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

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Coordinated Population Forecast

2018

Through

2068

Lake County

Urban Growth Boundaries (UGB) & Area Outside UGBs

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Photo Credit: Sunset at Thompson Reservoir. 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).

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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 slight differences between the 2018 updated forecast for Lake County and the 2016 version. Overall, the 2018 forecast is lower for Lake County due to tapering net in-migration across the 25-year period (2018-43). 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.

Lake County's total population grew steadily in the 2000s, with an average annual growth rate of .6% (**Figure 1**); however, its UGBs experienced population decline. Lakeview and Paisley posted average annual growth rates at -1.2 and -0.2 percent, respectively, during the 2000 to 2010 period while the area outside of the UBGs experienced an average annual growth rate of 2.3 percent.

Lake County's positive population growth in the 2000s was largely the result of sporadic 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 natural decrease (more deaths than births) in every year from 2001 to 2016. While natural decrease outweighed net in-migration during the early and late years of the last decade, in recent years (2012-16) net in-migration has increased, leading to meager population growth (**Figure 12**).

Forecast

Total population in Lake County as a whole as well as within its sub-areas will likely grow at a faster pace in the near-term (2018 to 2043) compared to the long-term (**Figure 1**). The tapering of growth rates is largely driven by a growing natural decrease that will cut into population growth from net in-migration. Lake County's total population is forecast to increase by nearly 375 over the next 25 years (2018-2043) and by 400 over the entire 50-year period (2018-2068).

Figure 1. Lake 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)
Lake County	**7,422**	**7,895**	***0.6%***	**8,157**	**8,521**	**8,557**	***0.4%***	***0.2%***	***0.0%***
Lakeview	3,670	3,263	*-1.2%*	3,132	3,154	2,983	*-0.5%*	*0.0%*	*-0.2%*
Paisley	247	243	*-0.2%*	261	274	270	*0.9%*	*0.2%*	*-0.1%*
Outside UGBs	3,505	4,389	*2.3%*	4,764	5,093	5,305	*1.0%*	*0.3%*	*0.2%*

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. Lake County and Sub-Areas—14-Year Population Forecast

	2018	2032	14-Year Change	AAGR (2018-2032)
Lake County	**8,157**	**8,445**	**288**	***0.2%***
Lakeview	3,132	3,198	66	*0.2%*
Paisley	261	274	13	*0.4%*
Outside UGBs	4,764	4,972	209	*0.3%*

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

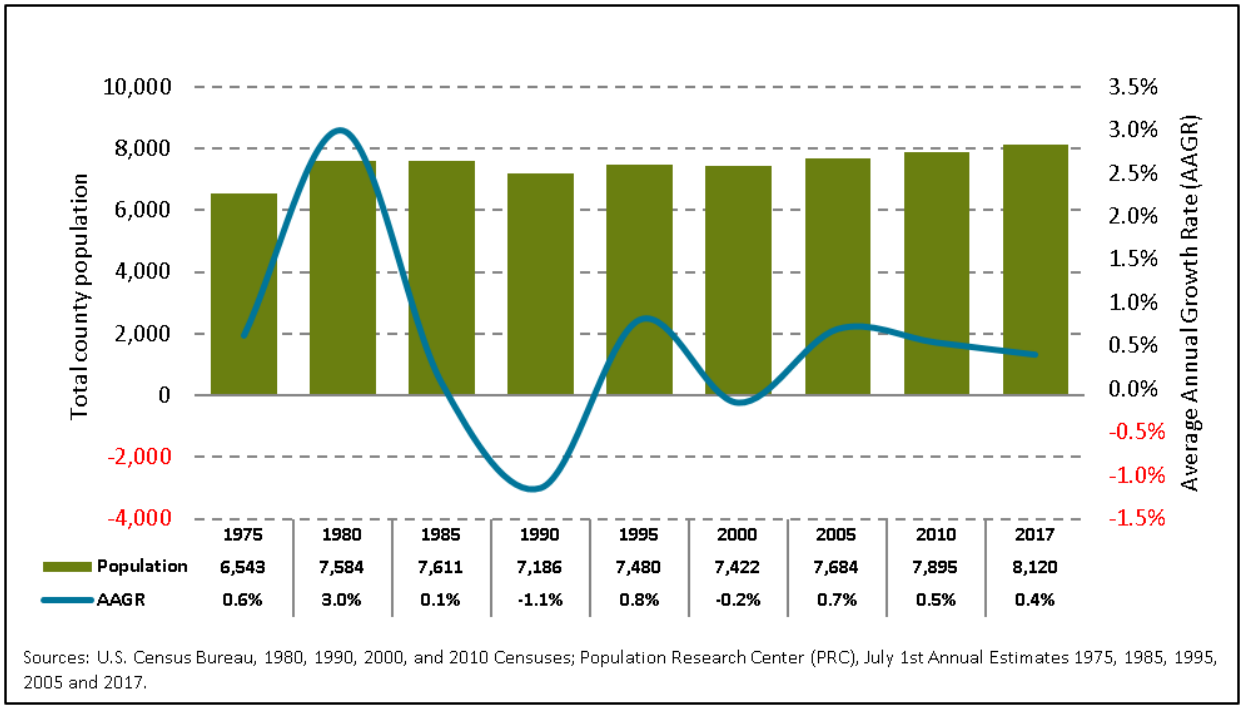
Historical Trends

Different growth patterns occur in different parts of Lake County. Each of Lake 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

Lake County's total population grew from roughly 6,500 in 1975 to about 8,100 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 and has steadied following the turn of the century, averaging .5% of annual growth between 2000 and 2017.

Figure 3. Lake 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, Lake County's average annual population growth rate stood at 0.6 percent (**Figure 4**). At the same time, Lakeview and Paisley recorded negative average annual growth rates of -1.2 and -0.2 percent, respectively. The area outside the UGBs experienced positive growth, recording an average annual growth rate of 2.3 percent.

Figure 4. Lake 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)
Lake County	*7,422*	*7,895*	*0.6%*	*100.0%*	*100.0%*	*0.2%*
Lakeview	*3,670*	*3,263*	-1.2%	49.4%	41.3%	-8.1%
Paisley	*247*	*243*	-0.2%	3.3%	3.1%	-0.3%
Outside UGBs	*3,505*	*4,389*	2.3%	47.2%	55.6%	8.4%

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

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

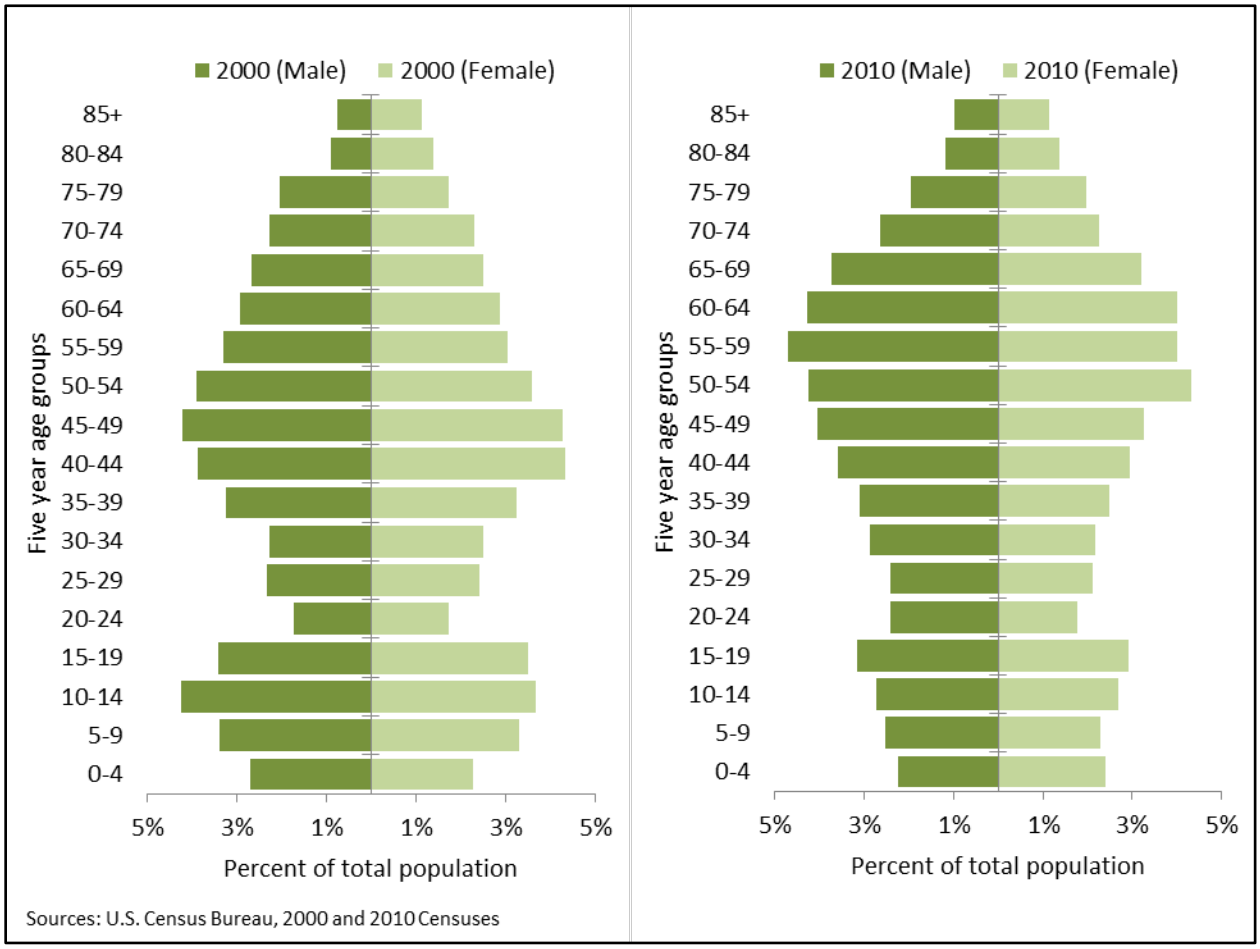
Age Structure of the Population

Similar to most areas across Oregon, Lake 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; the proportion of the county population 65 or older increased (**Figure 5**). Further underscoring the countywide trend in aging, the median age in Lake County increased from 42.7 in 2000 to 47.4 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. Lake 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. The Hispanic share of total population within Lake County increased from 2000 to 2010 (**Figure 6**), while the White, non-Hispanic share deceased 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, non-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, non-Hispanic households.

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

Hispanic or Latino and Race	2000		2010		Absolute Change	Relative Change
Total population	7,422	100.0%	7,895	100.0%	473	6.4%
Hispanic or Latino	404	5.4%	545	6.9%	141	34.9%
Not Hispanic or Latino	7,018	94.6%	7,350	93.1%	332	4.7%
White alone	6,617	89.2%	6,875	87.1%	258	3.9%
Black or African American alone	8	0.1%	37	0.5%	29	362.5%
American Indian and Alaska Native alone	166	2.2%	149	1.9%	-17	-10.2%
Asian alone	53	0.7%	44	0.6%	-9	-17.0%
Native Hawaiian and Other Pacific Islander alone	10	0.1%	5	0.1%	-5	-50.0%
Some Other Race alone	6	0.1%	7	0.1%	1	16.7%
Two or More Races	158	2.1%	233	3.0%	75	47.5%

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

Births

Historic fertility rates for Lake County mirror statewide trends in Oregon as a whole. Total fertility rates decreased for Lake County and the state from 2000 to 2010 because of delayed child bearing (**Figure 7**). At the same time fertility for women under 30 declined in both Lake County and Oregon (**Figure 8**). Total fertility in Lake County and the state was below replacement fertility (2.1) in 2010, indicating that future cohorts of women in their birth-giving years will shrink overtime without net in-migration. However, fertility rates have fluctuated greatly for Lake County during economic expansions and contractions, as TFR in 2015 was 2.69.

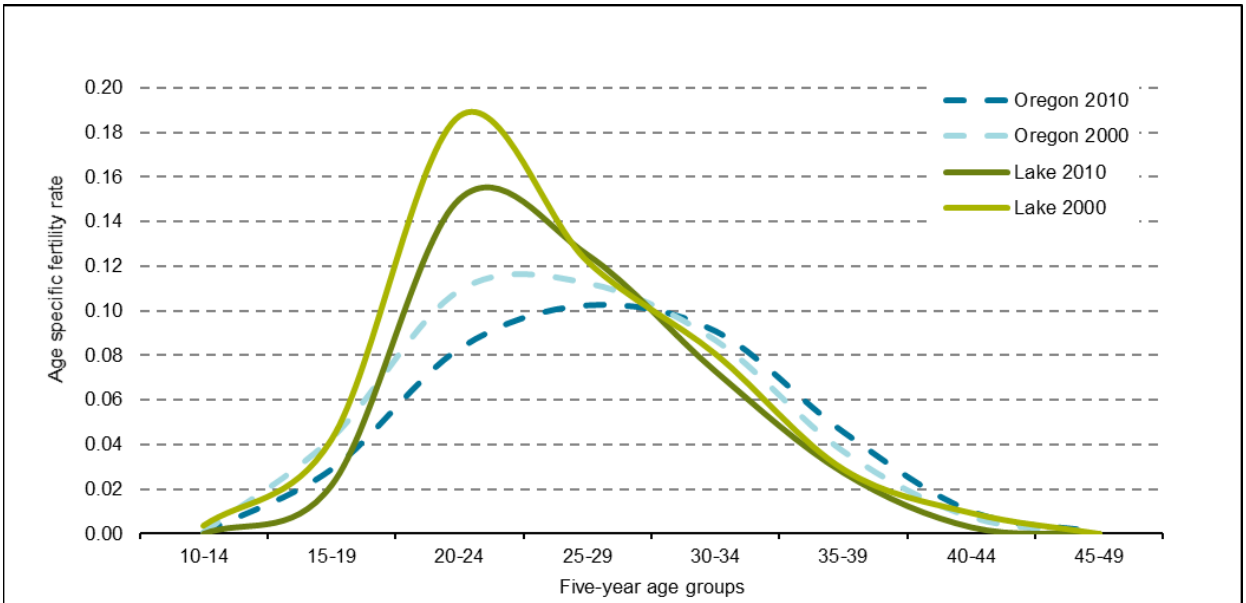
Figure 7. Lake County and Oregon—Total Fertility Rates (2000 and 2010)

Total Fertility Rate (TFR)

	2000	2010
Lake County	2.37	2.00
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).

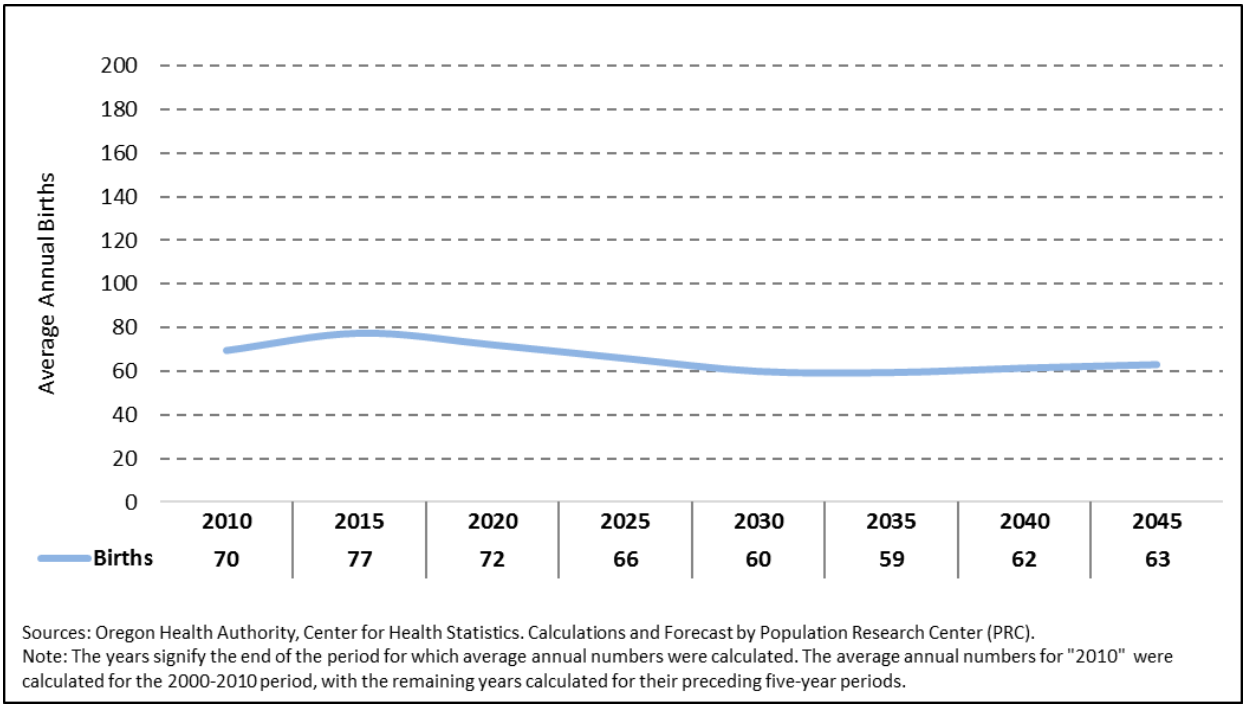
Figure 8. Lake County—Age Specific Fertility Rate (2000 and 2010)



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 cohort of women in their birth giving years and high fertility rates, births are expected to remain stable throughout the forecast period.

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

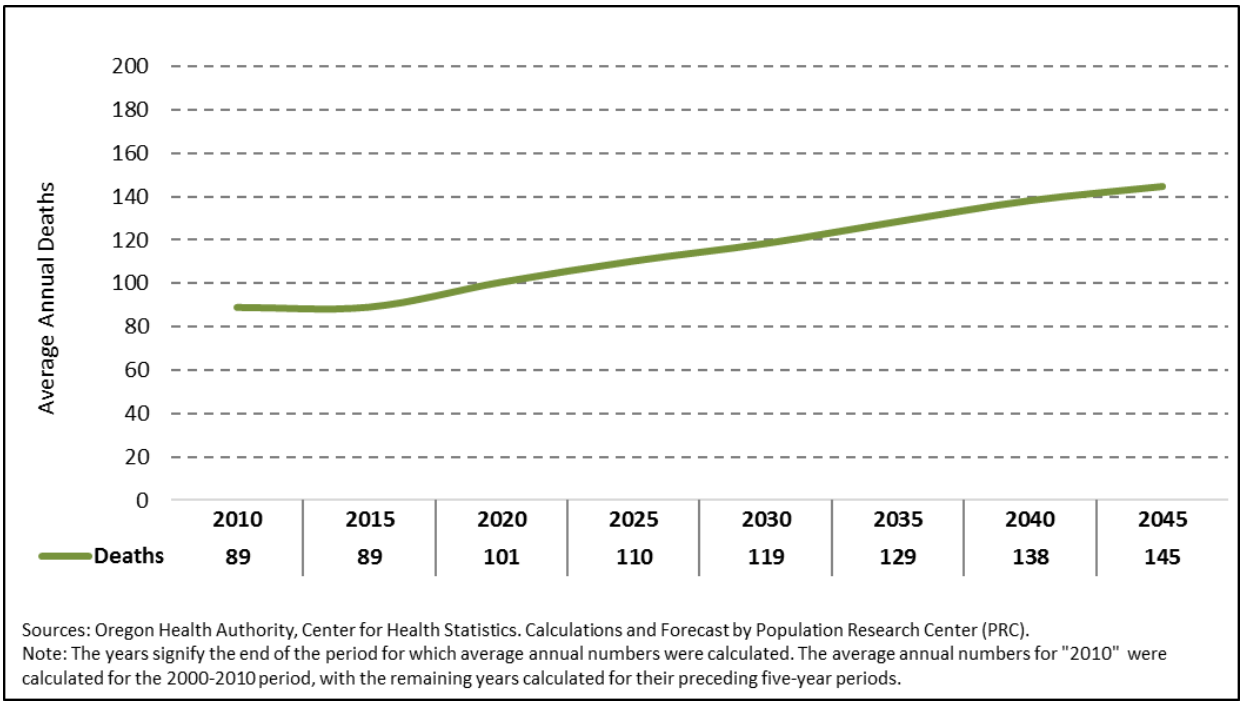


Sources: Oregon Health Authority, Center for Health Statistics. Calculations and Forecast by Population Research Center (PRC).
Note: The years signify the end of the period for which average annual numbers were calculated. The average annual numbers for "2010" were calculated for the 2000-2010 period, 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 Lake 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. Average annual deaths remained steady from 2000-10 and 2010-15, but they are expected to increase steadily overtime (**Figure 10**).

Figure 10. Lake 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.

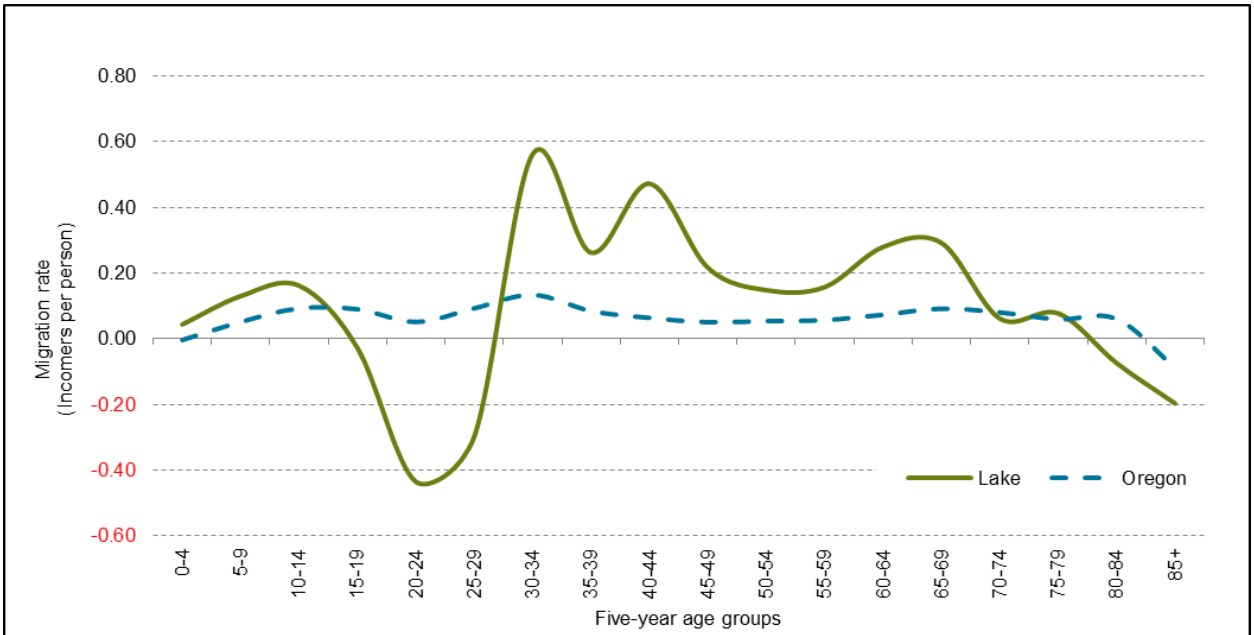
Migration

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 Lake County and for Oregon. The migration rate is shown as the number of net migrants per person by age group.

Lake 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. Retiree migrated into the county during 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. Lake County and Oregon—Age Specific Migration Rates (2000-2010)

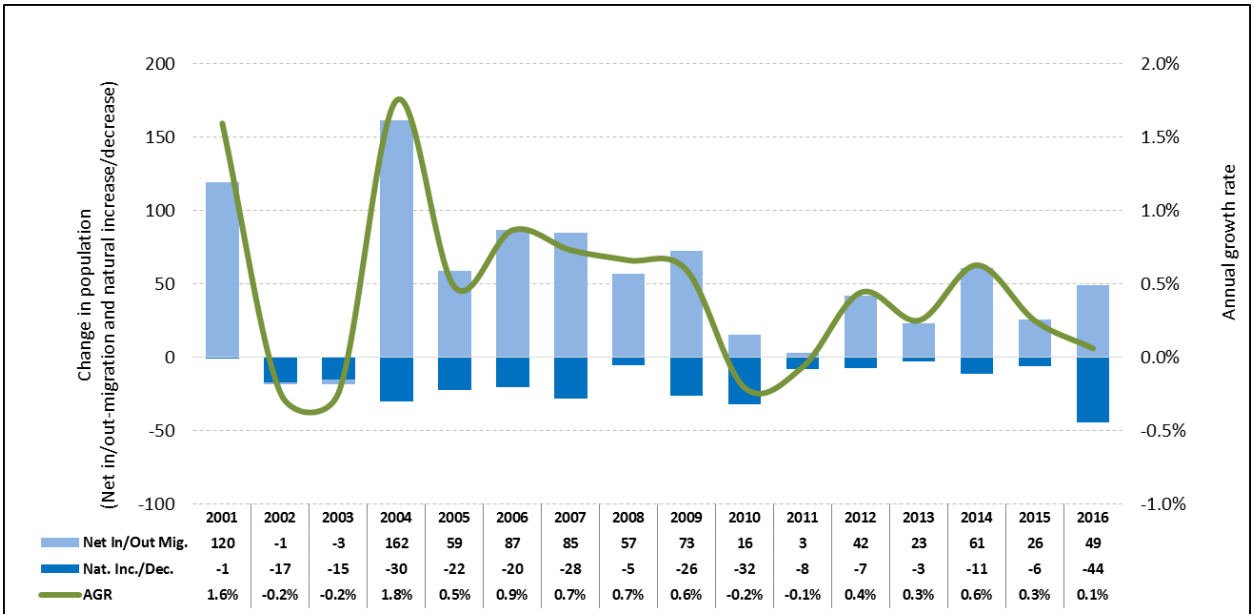


Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculated by Population Research Center (PRC).

Historical Trends in Components of Population Change

In summary, Lake County's positive population growth during the 2000s was the result of steady natural increase and a mid-decade period of sporadic net in-migration (**Figure 12**). In recent years (2012-16), net in-migration has offset a natural decrease that has persisted throughout the 2000s and 2010s, leading to slow population growth.

Figure 12. Lake 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.	120	-1	-3	162	59	87	85	57	73	16	3	42	23	61	26	49
Nat. Inc./Dec.	-1	-17	-15	-30	-22	-20	-28	-5	-26	-32	-8	-7	-3	-11	-6	-44
AGR	1.6%	-0.2%	-0.2%	1.8%	0.5%	0.9%	0.7%	0.7%	0.6%	-0.2%	-0.1%	0.4%	0.3%	0.6%	0.3%	0.1%

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 Lake 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 11 percent countywide; this was more than 440 new housing units (**Figure 13**). The area outside the UGB captured the largest share of the growth in total housing units, adding 523 units and increasing nearly 26 percent by 2010. The housing stock for Lakeview and Paisley declined by 63 and 20 units respectively, decreasing as a share of countywide housing units by 6.7 percent collectively.

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 Lake County are relatively similar.

Figure 13. Lake 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)
Lake County	*3,999*	*4,439*	*1.0%*	*100.0%*	*100.0%*	*0.0%*
Lakeview	1,780	1,717	-0.4%	44.5%	38.7%	-5.8%
Paisley	176	156	-1.2%	4.4%	3.5%	-0.9%
Outside UGBs	2,043	2,566	2.3%	51.1%	57.8%	6.7%

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

[1] *For simplicity each UGB is referred to by its primary city's name.*

Average household size, or PPH, in Lake County was 2.2 in 2010, a small decline from 2000 (**Figure 14**). Lake County's PPH in 2010 was lower than for Oregon as a whole, which had a PPH of 2.5. PPH varied across the county's UGBs, with Paisley recording the lowest PPH of 1.9. In general, areas with an older or aging population will, more often than not, experience a decline in PPH overtime.

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 Lake County decreased slightly. Lakeview and the area outside the UGBs experienced a decrease similar to that of the county, while Paisley experienced an increase in occupancy rates of nearly 15 percent (**Figure 14**).

Figure 14. Lake 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
Lake County	*2.4*	*2.2*	*-7.8%*	*77.1%*	*76.1%*	*-1.0%*
Lakeview	2.4	2.2	-8.2%	85.7%	85.3%	-0.4%
Paisley	2.4	1.9	-18.1%	65.3%	80.1%	14.8%
Outside UGBs	2.1	2.2	3.8%	70.6%	69.7%	-1.0%

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

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 Lake County's forecast. Lake County did not contain any large 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.

Assumptions for the County

During the forecast period the population in Lake County is expected to age more quickly during the first half of the forecast period and then remain relatively stable over the forecast horizon. Fertility rates are higher than they were in 2010, but are expected to decline throughout the forecast period (2.7 in 2015 to 2.2 in 2043).

Changes in survival rates are more stable than fertility and migration; overall life expectancy is expected to increase slightly over the forecast period. In spite of this trend, Lake County's gaining 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 historical trends unique to Lake County. Net in-migration of younger 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 35 net in-migrants in 2015 to 83 net in-migrants in 2043. Net in-migration is expected to curb the results of a growing natural decrease, accounting for all of Lake County's population growth throughout the forecast period.

[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.

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.

Occupancy rates and PPH are assumed to stay relatively stable over the forecast period. Smaller household size is associated with an aging population in Lake County and its sub-areas.

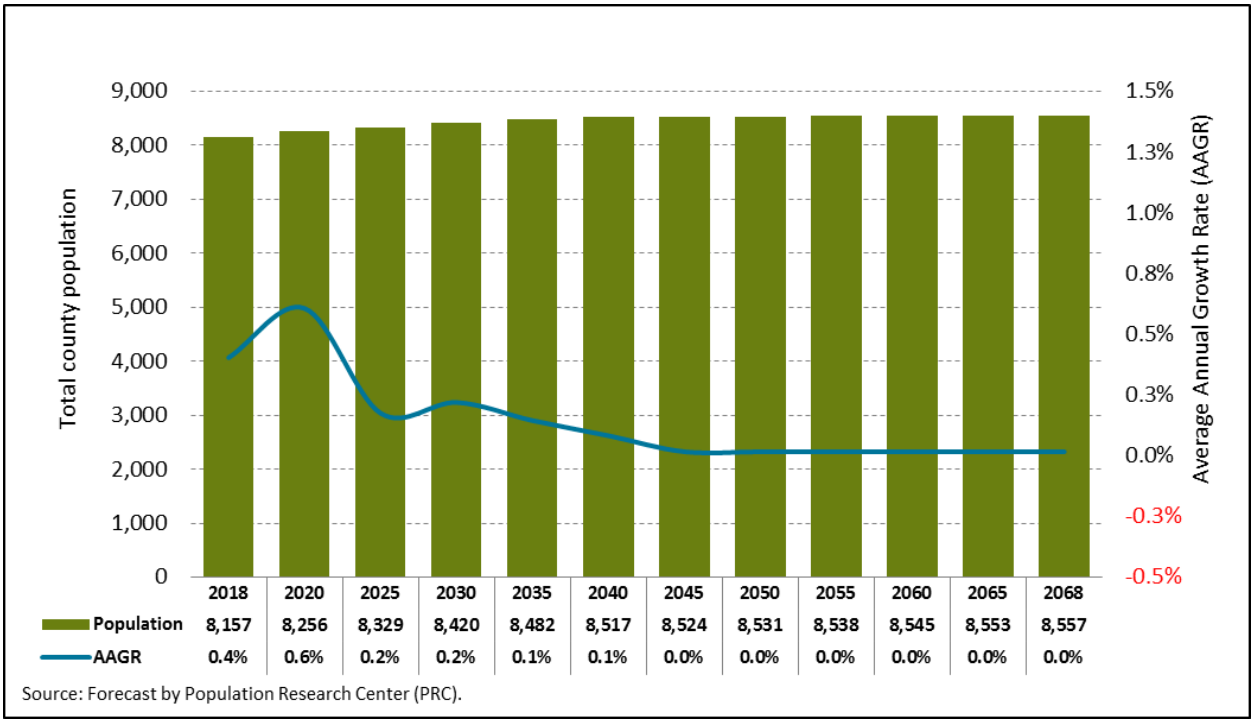
If planned housing units were reported in the surveys, we accounted for them being constructed over the next 5-15 years (or as specified by local officials). Finally, for sub-areas where population growth has been flat or declining, and there is no planned housing construction, we temper population change.

Forecast Trends

Under the most-likely population growth scenario for Lake County, countywide and sub-area populations are expected to increase slightly over the forecast period. The countywide population growth rate is forecast to peak in 2020 and then slowly decline throughout the forecast period. A reduction in population growth rates is driven by both (1) an aging population—contributing to steady increase in deaths—as well as (2) the tapering of net in-migration in the long run to account for uncertainty.

Lake County's total population is forecast to grow by 400 persons (36 percent) from 2018 to 2068, which translates into a total countywide population of 8,577 in 2068 (**Figure 15**). The population is forecast to grow at the highest rate—just over half a percent per year—during the near-term (2018-2020). 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.

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



Source: Forecast by Population Research Center (PRC).

Lake County's UGBs, Lakeview and Paisley, are forecast to experience a combined population growth of 36 from 2018 to 2043 and a population decline of over 175 from 2043 to 2068 (**Figure 16**). The Lakeview UGB is expected to decrease as a share of the total county population from 38.4 percent in 2018 to 34.9 percent in 2068. The Paisley UGB share of total county population is expected to remain steady at 3.2 percent throughout the forecast period.

Population outside UGBs is expected to grow by roughly 325 people from 2018 to 2043 and just over 210 people from 2043 to 2068. Its share is expected to increase over the 50-year period, composing about 58 percent of the countywide population in 2018 and 62 percent by 2068.

Figure 16. Lake County and 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
Lake County	*8,157*	*8,521*	*8,557*	*0.2%*	*0.0%*	--	--	--
Lakeview	3,132	3,154	2,983	*0.0%*	*-0.2%*	38.4%	37.0%	34.9%
Paisley	261	274	270	*0.2%*	*-0.1%*	3.2%	3.2%	3.2%
Outside UGBs	4,764	5,093	5,305	*0.3%*	*0.2%*	58.4%	59.8%	62.0%

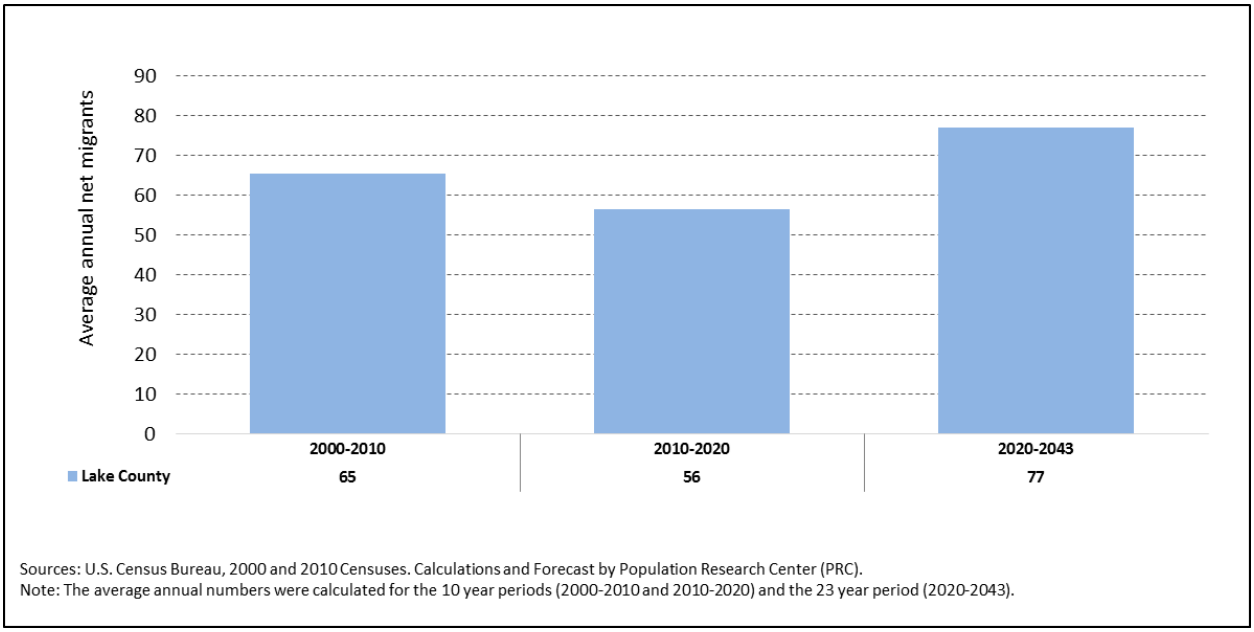
Source: Forecast by Population Research Center (PRC)

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

Forecast Trends in Components of Population Change

As previously discussed, the number of in-migrants is forecast to outweigh the number of out-migrants in Lake County, creating positive net in-migration of new residents that is expected to persist throughout the forecast period. Furthermore, annual net in-migration is forecast to increase from the near-term rate of 56 individuals from 2010-2020 to 77 individuals from 2020-2043. The majority of these net in-migrants are expected to be middle-aged and older individuals (**Figure 17**).

Figure 17. Lake County—Average Annual Net In/Out-Migration (2000-2010, 2010-2020, and 2020-2043)

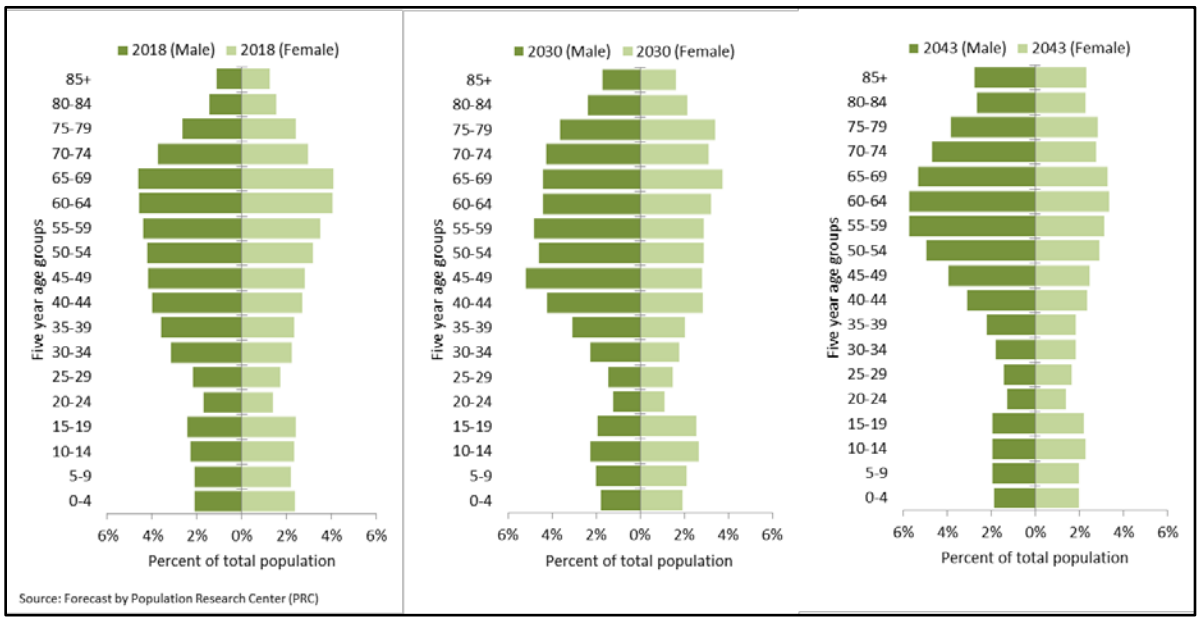


Sources: U.S. Census Bureau, 2000 and 2010 Censuses. Calculations and Forecast by Population Research Center (PRC).
Note: The average annual numbers were calculated for the 10 year periods (2000-2010 and 2010-2020) and the 23 year period (2020-2043).

In addition to in-migration, a key factor shaping Lake County's forecast is the county's aging population. The proportion of the county population that is 65 years of age or older is forecast to increase from roughly 26 percent in 2018 to over 30 percent in 2030 and 33 percent in 2043 (**Figure 18**). For a more

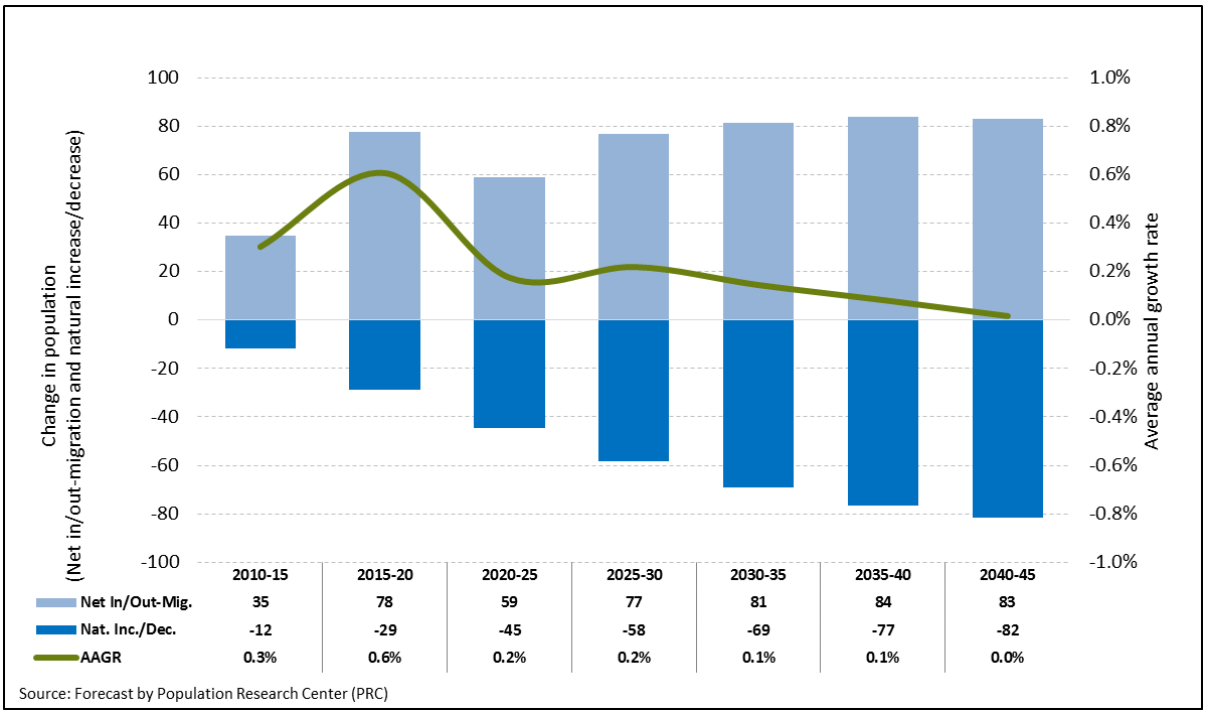
detailed look at the age structure of Lake County's population see the final forecast table published to the forecast program website (www.pdx.edu/prc/cycle-2-region-1-documents).

Figure 18. Lake County—Age Structure of the Population (2018, 2030, and 2043)



In summary, population growth is expected to peak in 2020, and then taper through the remainder of the forecast period (**Figure 19**). Net in-migration is expected to remain relatively steady throughout the forecast period, but a growing natural decrease will slow population growth dramatically overtime.

Figure 19. Lake 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 city of Lakeview did not submit a survey response.

General Survey for Oregon Population Forecast Program	
Jurisdiction: City of Paisley	Date: January 17, 2018
Observations about Population Composition (e.g. children, the elderly, racial and ethnic groups)	City population holds steady at 245 people. 28 – 35 percent of the population is over the age of 60. The elderly and adult population is approximately 78% of overall.
Observations about Housing	Available housing is scarce. Land to build on within city limits is scarce also.
Planned Housing Dev./Est. Year Completion	None
Future Group Quarters Facilities	None at this time.
Future Employers	N/A
Infrastructure	N/A
Promotions (promos) and Hindrances (hinders) to Population Growth; Other notes	Paisley is a beautiful little town, but the availability of housing and land to build is just not present at this time.
Highlights or summary from planning documents and studies on influences and anticipation of population and housing growth.	N/A

Appendix B: Specific Assumptions

Lakeview

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 85.3% and the persons per household (PPH) to decline slightly to 2.14 for the 25-year horizon. We assume the group quarters population to remain at 36.

Paisley

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 80.1% percent and 1.94 for the 25-year horizon, respectively. We assume the group quarters population to remain at 12.

Outside UGBs

We assume the 5-year average annual housing unit growth rate to taper throughout the forecast period. We assume the occupancy rate to be steady at 69.7 and persons per household (PPH) to decline to 2.13 for the 25-year horizon. We assume the group quarters population to remain at 404.

Appendix C: Detailed Population Forecast Results

Figure 20. Lake County—Population by Five-Year Age Group

Population Forecasts by Age Group / Year	2018	2020	2025	2030	2035	2040	2043
00-04	367	374	337	311	311	323	328
05-09	351	367	380	348	324	326	333
10-14	378	357	396	414	382	358	359
15-19	396	390	336	377	399	370	356
20-24	253	237	224	197	224	239	229
25-29	319	302	260	248	220	251	262
30-34	441	433	383	337	322	288	310
35-39	482	510	481	431	383	366	343
40-44	548	550	627	596	539	480	466
45-49	570	584	582	673	644	586	546
50-54	603	593	625	630	736	707	668
55-59	646	641	609	649	659	776	756
60-64	702	689	671	642	689	703	773
65-69	708	736	697	688	667	720	730
70-74	545	591	644	622	619	606	635
75-79	413	441	535	594	577	579	570
80-84	242	262	307	381	431	420	421
85+	193	200	234	282	354	419	435
Total	**8,157**	**8,256**	**8,329**	**8,420**	**8,482**	**8,517**	**8,521**

Figure 21. Lake County's Sub-Areas—Total Population

Area / Year	2018	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2068
Lake County	8,157	8,256	8,329	8,420	8,482	8,517	8,524	8,531	8,538	8,545	8,553	8,557
Lakeview UGB	3,132	3,219	3,214	3,206	3,186	3,169	3,145	3,106	3,057	3,025	3,002	2,983
Paisley UGB	261	270	273	274	275	274	274	273	271	271	270	270
Outside UGB Area	4,764	4,767	4,842	4,940	5,021	5,073	5,106	5,153	5,210	5,250	5,281	5,305