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Coordinated Population Forecast for Umatilla County, its Urban Growth Boundaries (UGB), and Area Outside UGBs 2016-2066

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Coordinated Population Forecast



2016

Through

2066

Umatilla County

Urban Growth
Boundaries (UGB)
& Area Outside UGBs

Photo Credit: Wheat in a field along Kings Corner Road. (Photo No. umaDA0009a)

Gary Halvorson, Oregon State Archives

<http://arcweb.sos.state.or.us/pages/records/local/county/scenic/umatilla/75.html>

**Coordinated Population Forecast for Umatilla County,
its Urban Growth Boundaries (UGB), and
Area outside UGBs
2016-2066**

**Prepared by
Population Research Center
College of Urban and Public Affairs
Portland State University**

June 30, 2016

This project is funded by the State of Oregon through the Department of Land Conservation and Development (DLCD). The contents of this document do not necessarily reflect the views or policies of the State of Oregon.

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The Population Research Center and project staff wish to acknowledge and express gratitude for support from DLCD's Forecast Advisory Committee, the hard work of our staff Deborah Loftus and Emily Renfrow, data reviewers, and many people who contributed to the development of these forecasts by answering questions, lending insight, providing data, or giving feedback.

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 methods employed to prepare the forecasts. This document also describes the data sets and 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 (i.e., 2016-2066).

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Executive Summary

Historical

Umatilla County's total population has grown steadily since 2000, with average annual growth rates near one percent between 2000 and 2010 (Figure 1); however, some of its sub-areas experienced more rapid population growth during the 2000s. Hermiston, the most populous UGB, and Umatilla UGB posted the highest average annual growth rates at 2.1 and 2.8 percent, respectively, during the 2000 to 2010 period.

Umatilla County's positive population growth in the 2000s was the result of a steady natural increase and periods of substantial net in-migration. A larger number of births relative to deaths led to a natural increase (more births than deaths) in every year from 2000 to 2015 (Figure 12). While net in-migration fluctuated dramatically during the early and middle years of the last decade, the number of in-migrants has been slightly more stable during recent years, contributing to a population increase. Even so the natural increase continues to account for most of the population growth.

Forecast

Total population in Umatilla County as a whole as well as within its sub-areas will likely grow at a slightly faster pace in the near-term (2016 to 2035) compared to the long-term (2035-2066) (Figure 1). The tapering of growth rates is driven by an aging population—a demographic trend which is expected to contribute to an increase in deaths. Even so, natural increase is expected to persist, combining with steady in-migration for continued strong population growth.

Umatilla County's total population is forecast to increase by nearly 13,300 over the next 19 years (2016-2035) and by close to 36,800 over the entire 50-year forecast period (2016-2066). All sub-areas are expected to experience population growth during the forecast period.

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

	Historical			Forecast				
	2000	2010	AAGR (2000-2010)	2016	2035	2066	AAGR (2016-2035)	AAGR (2035-2066)
<i>Umatilla County</i>	70,548	75,889	0.7%	81,438	94,765	118,308	0.8%	0.7%
Adams UGB	298	350	1.6%	370	391	407	0.3%	0.1%
Athena UGB	1,229	1,134	-0.8%	1,151	1,165	1,180	0.1%	0.0%
Echo UGB	668	722	0.8%	744	781	824	0.3%	0.2%
Helix UGB	192	194	0.1%	204	213	214	0.2%	0.0%
Hermiston UGB	15,635	19,234	2.1%	21,488	28,667	41,104	1.5%	1.2%
Milton-Freewater UGB	6,677	7,213	0.8%	7,653	8,738	10,993	0.7%	0.7%
Pendleton UGB	17,161	17,015	-0.1%	17,325	18,359	21,607	0.3%	0.5%
Pilot Rock UGB	1,641	1,576	-0.4%	1,576	1,576	1,576	0.0%	0.0%
Stanfield UGB	2,011	2,061	0.2%	2,144	2,280	2,383	0.3%	0.1%
Ukiah UGB	258	193	-2.9%	256	258	261	0.1%	0.0%
Umatilla UGB	5,786	7,623	2.8%	8,714	12,284	17,517	1.8%	1.1%
Weston UGB	742	679	-0.9%	695	713	722	0.1%	0.0%
Outside UGBs	18,250	17,895	-0.2%	19,119	19,341	19,520	0.1%	0.0%

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

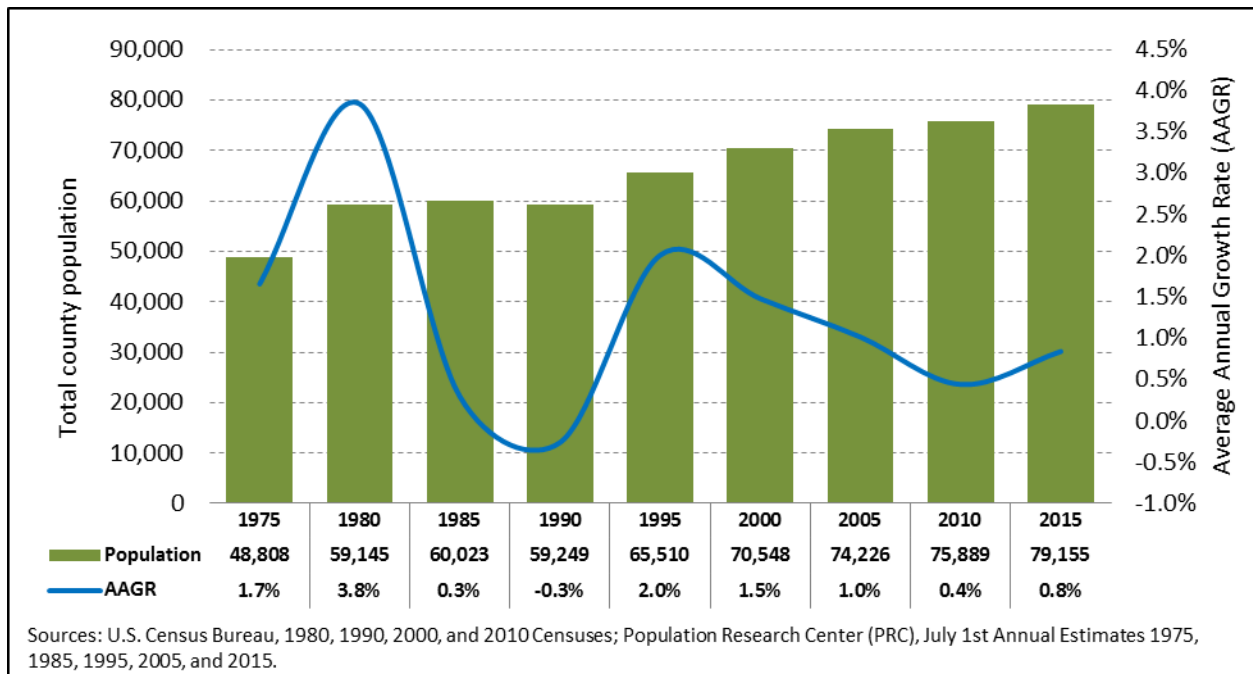
Historical Trends

Different growth patterns occur in different parts of the County. Each of Umatilla County’s sub-areas was examined for any significant demographic characteristics or changes in population or housing growth that might influence their individual forecasts. Factors that were analyzed include age composition of the population, ethnicity and race, births, deaths, migration, and number or growth rate of [housing units](#) as well as the [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, in general, local trends within sub-areas collectively influence population growth rates for the county.

Population

Umatilla County’s total population grew by about 62 percent between 1975 and 2015—from roughly 48,800 in 1975 to about 79,100 in 2015 (Figure 2). During this 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 1980s, challenging economic conditions, both nationally and within the county, led to population decline. Again, during the early 1990s population growth increased, but gave away to a steady decrease in population growth, continuing through the end of the last decade. Even so Umatilla County experienced positive population growth over the last decade (2000 to 2010)—averaging a little less than one percent per year. In recent years, growth rates have slightly increased, leading to faster paced population growth between 2010 and 2015.

Figure 2. Umatilla County—Total Population (1975-2015)



Umatilla County’s population change is the combined population growth or decline within each sub-area. During the 2000s, Umatilla County’s average annual population growth rate stood at a less than one percent (Figure 3). At the same time Umatilla and Hermiston UGBs recorded average annual growth

rates of 2.8 and 2.1 percent, respectively. Adams also experienced an average annual growth rate greater than one percent, while population in Echo, Helix, Milton-Freewater, and Stanfield increased at rates near or below that of the county as a whole. Athena, Pendleton, Pilot Rock, Ukiah, Weston, and the area outside UGBs recorded population decline between 2000 and 2010.

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

	2000	2010	AAGR (2000-2010)	Share of County 2000	Share of County 2010
<i>Umatilla County</i>	70,548	75,889	0.7%	100.0%	100.0%
Adams	298	350	1.6%	0.4%	0.5%
Athena	1,229	1,134	-0.8%	1.7%	1.5%
Echo	668	722	0.8%	0.9%	1.0%
Helix	192	194	0.1%	0.3%	0.3%
Hermiston	15,635	19,234	2.1%	22.2%	25.3%
Milton-Freewater	6,677	7,213	0.8%	9.5%	9.5%
Pendleton	17,161	17,015	-0.1%	24.3%	22.4%
Pilot Rock	1,641	1,576	-0.4%	2.3%	2.1%
Stanfield	2,011	2,061	0.2%	2.9%	2.7%
Ukiah	258	193	-2.9%	0.4%	0.3%
Umatilla	5,786	7,623	2.8%	8.2%	10.0%
Weston	742	679	-0.9%	1.1%	0.9%
Outside UGBs	18,250	17,895	-0.2%	25.9%	23.6%

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

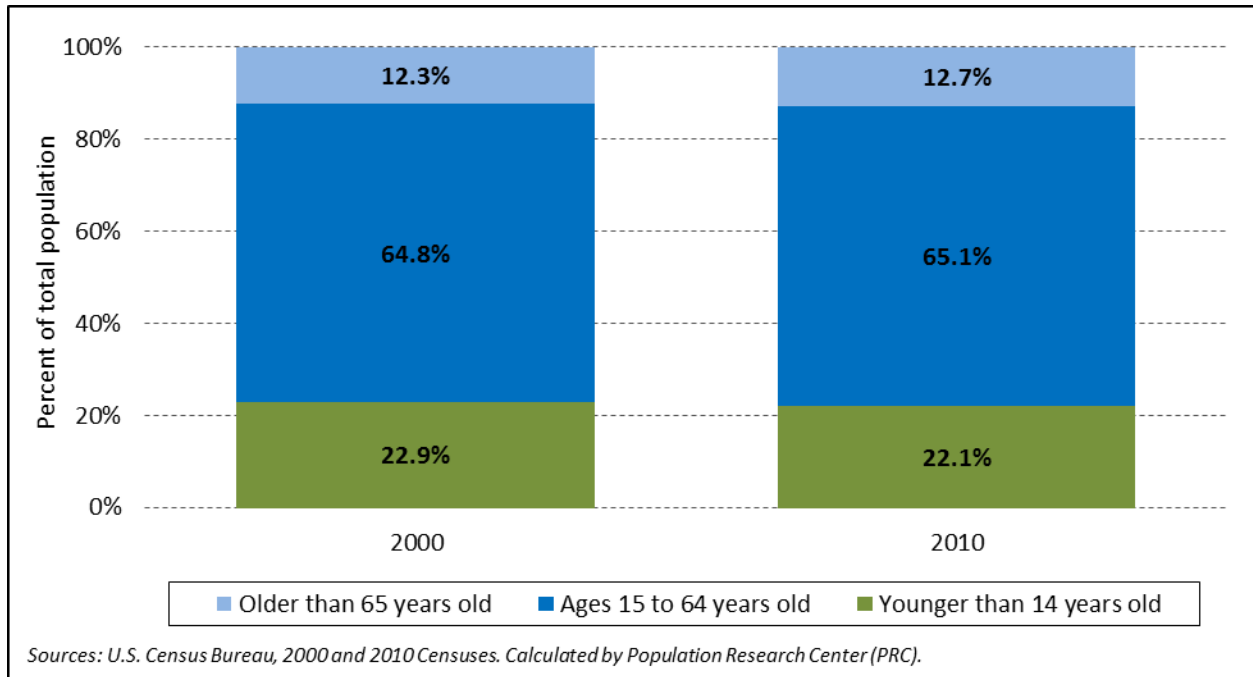
Note 1: For simplicity each UGB is referred to by its primary city's name.

Age Structure of the Population

Umatilla County's population is aging, but at a much slower pace compared to most areas across Oregon. 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. For Umatilla County the decline in the population of women at childbearing ages has not been true. Births have actually increased, in spite of the slight rise in the proportion of county population 65 or older between 2000 and 2010 (Figure 4). Further underscoring Umatilla County's modest trend in aging, the median age went from about 35 in 2000 to 36 in 2010, an increase that is half of what is observed statewide and in many cases a quarter of the increase in age seen in many of Oregon's counties over the same time period.¹

¹ Median age is sourced from the U.S. Census Bureau's 2000 and 2010 Censuses, DP-1.

Figure 4. Umatilla 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 size². The Hispanic population within Umatilla County increased substantially from 2000 to 2010 (Figure 5), while the White, non-Hispanic population decreased over the same time period. The 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.

² Historical data shows that some racial/ethnic groups, such as Hispanics, generally have higher fertility rates than other groups (<http://www.pewsocialtrends.org/2012/05/17/explaining-why-minority-births-now-outnumber-white-births/>); also average household sizes can vary among racial/ethnic groups (https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&sqi=2&ved=0ahUKEwjp09-PltXMAhUC_WMKHQFZCBEQFggcMAA&url=http%3A%2F%2Fwww.census.gov%2Fpopulation%2Fsocdemo%2Fhh-fam%2Fcps2011%2FtabAVG1.xls&usg=AFQjCNfFO2dYB_OKGxp-ag3hBMVDx4_j9w&cad=rja).

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

Hispanic or Latino and Race	2000		2010		Absolute Change	Relative Change
<i>Total population</i>	70,548	100.0%	75,889	100.0%	5,341	7.6%
Hispanic or Latino	11,366	16.1%	18,107	23.9%	6,741	59.3%
Not Hispanic or Latino	59,182	83.9%	57,782	76.1%	-1,400	-2.4%
White alone	54,670	77.5%	52,691	69.4%	-1,979	-3.6%
Black or African American alone	535	0.8%	557	0.7%	22	4.1%
American Indian and Alaska Native alone	2,258	3.2%	2,383	3.1%	125	5.5%
Asian alone	518	0.7%	626	0.8%	108	20.8%
Native Hawaiian and Other Pacific Islander alone	51	0.1%	95	0.1%	44	86.3%
Some Other Race alone	118	0.2%	55	0.1%	-63	-53.4%
Two or More Races	1,032	1.5%	1,375	1.8%	343	33.2%

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

Births

Historical fertility rates for Umatilla County do not mirror trends similar to Oregon as a whole. Total fertility rates increased in Umatilla County from 2000 to 2010, while they decreased in the state over the same time period (Figure 6). Fertility for high end mothers marginally increased in both Umatilla County and Oregon (Figure 7 and Figure 8), while peak fertility remained relatively unchanged in Umatilla County. The peak in Oregon as a whole shifts to a slightly older age group. County fertility changes are distinct from those of the state in three ways. First, total fertility in Umatilla County increased during the 2000s, which differed from the decrease observed statewide. Second, total fertility in the county remains well above [replacement fertility](#), while for Oregon as a whole, total fertility continues to fall further below replacement fertility. Third, the number of births to younger women did not decline as sharply in Umatilla County when compared to Oregon as a whole.

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

	2000	2010
Umatilla County	2.33	2.49
Oregon	1.98	1.80

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

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

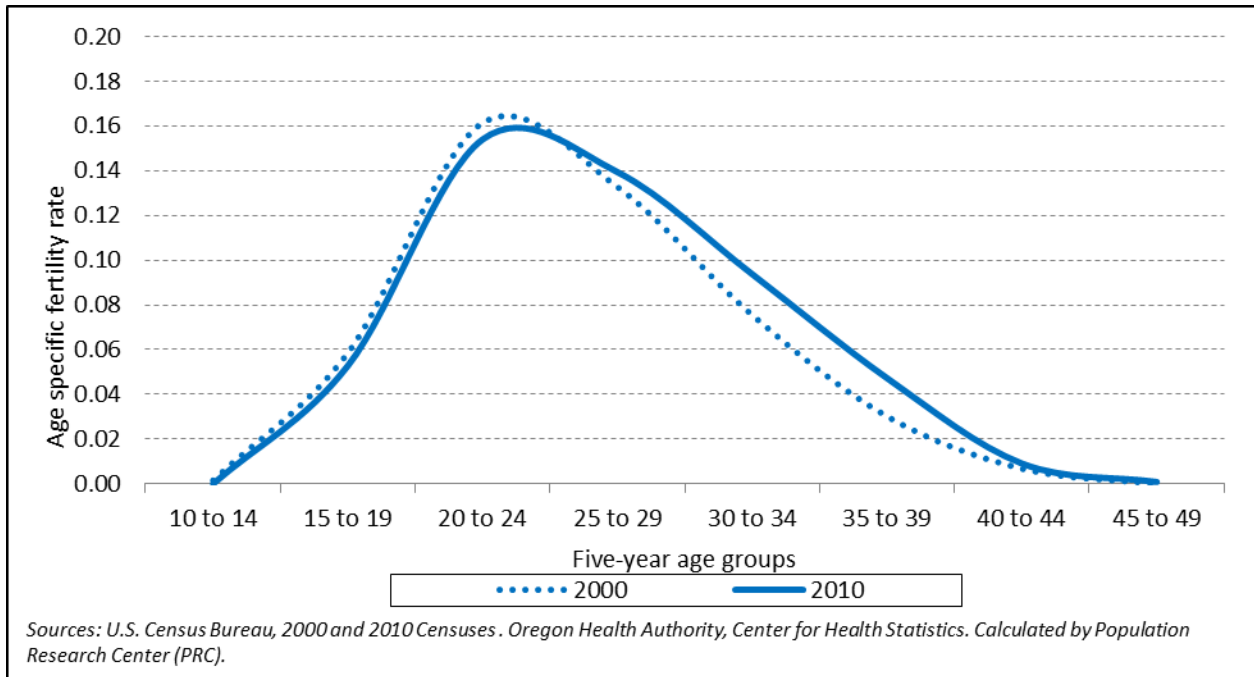


Figure 8. Oregon—Age Specific Fertility Rate (2000 and 2010)

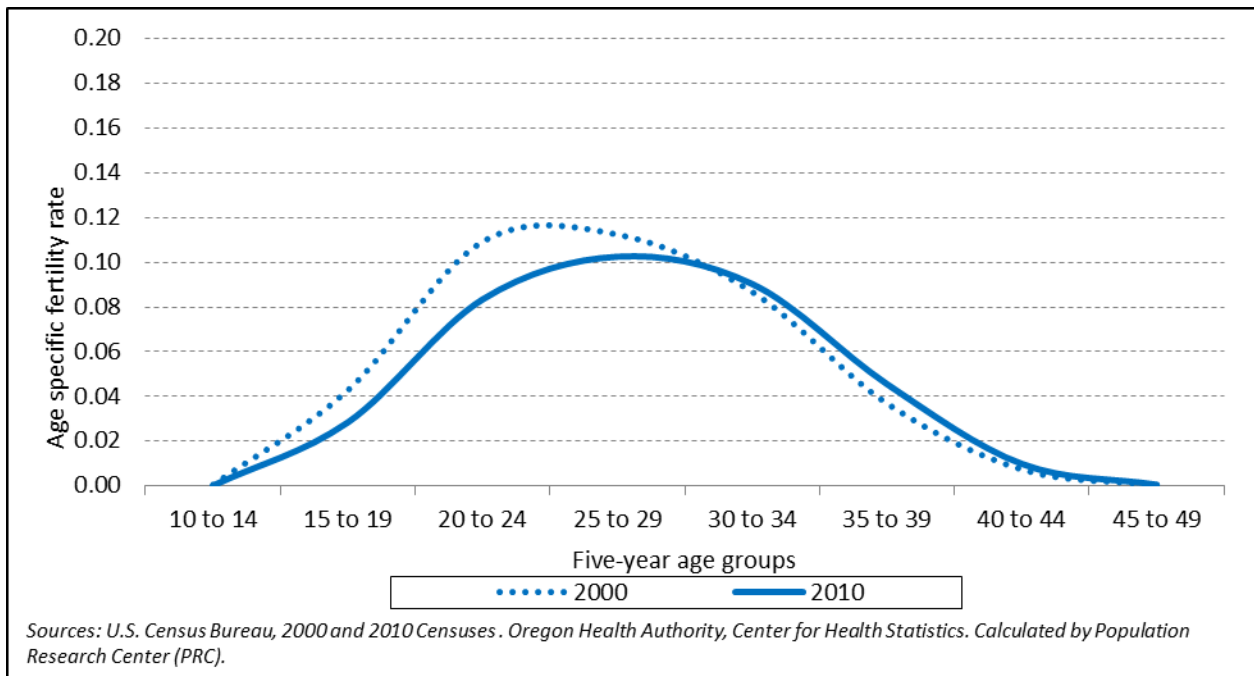


Figure 9 shows the number of births by the area in which the mother resides. Generally the number of births fluctuates from year to year. For example, a sub-area with an increase in births between two years could easily show a decrease for a different time period unless there were a general trend in

either direction. However for the 10- year period from 2000 to 2010 the county as a whole and three of its most populous cities saw an increase in births, while the Umatilla UGB, all smaller UGBs, and the area outside UGBs recorded a decrease in births (Figure 9).

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

	2000	2010	Absolute Change	Relative Change	Share of County 2000	Share of County 2010
<i>Umatilla County</i>	1,040	1,106	66	6.3%	100.0%	100.0%
Hermiston	271	368	97	35.8%	26.1%	33.3%
Milton-Freewater	112	134	22	19.6%	10.8%	12.1%
Pendleton	212	222	10	4.7%	20.4%	20.1%
Umatilla	141	110	-31	-22.0%	13.6%	9.9%
Smaller UGBs	246	187	-59	-24.0%	23.7%	16.9%
Outside UGBs	199	195	-4	-2.0%	19.1%	17.6%

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

Note 1: For simplicity each UGB is referred to by its primary city's name.

Note 2: Smaller UGBs are those with populations less than 7,000 in forecast launch year.

Deaths

Contrary to the statewide trend, people in Umatilla County are not necessarily living longer.³ For Umatilla County in 2000, life expectancy for males was 76 years and for females was 80 years. By 2010, life expectancy had remained relatively the same for males, but had slightly decreased for females. However, for both Umatilla County and Oregon, the survival rates changed little for most age groups 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 because of the aging baby boomers and the larger share of total population they represent (Figure 10).

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 10. Umatilla County and Sub-Areas—Total Deaths (2000 and 2010)

	2000	2010	Absolute Change	Relative Change	Share of County 2000	Share of County 2010
<i>Umatilla County</i>	456	529	73	16.0%	100.0%	100.0%
Hermiston	109	132	23	21.1%	23.9%	25.0%
Pendleton	104	149	45	43.3%	22.8%	28.2%
All other areas	243	248	5	2.1%	53.3%	46.9%

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

Note 1: For simplicity each UGB is referred to by its primary city's name.

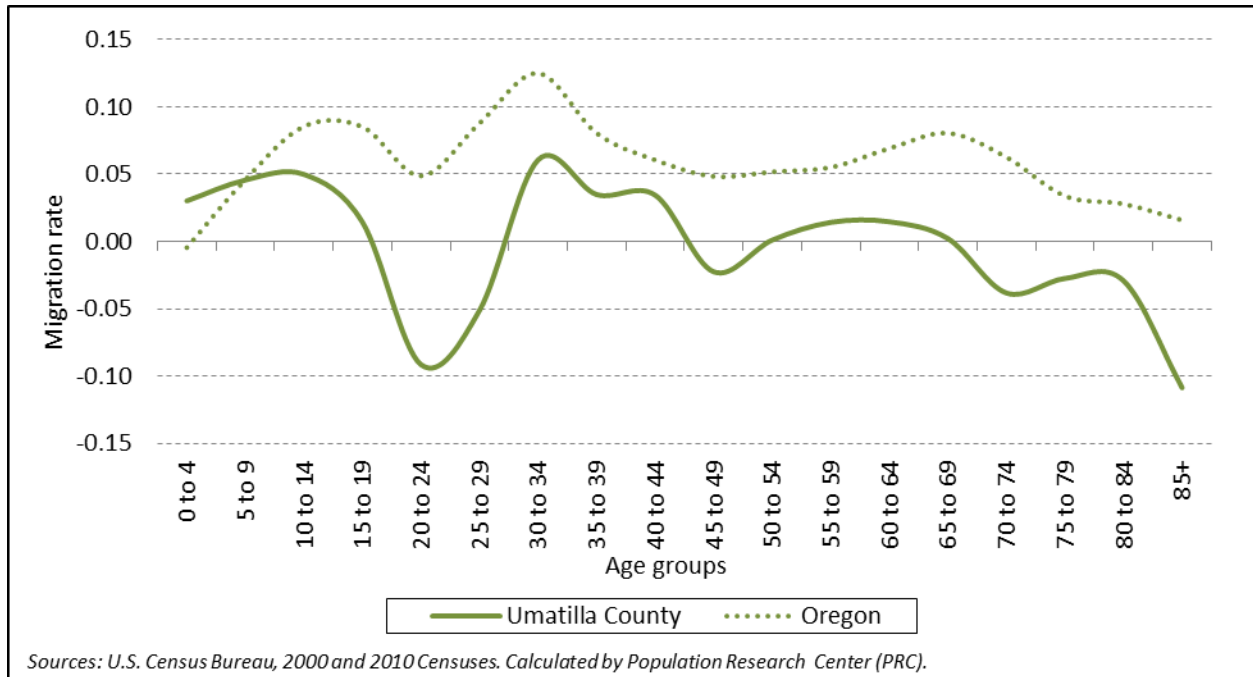
Note 2: All other areas includes some larger UGBs (those with populations greater than 7,000), all smaller UGBs (those with populations less than 7,000), and the area outside UGBs. Detailed, point level death data were unavailable for 2000, thus PRC was unable to assign deaths to some areas.

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 group. Figure 11 shows the historical age-specific migration rates by five-year age group, both for Umatilla County and Oregon. The migration rate is shown 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 for military service. At the same time however, the county attracted a substantial number of middle aged migrants who likely moved into the county due to economic opportunities. Many in this group of in-migrants were assumed to be accompanied by their children as shown in the in-migration of persons under the age of 14 in Figure 11. Net in-migration of persons of retiree ages also occurred followed by a net out-migration of the oldest age groups perhaps moving to become closer in proximity to family members who live elsewhere or for medical facilities.

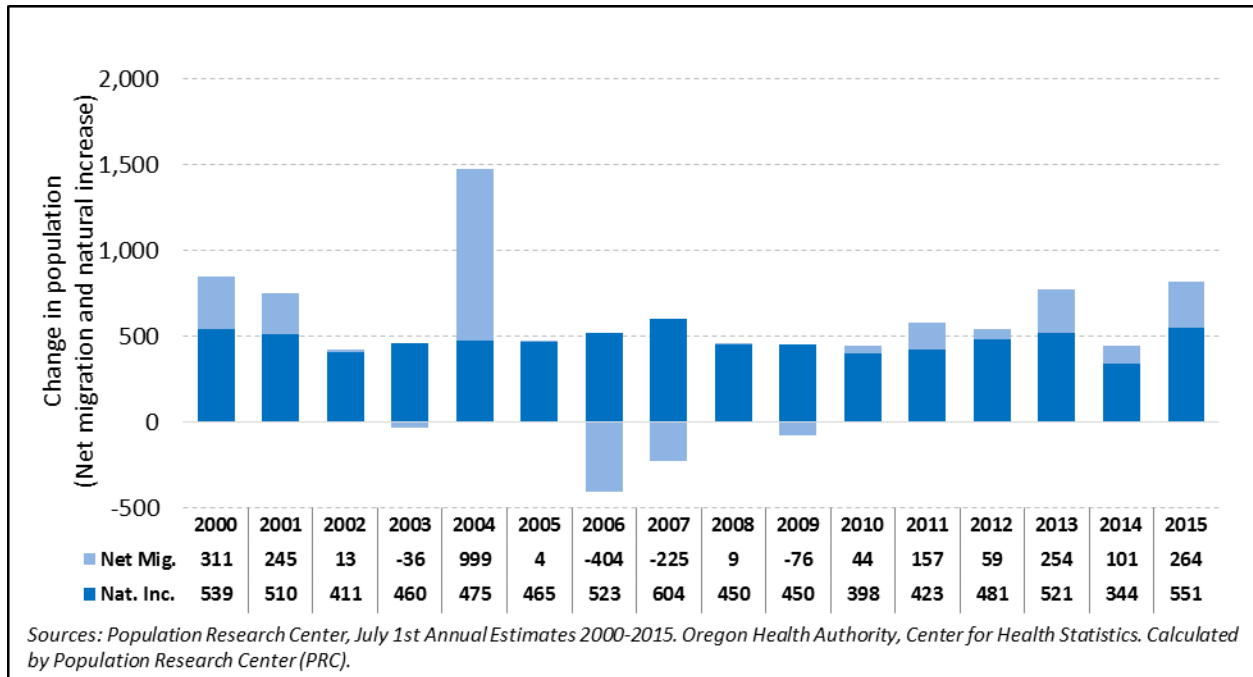
Figure 11. Umatilla County and Oregon—Age Specific Migration Rates (2000-2010)



Historical Trends in Components of Population Change

In summary, Umatilla County’s positive population growth in the 2000s was the result of a steady natural increase and periods of substantial net in-migration (Figure 12). The larger number of births relative to deaths led to a natural increase (more births than deaths) in every year from 2000 to 2015. While net in-migrants fluctuated dramatically during the early and middle years of the last decade, the number of in-migrants has been slightly more stable during recent years, also contributing to population increase. Even so natural increase continues to account for most of the population growth.

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



Housing and Households

The total number of housing units in Umatilla 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 about seven percent countywide; this resulted in more than 2,000 new housing units (Figure 13). Hermiston captured the largest share of the growth in total housing units, with Pendleton, Milton-Freewater, Umatilla, and the area outside UGBs also seeing large shares of the countywide housing growth. In terms of relative housing growth, Adams grew the most during the 2000s, its total housing units increased more than 18 percent (22 housing units) by 2010.

The rates of increase in the number of total housing units in the county, UGBs, and area outside UGBs are similar to the growth rates of their corresponding populations. The growth rates for housing may slightly differ from the rates for population because the numbers of total housing units are smaller than the numbers of persons, or the UGB has experienced changes in the average number of persons per household (PPH) or in occupancy rates. However, the pattern of population and housing change in the county is relatively similar.

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

	2000	2010	AAGR (2000-2010)	Share of County 2000	Share of County 2010
<i>Umatilla County</i>	27,676	29,693	0.7%	100.0%	100.0%
Adams	119	141	1.7%	0.4%	0.5%
Athena	476	486	0.2%	1.7%	1.6%
Echo	260	267	0.3%	0.9%	0.9%
Helix	70	72	0.3%	0.3%	0.2%
Hermiston	6,234	7,243	1.5%	22.5%	24.4%
Milton-Freewater	2,573	2,813	0.9%	9.3%	9.5%
Pendleton	6,682	6,976	0.4%	24.1%	23.5%
Pilot Rock	679	680	0.0%	2.5%	2.3%
Stanfield	725	742	0.2%	2.6%	2.5%
Ukiah	128	127	-0.1%	0.5%	0.4%
Umatilla	1,848	2,076	1.2%	6.7%	7.0%
Weston	288	274	-0.5%	1.0%	0.9%
Outside UGBs	7,594	7,796	0.3%	27.4%	26.3%

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

Note 1: 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 cause larger changes—in relative terms. From 2000 to 2010 the occupancy rate in Umatilla County declined slightly; this was most likely due to slack in demand for housing as individuals experienced the effects of the Great Recession. Many sub-areas experienced similar declines in occupancy rates, with two smaller UGBs (i.e., Helix and Ukiah) experiencing more extreme declines in their rates. A few UGBs recorded increases in occupancy rates of more than one percentage point. These were Adams, Hermiston, Milton-Freewater, and Umatilla.

Average household size, or PPH, in Umatilla County was 2.7 in 2010, the same as in 2000 (Figure 14). Umatilla County's PPH in 2010 was slightly higher than for Oregon as a whole, which had a PPH of 2.5. PPH varied across the 12 UGBs, with all of them falling between two and three persons per household. In 2010 the highest PPH was in Helix with 3.3 and the lowest in Ukiah at 2.1.

Figure 14. Umatilla 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
<i>Umatilla County</i>	2.7	2.7	0.0	91.0%	90.6%	-0.4%
Adams	2.7	2.6	-0.1	89.9%	94.3%	4.4%
Athena	2.7	2.5	-0.2	94.3%	92.2%	-2.1%
Echo	2.7	2.8	0.2	95.4%	95.5%	0.1%
Helix	3.0	3.3	0.3	91.4%	80.6%	-10.9%
Hermiston	2.7	2.8	0.1	92.7%	94.8%	2.1%
Milton-Freewater	2.8	2.8	0.0	89.4%	90.4%	1.0%
Pendleton	2.4	2.4	0.0	94.0%	91.5%	-2.5%
Pilot Rock	2.6	2.6	0.0	92.8%	89.7%	-3.1%
Stanfield	3.0	3.0	0.0	92.7%	92.9%	0.2%
Ukiah	2.5	2.1	-0.4	76.6%	66.1%	-10.4%
Umatilla	3.0	3.0	0.0	90.5%	92.8%	2.3%
Weston	2.7	2.7	-0.1	94.8%	93.1%	-1.7%
Outside UGBs	2.7	2.7	-0.1	87.3%	85.4%	-1.9%

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

Note 1: 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 demographic 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 Umatilla County's population forecast as well as for the forecasts for larger sub-areas.⁴ The assumptions are derived from observations based on life events, as well as trends unique to Umatilla County and its larger sub-areas. Population change for smaller sub-areas is determined by the change in the number of total housing units, PPH, and housing occupancy. 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. Young families tend to have higher PPH than older populations. The forecast period is 2016-2066.

Assumptions for the County and Larger Sub-Areas

During the forecast period, the population in Umatilla County is expected to age more quickly during the first half of the forecast period and then remain relatively stable over the remainder of the forecast horizon. Fertility rates are expected to slightly decline throughout the forecast period. Total fertility in Umatilla County is forecast to very slightly decrease from 2.2 children per woman in 2015 to 2.1 children per woman by 2065. Similar patterns of mildly 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 the advancement in medical technology and health care. 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 78 years in 2010 to 85 in 2060. However, in spite of increasing life expectancy and the corresponding increase in survival rates, Umatilla County's aging population and large population cohort reaching a later stage of life will increase the overall number of deaths throughout the forecast period. Larger sub-areas within the county will 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

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.

direction and the volume of migration. Net migration rates consider historical trends unique to Umatilla County. Net out-migration of younger persons and net in-migration of middle-age individuals will persist throughout the forecast period. Countywide average annual net migration is expected to increase from about 200 net in-migrants in 2015 to about 300 net in-migrants in 2035. Over the last 30 years of the forecast period average annual net migration is expected to grow more steadily, remaining at about 400 net in-migrants through 2065. Net in-migration is expected to account for roughly less than half of the Umatilla County's population growth for the first half forecast period and more than half of it during the second half period.

Assumptions for Smaller Sub-Areas

Rates of population growth for the smaller UGBs are assumed to be determined by corresponding growth in the number or the growth rate 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.

PPH is assumed to stay fairly stable over the forecast period with some small decline. Smaller household size is associated with an aging population in Umatilla County and its sub-areas. Occupancy rates are assumed to decline a little over the forecast period, as more housing is available.

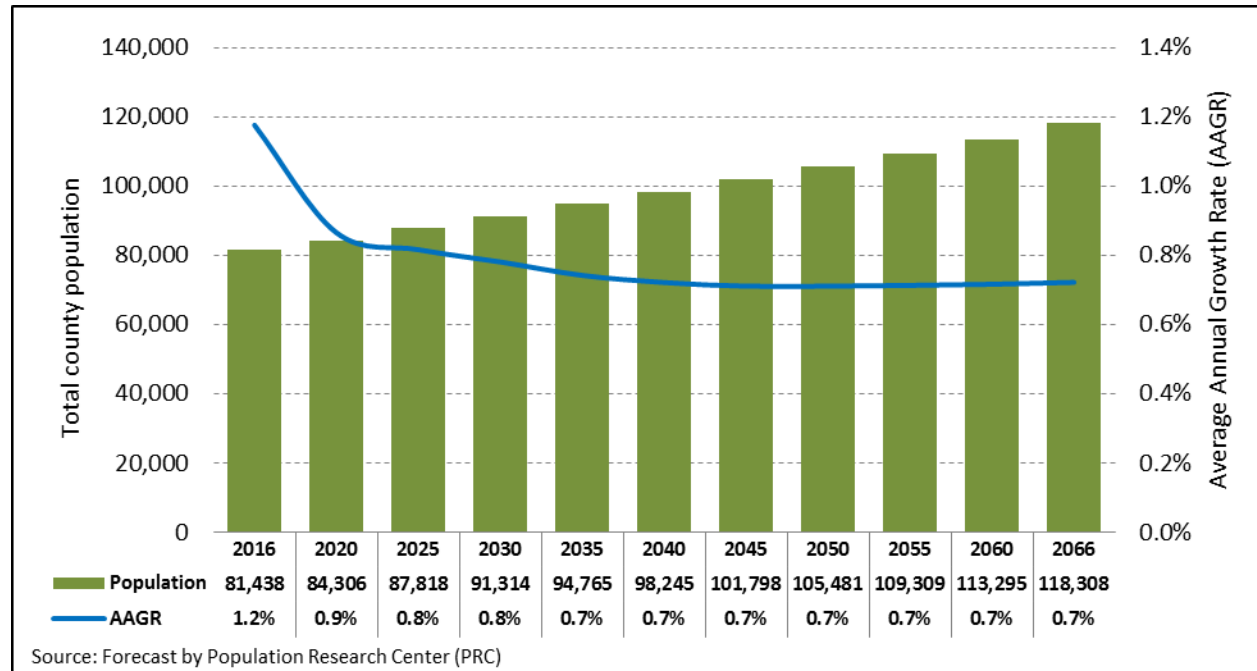
In addition, for sub-areas experiencing population growth, we assume a higher growth rate in the near-term, with growth stabilizing over the remainder of the forecast period. If planned housing units were reported in the surveys, then they are assumed to be constructed over the next 5-15 years. Finally,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

Forecast Trends

Under a most-likely population growth scenario in Umatilla County, countywide and sub-area populations are expected to increase over the forecast period. The countywide population growth rate is forecast to slowly decline throughout the forecast period. Forecasting tapered population growth is driven by both an aging population—contributing to steady increase in deaths over the entire forecast period—although the expectation of steadily growing in-migration over the second half of the forecast period will occur. The combination of these factors will likely result in a slowly declining population growth rate as time progresses through the forecast period.

Umatilla County’s total population is forecast to increase by a little more than 36,800 persons (45 percent) from 2016 to 2066, which translates into a total countywide population of 118,308 in 2066 (Figure 15). The population is forecast to grow at the highest rate—approximately one percent per year—in the near-term (2016-2025). This anticipated population growth in the near-term is based on two core assumptions: (1) Umatilla County’s economy will continue to strengthen in the next 10 years; (2) Middle-age persons will continue to migrate into the county—bringing their children or having more children after they arrive. The largest component of growth in this initial period is natural increase. Nearly 4,100 more births than deaths are forecast for the 2016 to 2025 period. At the same time more than 2,100 in-migrants are also forecast, combining with a natural increase for continued strong population growth.

Figure 15. Umatilla County—Total Forecast Population by Five-year Intervals (2016-2066)



Umatilla County’s four largest UGBs—Hermiston, Milton-Freewater, Pendleton, and Umatilla—are forecast to experience a combined population growth of more than 12,800 from 2016 to 2035 and more than 23,100 from 2035 to 2066 (Figure 16). The Hermiston UGB is expected to increase by more than

7,100 persons from 2016 to 2035, growing from a total population of 21,400 in 2016 to 28,600 in 2035. The Umatilla UGB is forecast to increase by a slightly faster rate, growing from 8,700 persons in 2016 to a population of 12,200 in 2035. Both Milton-Freewater and Pendleton are forecast to experience more mild population growth from 2016-2035. Growth is expected to occur more slowly for Hermiston, Umatilla, and Milton-Freewater during the second part of the forecast period, with total population increasing to 41,100, 17,500, and 10,900 respectively by 2066. At the same time Pendleton is forecast to grow at a slightly faster pace from 2035-2066, increasing to 21,600. Both Hermiston and Umatilla UGBs are expected to grow as a share of total county population, while Milton-Freewater and Pendleton are forecast to decrease as a share of total county population.

Population outside UGBs is expected to grow by more than 200 people from 2016 to 2035, but is expected to grow at a slower rate during the second half of the forecast period, only adding a little more than 180 people from 2035 to 2066. The population of the area outside UGBs is forecast to decline as a share of total countywide population over the forecast period, composing 24 percent of the countywide population in 2015 and less than 20 percent in 2066.

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

	2016	2035	2066	AAGR (2015-2035)	AAGR (2035-2066)	Share of County 2016	Share of County 2035	Share of County 2066
<i>Umatilla County</i>	81,438	94,765	118,308	0.8%	0.7%	100.0%	100.0%	100.0%
Hermiston	21,488	28,667	41,104	1.5%	1.2%	26.4%	30.3%	34.7%
Milton-Freewater	7,653	8,738	10,993	0.7%	0.7%	9.4%	9.2%	9.3%
Pendleton	17,325	18,359	21,607	0.3%	0.5%	21.3%	19.4%	18.3%
Umatilla	8,714	12,284	17,517	1.8%	1.1%	10.7%	13.0%	14.8%
Smaller UGBs	7,140	7,376	7,568	0.2%	0.1%	8.8%	7.8%	6.4%
Outside UGBs	19,119	19,341	19,520	0.1%	0.0%	23.5%	20.4%	16.5%

Source: Forecast by Population Research Center (PRC)

Note 1: For simplicity each UGB is referred to by its primary city's name.

Note: Smaller UGBs are those with populations less than 7,000 in forecast launch year.

Hermiston, Umatilla County's largest UGB, and Umatilla UGB are expected to capture the largest share of total countywide population growth during the initial 19 years of the forecast period (Figure 17); however, both of these areas are forecast to capture a smaller share of countywide population growth during the last 31 years of the forecast period. Milton-Freewater and Pendleton are expected to capture an increasing share of countywide population growth over the forecast period.

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

	2016-2035	2035-2066
<i>Umatilla County</i>	100.0%	100.0%
Hermiston	53.9%	52.8%
Milton-Freewater	8.1%	9.6%
Pendleton	7.8%	13.8%
Umatilla	26.8%	22.2%
Smaller UGBS	1.8%	0.8%
Outside UGBs	1.7%	0.8%

Source: Forecast by Population Research Center (PRC)

Note 1: For simplicity each UGB is referred to by its primary city's name.

Note: Smaller UGBs are those with populations less than 7,000 in forecast launch year.

The remaining smaller UGBs are expected to grow by a combined number of about 230 persons from 2016 to 2035, with a combined average annual growth rate of 0.2 percent (Figure 16). This growth rate is due to expected mild growth in all smaller UGBs (Figure 18). Athena, Pilot Rock, Ukiah, and Weston are expected to record population increase rather than the decrease observed during the last decade (2000 to 2010). Similar to the larger UGBs and the county as a whole, population growth rates are forecast to decline for the second half of the forecast period (2035 to 2066). The smaller UGBs are expected to collectively add nearly 190 people from 2035 to 2066.

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

	2016	2035	2066	AAGR (2016-2035)	AAGR (2035-2066)	Share of County 2016	Share of County 2035	Share of County 2066
<i>Umatilla County</i>	81,438	94,765	118,308	0.8%	0.7%	100.0%	100.0%	100.0%
Adams	370	391	407	0.3%	0.1%	0.5%	0.4%	0.3%
Athena	1,151	1,165	1,180	0.1%	0.0%	1.4%	1.2%	1.0%
Echo	744	781	824	0.3%	0.2%	0.9%	0.8%	0.7%
Helix	204	213	214	0.2%	0.0%	0.3%	0.2%	0.2%
Pilot Rock	1,576	1,576	1,576	0.0%	0.0%	1.9%	1.7%	1.3%
Stanfield	2,144	2,280	2,383	0.3%	0.1%	2.6%	2.4%	2.0%
Ukiah	256	258	261	0.1%	0.0%	0.3%	0.3%	0.2%
Weston	695	713	722	0.1%	0.0%	0.9%	0.8%	0.6%
Larger UGBs	55,179	68,049	91,220	1.1%	0.9%	67.8%	71.8%	77.1%
Outside UGBs	19,119	19,341	19,520	0.1%	0.0%	23.5%	20.4%	16.5%

Source: Forecast by Population Research Center (PRC)

Note 1: For simplicity each UGB is referred to by its primary city's name.

Note 2: Larger UGBs are those with populations equal to or greater than 7,000 in forecast launch year.

Umatilla County's smaller sub-areas are expected to compose roughly 1.8 percent of countywide population growth in the first 19 years of the forecast period and about 0.8 percent in the last 31 years (Figure 17). Every smaller UGB is expected to capture an increasing share of countywide population growth, with Pilot Rock and Stanfield capturing the largest increase in their share of countywide population growth between the initial 19 and final 31 years of the forecast period.

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

	2016-2035	2035-2066
<i>Umatilla County</i>	<i>100.0%</i>	<i>100.0%</i>
Adams	0.2%	0.1%
Athena	0.1%	0.1%
Echo	0.3%	0.2%
Helix	0.1%	0.0%
Pilot Rock	0.0%	0.0%
Stanfield	1.0%	0.4%
Ukiah	0.0%	0.0%
Weston	0.1%	0.0%
Larger UGBs	96.6%	98.4%
Outside UGBs	1.7%	0.8%

Source: Forecast by Population Research Center (PRC)

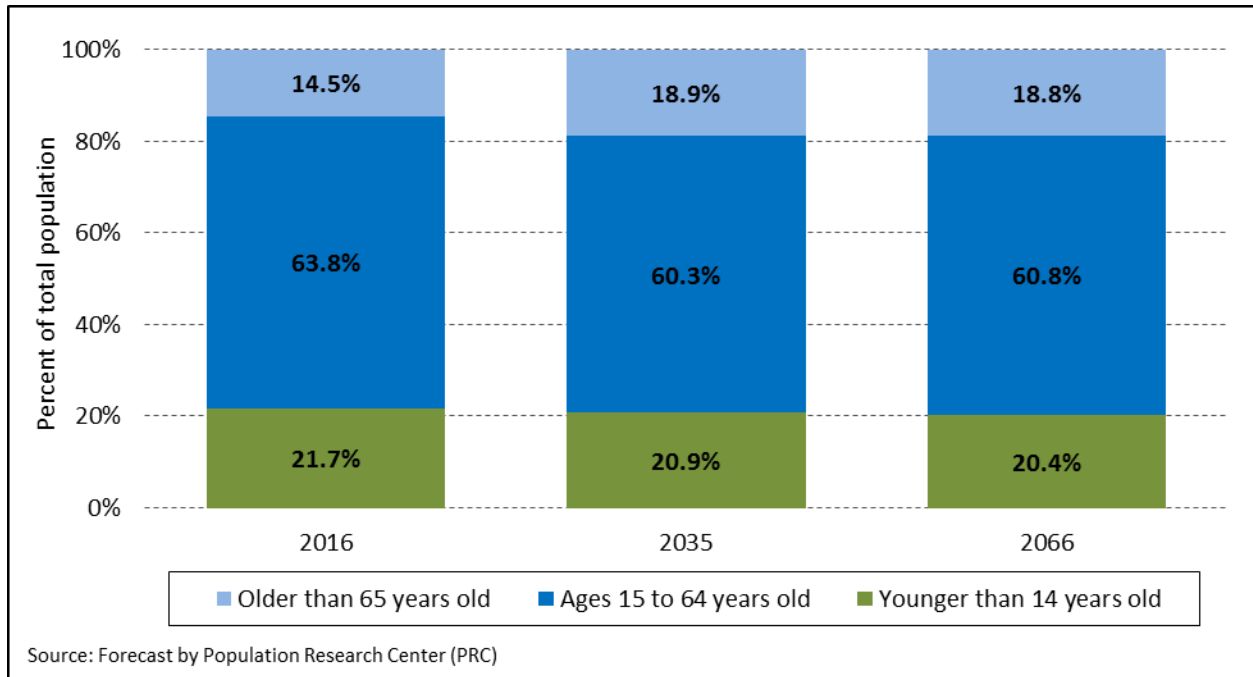
Note 1: For simplicity each UGB is referred to by its primary city's name.

Note 2: Larger UGBs are those with populations equal to or greater than 7,000 in forecast launch year.

Forecast Trends in Components of Population Change

As previously discussed, a key factor in increasing deaths is an aging population. From 2016 to 2035 the proportion of county population 65 or older is forecast to grow from roughly 15 percent to about 19 percent; however the proportion of the population 65 or older is expected to actually slightly decrease from 2035 to 2066 (Figure 20). For a more detailed look at the age structure of Umatilla County's population see the forecast table published to the forecast program website (<http://www.pdx.edu/prc/opfp>).

Figure 20. Umatilla County—Age Structure of the Population (2016, 2035, and 2066)

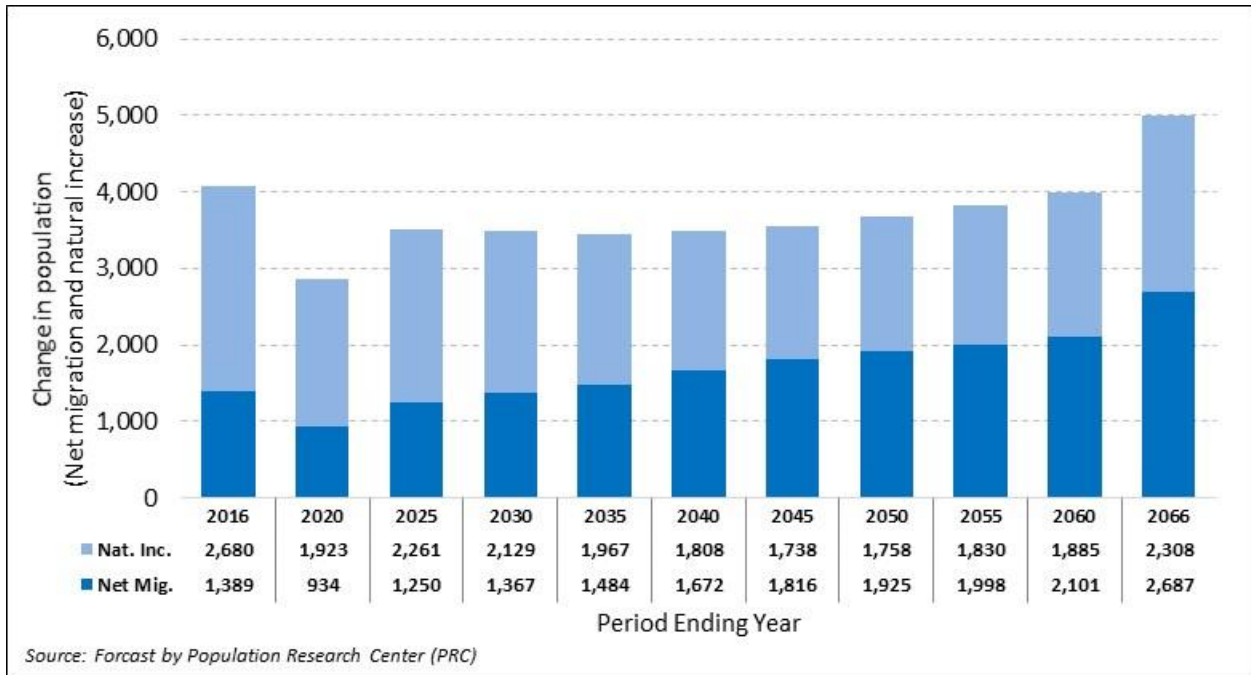


As the countywide population ages in the near-term—contributing to a slow-growing population of women in their years of peak fertility—and more women choose to have fewer children and have them at an older age, the increase in average annual births is expected to slow; this combined with the rise in number of deaths, is expected to cause a natural increase to remain relatively stable over the forecast period (Figure 21).

Net in-migration is forecast to increase gradually over the remainder of the forecast period. The majority of these net in-migrants are expected to be middle-aged individuals and children under the age of 14.

In summary, a steady magnitude of natural increase and increasing net in-migration are expected to lead to population growth through the entire forecast period (Figure 21).

Figure 21. Umatilla County—Components of Population Change, 2016-2066



Glossary of Key Terms

Cohort-Component Method: A method used to forecast future populations based on changes in births, deaths, and migration over time; this method models the population in age cohorts, which are survived into progressively older age groups over time and are subject to age-specific mortality, fertility and net migration rates to account for population change.

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 residency.

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 quarters population counts.

Occupancy rate: The proportion of total housing units that is occupied by individuals or groups 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. This is commonly estimated to be 2.1 children per woman in the U.S.

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 Helix, Pendleton, Pilot Rock, Stanfield, Ukiah, and Weston did not submit survey responses.

Adams—Umatilla County—11/02/2015						
Observations about Population Composition (e.g. about children, the elderly, racial ethnic groups)	Observations about Housing (including vacancy rates)	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population and Housing Growth; Other notes
Diverse group of all age groups. There are families with school age kids, double income no kids, single occupants, and retired individuals, and retired couples. Not diverse in ethnic groups.	The city has the opportunity to have a few housing developments but not many. City is on a septic system which influences development. Several houses need demolished which may	There are potentially 4 to 5 new house sites that could be developed. One will be completed in 2016. There are 4 vacant lots for sale which could be developed in the next 3-5 years.	None	None	Infrastructure is in good shape and capable of expansion. Some roads could use some work but the water utility is capable of growth.	Promos: Hinders: Septic system and the few amount of developable lots within urban growth boundary are hindrances to growth

Adams—Umatilla County—11/02/2015

	<p>spur additional growth. Occupancy rates remain fairly stable.</p>					
<p>Highlights or summary of influences on or anticipation of population and housing growth from planning documents and studies</p>	<p>Planning commission and council have begun completing surveys of citizens then doing review of the developmental code book / comprehensive plan. This will allow the city to keep on top of the changes necessary to help with growth. The city adopted a “Tiny House” provision which may help with growth on smaller lots within the city limits.</p>					

Adams—Umatilla County—11/02/2015

**Other information
(e.g. planning
documents, email
correspondence,
housing
development
survey)**

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Athena—Umatilla County—10/27/2015

Observations about Population Composition (e.g. about children, the elderly, racial ethnic groups)	Observations about Housing (including vacancy rates)	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population and Housing Growth; Other notes
Population is virtually unchanged	4 unit Senior Housing building completed 12/2014.	N/A	N/A	N/A	N/A	<p>Promos:</p> <p>Hinders: Very small community with limited housing and business opportunities.</p>
<p>Highlights or summary of influences on or anticipation of population and housing growth from planning documents and studies</p>	<p>Due to the number of businesses in town, limited housing availability and being in a bedroom community we do not anticipate population or housing growth.</p>					

Athena—Umatilla County—10/27/2015

**Other information
(e.g. planning
documents, email
correspondence,
housing
development
survey)**

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Echo—Umatilla County—10/26/2015

Observations about Population Composition (e.g. about children, the elderly, racial ethnic groups)	Observations about Housing (including vacancy rates)	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population and Housing Growth; Other notes
<p>Echo is primarily White. The Hispanic population is low and relatively stable. Older 2 bed room homes dominate so we do attract an unstable low income white population for these homes that tend to have a high proportion of drug users and those on government assistance (about 10%)</p>	<p>Housing shortage, but little easily developable land is available. We do have a large urban growth boundary, but it is land on the hills above town with no sewer or water and we are in a critical ground water area, so getting water rights is</p>	<p>None</p>	<p>N/A</p>	<p>New wine/vineyard businesses. One well established vineyard business has created a surge of improvements in the downtown that is attracting visitors, but because of the housing market—no residents and limited employees. A second winery is being</p>	<p>Water good distribution system. No water for high use industries. The city is on a DEQ order requiring upgrades, project is waiting to see if we can get land and funding.</p>	<p>Promos:</p> <p>Hinders: Housing as noted earlier. Area wide job market</p>

Echo—Umatilla County—10/26/2015

	<p>difficult.</p> <p>There are people wanting homes in Echo and who want to bring their children to school here. We definitely could fill some nice 3 bedroom apartments or homes in the \$80,000 to \$140,000 range.</p>			<p>developed now with completion targeted for 2016.</p>		
<p>Highlights or summary of influences on or anticipation of population and housing growth from planning documents and</p>	<p>No new comp plan changes in last few years. The Downtown has undergone major improvements and private upgrades to historic buildings. City’s participation and success in America in Bloom Livability Program is attracting attention and interest in Echo, but no growth yet.</p>					

Echo—Umatilla County—10/26/2015

studies

**Other information
(e.g. planning
documents, email
correspondence,
housing
development
survey)**

Helix—Umatilla County—NO SURVEY RESPONSE

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

Helix—Umatilla County—NO SURVEY RESPONSE

**Other information
(e.g. planning
documents, email
correspondence,
housing
development
survey)**

Hermiston—Umatilla County—11/02/2015

Observations about Population Composition (e.g. about children, the elderly, racial ethnic groups)	Observations about Housing (including vacancy rates)	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population and Housing Growth; Other notes
<p>Increase in number of enrolled students. Reference PSU school forecast from 2014.</p>	<p>Housing is steady. Absorption is 3-6 houses per month.</p>	<p>66 apts units and 60 SFR units planned. Olive Court, Abarim Meadows, Desert Sky, Castle Homes, Highland Summit, Sterling Ridge. (More development detail below)</p>	<p>Guardian Angel, Aspen Springs</p>	<p>Holiday Inn Express, Guardian Angel, Aspen Springs, Ranch & Home. City aggressively recruits industry.</p>	<p>Waste water treatment plant, new signal lights</p>	<p>Promos: Largest city on the East side, ag center, retail hub, transport hub.</p> <p>Hinders: Proximity to Tri-Cities, lack of upper market retail opportunities, increasing congestion</p>
<p>Highlights or summary of influences on or anticipation of population and housing growth from planning documents and studies</p>						

Hermiston—Umatilla County—11/02/2015

**Other information
(e.g. planning
documents, email
correspondence,
housing
development
survey)**

City anticipates 2% population growth each year. Infrastructure has capacity to reach about 36,000 without substantial upgrades.

Olive Court with 8 SFR units, preliminary plat approved. Target price: \$250k range. Abarim Meadows with 7 SFR units, ph1 of 2 approved 4 lots. Desert Sky Estates with 14 SFR units, at ph4 of multiphase plan. Castle Homes with 10 SFR units, at ph3 of multiphase plan. Highland Summit with 21 SFR units, at ph7 of multiphase plan. Sterling Ridge with 66 MF 2-3 bedroom apt units, site plan approved.

Milton-Freewater—Umatilla County—11/04/2015

Observations about Population Composition (e.g. about children, the elderly, racial ethnic groups)	Observations about Housing (including vacancy rates)	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population and Housing Growth; Other notes
Slight increase in Hispanic population over the past several years. Also increase in aging population.	Almost no new housing starts in 2015.	We have a developer very interested in re-filing a preliminary subdivision plat from several years ago for approximately 49 lots. Estimated completion in 2016. Too soon to tell but more than likely targeting families.	None	Potential industrial expansion - could see up to 50 new employees. Otherwise, expect a few small new businesses.	Sewer treatment plant upgrades in progress. As a result, all infrastructure will be in place to serve all land within the City's UGB.	<p>Promos: Plenty of land within the UGB to accommodate additional housing needs. Lower development costs in City than in neighboring cities across state line, and lower utility costs as well.</p> <p>Hinders: There are few very large employers.</p>

Milton-Freewater—Umatilla County—11/04/2015

<p>Highlights or summary of influences on or anticipation of population and housing growth from planning documents and studies</p>	<p>Have not met anticipated population growth in all studies previously done; however, still feel that we are poised for increased growth.</p>
<p>Other information (e.g. planning documents, email correspondence, housing development survey)</p>	

Pendleton—Umatilla County—NO SURVEY RESPONSE

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

Pendleton—Umatilla County—NO SURVEY RESPONSE

<p>Other information (e.g. planning documents, email correspondence, housing development survey)</p>	
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Pilot Rock—Umatilla County—NO SURVEY RESPONSE

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

Pilot Rock—Umatilla County—NO SURVEY RESPONSE

**Other information
(e.g. planning
documents, email
correspondence,
housing
development
survey)**

Stanfield—Umatilla County—NO SURVEY RESPONSE

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

Stanfield—Umatilla County—NO SURVEY RESPONSE

<p>Other information (e.g. planning documents, email correspondence, housing development survey)</p>	
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Ukiah—Umatilla County—NO SURVEY RESPONSE

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

Ukiah—Umatilla County—NO SURVEY RESPONSE

<p>Other information (e.g. planning documents, email correspondence, housing development survey)</p>	
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Umatilla—Umatilla County—11/04/2015

Observations about Population Composition (e.g. about children, the elderly, racial ethnic groups)	Observations about Housing (including vacancy rates)	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population and Housing Growth; Other notes
<p>Percentage of Hispanic to White, non-Hispanic population is nearly 50/50. White, non-Hispanic population tends to be predominantly older, while Hispanic population tends to be younger and easily has a larger population of school-age children and younger.</p>	<p>For at least the 2-3 years new housing units have been associated more with infill on vacant lots within existing subdivisions with most of those built in the moderate income range. Umatilla appears to have a relatively large</p>	<p>No new housing subdivision since mid-2000s. One developer is currently hoping to rezone property in a commercial zone to residential to accommodate 30-40 new single family dwellings despite abundance of undeveloped R-1 zoned land within the City, which makes likelihood of approval fair at best. Development plan unknown</p>	<p>None</p>	<p>3-5 data centers are in various phases of development within the Port Umatilla with each projected to employ approximately 25 employees each with incomes expected to be in the \$50k to \$75k range. There has been little, if any noticeable multiplier effect to date.</p>	<p>City is working on water & sewer plans to serve problems areas in UGB which will require annexations, but probably won't happen for 2-5 years. Wastewater treatment plans are being developed to support industrial development in the Port of Umatilla Industrial Park.</p>	<p>Promos: Close proximity to natural resources can promote to make the community an attractive place to live work, and play. Greater attention to areas within the UGB could greatly improve the City's base for attracting commercial and industrial uses.</p> <p>Hinders: Low-income, utility-impacted community to nearby Hermiston. Absentee ownership and owners making light or no effort to market or develop their properties.</p>

Umatilla—Umatilla County—11/04/2015

	percentage of substandard housing units occupied by low-income and seasonal farmworkers.	but expect 1 – 3 years until completion. Target price between \$135k and \$160k. Target population young to middle-age families with 1-3 children.				
<p>Highlights or summary of influences on or anticipation of population and housing growth from planning documents and studies</p>	<p>The City’s Comprehensive Land Use Plan really only focuses on the downtown area with a Downtown Revitalization Plan that was adopted in 2002 and which focuses on developing a core business area (there are a lot of vacant and/or underutilized parcels in the downtown area) surrounded by high density residential development. Until recently, efforts at implementing the plan have been minimal at best, due largely to a lack of staffing.</p>					
<p>Other information (e.g. planning documents, email correspondence, housing development survey)</p>						

Weston—Umatilla County—NO SURVEY RESPONSE

Observations about Population Composition (e.g. about children, the elderly, racial ethnic groups)	Observations about Housing (including vacancy rates)	Planned Housing Development/Est. 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						

Weston—Umatilla County—NO SURVEY RESPONSE

<p>studies</p>	
<p>Other information (e.g. planning documents, email correspondence, housing development survey)</p>	

Non-UGB Unincorporated Area—Umatilla County—11/04/2015

Observations about Population Composition (e.g. about children, the elderly, racial ethnic groups)	Observations about Housing (including vacancy rates)	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population and Housing Growth; Other notes
Housing size in Hispanic community is larger than average. West Co. area and NE County areas have large Hispanic populations.	Very low vacancy rate. Especially in Pendleton and Hermiston areas. Need for farm worker/temp orary/low income housing.	Partition plats created 13 new 5 acre parcels for SFD development. Currently, no permits issued for development. Housing will mostly be used for seasonal/recreational homes.	Barracks at Army Depot.	UAV project in Pendleton	N/A	<p>Promos: West Co. School District growing – especially Hermiston.</p> <p>Hinders:</p>
Highlights or summary of influences on or anticipation of population and housing growth from planning	Highway 395 Redevelopment Study shows growth continuing in west County.					

Non-UGB Unincorporated Area—Umatilla County—11/04/2015

<p>documents and studies</p>	
<p>Other information (e.g. planning documents, email correspondence, housing development survey)</p>	<p>Growth in 2015 was at high range of projection. See PSU population forecast.</p>

Email sent March 11, 2016, following the preliminary forecast meeting presentation. The comments below and the revision to the preliminary population forecasts were based on comments received during the meeting.

Hello Umatilla County and City Partners,

Thank you all again for participating our regional meetings and providing your valuable comments. According to your feedback on the presentations, we revisited our assumptions for the county and all UGBs and adjusted most preliminary forecasts.

Specifically, we lowered the forecasts for smaller UGBs to be closer to their historical average levels, while we increased the forecasts for Hermiston, Milton-Freewater, and Pendleton UGBs. We assume that historical net out-migration in Pendleton and Milton-Freewater will lessen (as additional people move to these places in search of affordable housing and livable locations outside of the Portland Metro and other areas). We increased Hermiston UGB's forecast slightly to more closely align with recent population and school enrollment growth (including population the ages of children's parents). Umatilla UGB's forecast remains the same as the presentation demonstrated. We lowered the forecasts for the non-UGB area according to local observations and expectations, and which match more closely with historical growth. As the increases and decreases did not exactly offset each other, the county total forecasts are updated accordingly as well.

These changes are supported by a previous version of the forecasts we had prepared prior to our meeting, but did not use for the presentation.

Attached are the two summary slides with updated forecasts. Please take a look and give us your feedback again at your early convenience. The publication of the proposed forecasts is scheduled by the end of March. We'll post the whole presentation soon on our website.

Appendix B: Specific Assumptions

Adams

The 5-year average annual housing unit growth rate is assumed to gradually decrease throughout the forecast period. The decreasing trend is consistent with the trend in the 2000s and in the 2010-2015 period. The occupancy rate is assumed to be fairly stable at 96.4 percent throughout the 50-year horizon. PPH is assumed to stay steady at 2.72 over the forecast period. The group quarters population is assumed to remain at zero.

Athena

The 5-year average annual housing unit growth rate is assumed to slightly decrease throughout the forecast period, which follows historical trends. The overall 50-year annual average housing unit growth rate is 0.1 percent. The occupancy rate is assumed to be stable at 92 percent throughout the 50-year horizon, which correlates to the Census 2010 occupancy rate. PPH is assumed to stay steady at 2.53 over the forecast period, also the same level as Census 2010. There is no group quarters population in Athena.

Echo

The 5-year average annual housing unit growth rate is assumed to be stable throughout the forecast period, and is at a slightly higher than the historical average annual rate in 2000s. The overall 50-year annual average housing unit growth is 0.4 percent. The occupancy rate is assumed to gradually decrease throughout the 50-year horizon, and averages 93.2 percent. This declining rate follows the trend post-2000. PPH is assumed to be stable at 2.85 over the forecast period, a level that is consistent with Census 2010. The group quarters population is assumed to be the average of Census 2000 and 2010 through the entire 50-year forecast period.

Helix

The 5-year average annual housing unit growth rate is assumed to be steady throughout the forecast period, and the overall 50-year annual average is 0.2 percent, which follows a declining trend of the 2000s. The occupancy rate is assumed to gradually decrease, following a trend that is consistent with the trend from the 2000s. The occupancy rate averages 86 percent throughout the 50-year horizon. PPH is assumed to stay stable at 3.15 over the forecast period, which is consistent with the ACS 2005-2009 5-year estimated PPH. The group quarters population is assumed to remain at zero.

Hermiston

Total fertility rates are assumed to follow the countywide historical trend (observed from the 2000 to 2010 period), gradually declining over the forecast period. Survival rates for the entire 50-year horizon are assumed to gradually increase to 2060. Survival rates for 2060 are assumed to be the same as those forecast for the county as a whole. Age-specific net migration rates are assumed to generally follow

historical patterns for Umatilla County, but at slightly higher rates for most age groups over the forecast period.

Milton-Freewater

Total fertility rates are assumed to follow the countywide historical trend of the 2000s, and gradually decline over the forecast period. Survival rates for the entire 50-year horizon are assumed to gradually increase to 2060. Survival rates for 2060 are assumed to be the same as those forecast for the county as a whole. Age-specific net migration rates are assumed to generally follow historical patterns for Umatilla County, but at higher rates for multiple age groups over the forecast period.

Pendleton

Total fertility rates are assumed to follow the trend of the 2000s and gradually decline over the forecast period. Survival rates for the whole 50-year horizon are assumed to gradually increase to 2060. Survival rates for 2060 are assumed to be the same as those forecast for the county as a whole. Age-specific net migration rates are assumed to generally follow historical patterns for Umatilla County, but with higher rates for multiple age groups over the forecast period.

Pilot Rock

The 5-year average annual housing unit growth rate is assumed to be stable at 0.1 percent throughout the forecast period, which is a little higher than in the 2000s. The occupancy rate is assumed to slightly decrease, a trend that is consistent with the trend from the 2000s and 2010-2015 period. The occupancy rate averages 86 percent throughout the 50-year horizon. PPH is assumed to stay stable at 2.60 over the forecast period, a rate that is consistent with historical census rates. The group quarters population is assumed to remain at zero.

Stanfield

The 5-year average annual housing unit growth rate is assumed to be stable at 0.1 percent throughout the forecast period, which is a little lower than in the 2000s. The occupancy rate is assumed to gradually increase throughout the 50-year horizon, and averages 96 percent, a higher rate than the 2010 Census level. PPH is assumed to stay steady at 3.0 over the forecast period, the same level as in Census 2010. There is no group quarters population in Stanfield.

Ukiah

The 5-year average annual housing unit growth rate is assumed to slightly decrease throughout the forecast period; and the overall 50-year annual average is zero percent, a rate that is slightly above the historical growth rate in the 2000s. The occupancy rate is assumed to be stable at 71 percent throughout the 50-year horizon, which is roughly the average of the Census 2000 and 2010 rates. PPH is assumed to stay stable at 2.50 over the forecast period, the same level as in the most recent Census. The group quarters population is assumed to also stay at Census 2010 level throughout the forecast period.

Umatilla UGB

Total fertility rates are assumed to follow the historical trend (observed from the 2000 to 2010 period), gradually declining over the forecast period. Survival rates for the whole 50-year horizon are assumed to gradually increase. Survival rates for 2060 are assumed to be the same as those forecast for the county as a whole. Age-specific net migration rates are assumed to generally follow historical patterns for Umatilla County, but with higher rates for multiple age groups over the forecast period.

Weston

The 5-year average annual housing unit growth rate is assumed to slightly decrease throughout the forecast period. The overall 50-year annual average housing unit growth rate is zero percent, a rate that is slightly above the rate in 2000s. The occupancy rate is assumed to gradually increase, and averages 94 percent throughout the 50-year horizon, which is roughly the average of Census 2000 and 2010 rates. PPH is assumed to stay stable at 2.68 persons per household over the forecast period, slightly higher than the 2010 Census. The group quarters population is assumed to remain at zero.

Outside UGBs

Total fertility rates are assumed to follow recent historical trends, gradually declining over the forecast period. Survival rates for the whole 50-year horizon are assumed to gradually increase to 2060. Survival rates for 2060 are assumed to be the same as those forecast for the county as a whole. Age-specific net migration rates are assumed to generally follow historical patterns for Umatilla County, but with higher rates for multiple age groups over the forecast period.

Appendix C: Detailed Population Forecast Results

Figure 22. Umatilla County - Population by Five-Year Age Group

Population Forecasts by Age Group / Year	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2066
00-04	5,686	5,852	6,107	6,351	6,553	6,747	6,969	7,220	7,461	7,689	7,888	7,934
05-09	5,980	5,862	6,075	6,335	6,607	6,858	7,060	7,287	7,516	7,760	7,988	8,037
10-14	5,978	6,254	6,097	6,314	6,603	6,928	7,190	7,396	7,601	7,833	8,077	8,132
15-19	5,809	6,038	6,386	6,222	6,462	6,799	7,133	7,398	7,577	7,780	8,008	8,066
20-24	5,528	5,548	5,821	6,155	6,015	6,287	6,615	6,936	7,165	7,333	7,522	7,572
25-29	4,981	5,450	5,474	5,741	6,088	5,987	6,257	6,580	6,870	7,090	7,249	7,294
30-34	5,412	5,059	5,665	5,688	5,983	6,384	6,278	6,558	6,868	7,165	7,388	7,428
35-39	5,168	5,655	5,198	5,818	5,859	6,201	6,616	6,503	6,765	7,079	7,379	7,431
40-44	5,067	5,175	5,790	5,320	5,972	6,052	6,406	6,832	6,688	6,952	7,268	7,336
45-49	4,842	4,974	5,108	5,714	5,268	5,952	6,034	6,387	6,786	6,640	6,898	6,968
50-54	5,017	4,753	4,918	5,051	5,673	5,267	5,956	6,040	6,371	6,768	6,621	6,679
55-59	5,148	5,054	4,726	4,893	5,042	5,705	5,301	5,996	6,060	6,391	6,789	6,767
60-64	4,984	5,013	4,905	4,591	4,775	4,957	5,622	5,231	5,902	5,970	6,299	6,384
65-69	4,028	4,632	4,678	4,586	4,317	4,530	4,714	5,360	4,980	5,629	5,703	5,774
70-74	2,833	3,458	4,129	4,182	4,124	3,918	4,124	4,302	4,889	4,553	5,157	5,179
75-79	2,038	2,318	2,982	3,570	3,638	3,618	3,446	3,637	3,784	4,317	4,028	4,137
80-84	1,458	1,576	1,857	2,400	2,893	2,980	2,975	2,842	3,001	3,127	3,588	3,546
85+	1,481	1,638	1,901	2,383	2,895	3,075	3,104	2,977	3,026	3,219	3,606	3,644
Total	81,438	84,306	87,818	91,314	94,765	98,245	101,798	105,481	109,309	113,295	117,457	118,308

Population Forecasts prepared by: Population Research Center, Portland State University, June 30, 2016.

Figure 23. Umatilla County's Sub-Areas - Total Population

Area/Year	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2066
Umatilla County	81,438	84,306	87,818	91,314	94,765	98,245	101,798	105,481	109,309	113,295	117,457	118,308
Adams UGB	370	376	382	387	391	394	397	400	402	405	407	407
Athena UGB	1,151	1,156	1,160	1,162	1,165	1,168	1,171	1,174	1,176	1,178	1,180	1,180
Echo UGB	744	754	764	773	781	789	796	802	809	816	823	824
Helix UGB	204	208	211	212	213	213	213	213	214	214	214	214
Hermiston UGB	21,488	22,988	24,859	26,763	28,667	30,599	32,541	34,493	36,462	38,500	40,657	41,104
Milton-Freewater L	7,653	7,897	8,180	8,458	8,738	9,048	9,386	9,744	10,113	10,499	10,906	10,993
Pendleton UGB	17,325	17,541	17,814	18,085	18,359	18,654	19,006	19,469	20,054	20,723	21,453	21,607
Pilot Rock UGB	1,576	1,576	1,576	1,576	1,576	1,576	1,576	1,576	1,576	1,576	1,576	1,576
Stanfield UGB	2,144	2,186	2,223	2,253	2,280	2,301	2,320	2,337	2,353	2,367	2,380	2,383
Ukiah UGB	256	256	257	258	258	259	259	260	260	261	261	261
Umatilla UGB	8,714	9,484	10,441	11,380	12,284	13,151	14,003	14,853	15,702	16,542	17,363	17,517
Weston UGB	695	701	706	710	713	715	717	718	719	720	722	722
Outside UGB Area	19,119	19,182	19,245	19,297	19,341	19,379	19,412	19,442	19,469	19,493	19,516	19,520

Population Forecasts prepared by: Population Research Center, Portland State University, June 30, 2016.