information submissions please use the Housing Development Survey)	8 new lots, and we are converting an old school into and up to 12-24 units.
Planned future construction of Group Quarters facilities	The old school would be the only item we know about.
Future Employers Locating to the Area	We have a large commercial parcel, but we only have prospects at this point.
Capacity and condition of infrastructure to accommodate growth.	We have plenty of water and wastewater capacity.
Any Promotions (promos) and Hindrances (hinders) to Population Growth; Other notes	No
Do you have a buildable lands inventory for your area/UGB? If yes, it would be helpful if you could please share it with our center in GIS format.	No
Highlights or summary from planning documents and studies on influences and anticipation of population and housing growth (including any plans for UGB expansion and the stage in the expansion process)	None

General Survey for Oregon Population Forecast Program	
Jurisdiction: City of Myrtle Point	Date:
Observations about Population Composition (e.g. children, the elderly, racial and ethnic groups)	Population trends appear similar to the previous survey. There continues to be an increase of the retired citizens, particularly from California.
Observations about Housing	Housing continues to be a challenge due to lack of available residential developable land, and geological constraints (primarily significant slopes). Infrastructure is a concern depending on specific site location (rural and high elevations can pose challenges available utilities and development).
Planned Housing Dev./Est. Year Completion	Specifics unknown. Possible development of three (3) detached single-family homes. One has begun site development. There is an application currently being processed for an additional two (2) single family homes.
Future Group Quarters Facilities	None known.
Future Employers	None known.
Infrastructure	The new Wastewater Plant has been completed. SDC connection fees currently remain the same for water and sewer ($1,500 for water and $0 for sewer). On March 1, 2018 the SDC connection fee for sewer will increase to $2,000.
Promotions (promos) and Hindrances (hinders) to Population Growth; Other notes	There are no additional comments. Previous statements about land availability and geological constraints apply.

Highlights or summary from planning documents and studies on influences and anticipation of population and housing growth.	While the local economy and development have increased since the previous survey, internal population growth projections are expected to be similar to the previous survey. Myrtle Point is a small rural town. Therefore the amount of annual development is typically low but stable.

General Survey for Oregon Population Forecast Program

Jurisdiction: City of North Bend Date: 01/02/2018

Observations about Population Composition (e.g. children, the elderly, racial and ethnic groups)	Majority white/Caucasian. Majority older. Increasing number of young to mid-aged families. Elementary school seeing an increase in Kindergarten students.
Observations about Housing	Not enough variety. Not enough supply of affordable housing choices. Most new development are single-family dwellings for around $300k.
Planned Housing Dev./Est. Year Completion	
Future Group Quarters Facilities	
Future Employers	
Infrastructure	
Promotions (promos) and Hindrances (hinders) to Population Growth; Other notes	Hinders: little or too small available land area; mostly built-out already; topography; floodplain and wetlands; building requirements for lot size, allowable lot coverage, setbacks, etc.; lack of employers and variety of commercial shopping availability
Highlights or summary from planning documents and studies on influences and anticipation of population and housing growth.	

General Survey for Oregon Population Forecast Program	
Jurisdiction: City of Powers	Date: 9/27/17
Observations about Population Composition (e.g. children, the elderly, racial and ethnic groups)	Our population consists heavily of elderly residents, with the second largest group appearing to be residents 30+ years of age with very few children.
Observations about Housing	Housing options are virtually non-existent. Homes tend to go up for sale for years at a time, sitting vacant. Many are not eligible for conventional financing. Rentals are typically found in the trailer parks in extreme dilapidated condition.
Planned Housing Dev./Est. Year Completion (for detailed information submissions please use the Housing Development Survey)	Public Works Director is in beginning planning stages to propose a City-owned residential RV park. No estimates at this time.
Planned future construction of Group Quarters facilities	None.
Future Employers Locating to the Area	None.
Capacity and condition of infrastructure to accommodate growth.	Existing infrastructure is undersized for growth and in progressively deteriorating condition.
Any Promotions (promos) and Hindrances (hinders) to Population Growth; Other notes	Pro: lush outdoor recreational area and natural vistas. Hindrances: remote rural location, lack of adequate internet bandwith to accommodate growth, extreme dilapidated condition of private properties and need for updated public facilities.
Do you have a buildable lands inventory for your area/UGB? If yes, it would be helpful if you could please share it with our center in GIS format.	The City owns several buildable lands suitable for growth/industry. No GIS information available.
Highlights or summary from planning documents and studies on influences and anticipation of population and housing growth (including any plans for UGB expansion and the stage in the expansion process)	None

Appendix B: Specific Assumptions

Bandon

We assume the 5-year average annual housing unit growth rate to taper throughout the forecast period. We assume the occupancy rate and persons per household (PPH) to be steady at 78.7% percent and 2 for the 25-year horizon, respectively. We assume the group quarters population to remain at 121.

Coos Bay

We assume total fertility rates will follow a historical trend (observed from the 2000 to 2010 period) and gradually decline over the forecast period. We assume forecasted trends in survival rates to be the same as those for the county as a whole; these rates are expected to increase slightly for the 65+ population over the 25 year horizon. Age specific net migration rates are generally in line with county patterns.

Coquille

We assume the 5-year average annual housing unit growth rate to remain stable throughout the forecast period. We assume the occupancy rate and persons per household (PPH) to decline slightly to 87.8% and 2.3 for the 25-year horizon, respectively. We assume the group quarters population to remain at 118.

Lakeside

We assume the 5-year average annual housing unit growth rate to taper throughout the forecast period. We assume the occupancy rate and persons per household (PPH) to decline slightly to 81.9% and 2.05 for the 25-year horizon, respectively. We assume the group quarters population to remain at seven.

Myrtle Point

We assume the 5-year average annual housing unit growth rate to remain stable throughout the forecast period. We assume the occupancy rate to be steady at 91% and the persons per household (PPH) to decline slightly to 2.35 for the 25-year horizon. We assume the group quarters population to remain at 53.

North Bend

We assume total fertility rates will remain stable throughout the forecast period, though we expect rates for women under 30 will continue to decline. We assume forecasted trends in survival rates to be the same as those for the county as a whole; these rates are expected to increase slightly for the 65+ population over the 25 year horizon. Age specific net migration rates are generally in line with county patterns.

Powers

We assume the 5-year average annual housing unit growth rate to remain stable throughout the forecast period. We assume the occupancy rate and persons per household (PPH) to be steady at 83.1% percent and 2.2 for the 25-year horizon, respectively. There is no group quarters population in this sub-area.

Outside UGBs

We assume total fertility rates will remain stable throughout the forecast period. We assume forecasted trends in survival rates to be the same as those for the county as a whole; these rates are expected to increase slightly for the 65+ population over the 25 year horizon. Age specific net migration rates are generally in line with county patterns, though we assume the sub-area will experience a steeper net out-migration of 70+ year olds.

Appendix C: Detailed Population Forecast Results

Figure 21. Coos County—Population by Five-Year Age Group

Population Forecasts by Age Group / Year	2018	2020	2025	2030	2035	2040	2043
00-04	3,309	3,219	3,102	2,975	2,927	2,955	2,971
05-09	3,339	3,534	3,309	3,211	3,096	3,050	3,067
10-14	3,206	3,146	3,637	3,428	3,345	3,229	3,200
15-19	3,355	3,234	3,093	3,601	3,415	3,335	3,266
20-24	2,857	2,879	2,440	2,355	2,764	2,624	2,587
25-29	2,917	2,816	2,907	2,480	2,409	2,829	2,742
30-34	3,439	3,414	3,135	3,257	2,794	2,716	2,991
35-39	3,461	3,554	3,498	3,266	3,412	2,930	2,881
40-44	3,342	3,359	3,599	3,568	3,351	3,505	3,199
45-49	3,552	3,448	3,569	3,849	3,837	3,607	3,706
50-54	4,070	3,962	3,687	3,841	4,164	4,154	4,003
55-59	4,640	4,430	4,148	3,882	4,063	4,409	4,403
60-64	5,199	5,116	4,569	4,306	4,050	4,244	4,457
65-69	5,204	5,384	5,192	4,671	4,428	4,169	4,288
70-74	4,415	4,641	5,077	4,938	4,473	4,245	4,094
75-79	3,259	3,550	4,006	4,427	4,338	3,931	3,809
80-84	2,108	2,210	2,757	3,152	3,513	3,445	3,245
85+	1,801	1,900	2,170	2,648	3,172	3,687	3,839
Total	**63,471**	**63,795**	**63,895**	**63,855**	**63,552**	**63,066**	**62,747**

Figure 22. Coos County's Sub-Areas—Total Population

Area / Year	2018	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2068
Coos County	63,471	63,795	63,895	63,855	63,552	63,066	62,536	62,011	61,490	60,974	60,462	60,157
Bandon UGB	3,422	3,462	3,609	3,733	3,816	3,897	3,959	4,050	4,173	4,240	4,280	4,319
CoosBay UGB	16,824	17,057	17,543	17,874	18,117	18,301	18,451	18,676	18,994	19,145	19,214	19,300
Coquille UGB	3,950	3,918	3,932	3,961	3,989	4,016	4,041	4,050	4,069	4,070	4,061	4,061
Lakeside UGB	1,696	1,747	1,868	2,004	2,143	2,288	2,436	2,573	2,747	2,852	2,923	2,984
MyrtlePoint UGB	2,575	2,574	2,609	2,631	2,674	2,717	2,745	2,770	2,807	2,822	2,828	2,836
NorthBend UGB	9,919	9,979	10,095	10,148	10,152	10,126	10,095	10,079	10,079	10,050	10,007	9,989
Powers UGB	707	710	719	726	732	738	743	747	754	756	755	756
Outside UGB Area	24,378	24,348	23,521	22,778	21,929	20,984	20,065	19,065	17,867	17,039	16,393	15,912