Coordinated Population Forecast

Deschutes County

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

Prepared by
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The Population Research Center and project staff wish to recognize and thank those 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**—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. *(Available for download with Final Report, June 30, 2015)*
- **Supporting Information**—Provides a complete copy of all survey results as well as any other information gleaned from local planning documents, city officials, etc. *(Available for download with Final Report, June 30, 2015)*
- **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., 2015-2065).
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Executive Summary

Historical

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

Deschutes County’s population as a whole has grown rapidly since 2000, with an average annual growth rate of more than three percent between 2000 and 2010 (Figure 1); in addition, most of its sub-areas experienced even more rapid population growth during the 2000s. Sisters and La Pine posted the highest average annual growth rates at 7.8 and 6.3 percent, respectively, during the 2000 to 2010 period.

Deschutes County’s positive population growth in the 2000s was the direct result of substantial net in-migration and steady natural increase. Meanwhile an aging population not only led to an increase in deaths, but also resulted in a smaller proportion of women in their childbearing years and a consequent slowing in the number of births. The growing number of deaths and slow growth in births caused natural increase—the difference between births and deaths—to shrink between 2007 and 2014. While net in-migration and steady natural increase contributed to population growth during the early and middle years of the last decade, it is clear than in more recent years (i.e., 2010 to 2014) net in-migration played the most prominent role in population growth.

Forecast

Total population in Deschutes County as a whole as well as within its sub-areas will more than likely grow at a slightly faster pace in the first 20 years of the forecast period (2015 to 2035), and slow in the last 30 years (Figure 1). The tapering of growth rates is largely driven by an aging population—a demographic trend which will lead to declining natural increase (births minus deaths). As natural increase declines population growth will become increasingly reliant on net in-migration.

Even so, Deschutes County’s total population is forecast to increase by more than 78,000 over the next 20 years (2015-2035) and by more than 186,000 over the entire 50 year forecast period (2015-2065). Sub-areas that showed strong population growth in the 2000s will experience similar rates of population growth during the forecast period.
Figure 1. Historical and Forecast Populations, and Average Annual Growth Rates (AAGR) for Deschutes County and its Sub-Areas

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2000</td>
<td>2010</td>
<td>2015</td>
<td>2035</td>
<td>2065</td>
</tr>
<tr>
<td>Deschutes County</td>
<td>115,367</td>
<td>157,733</td>
<td>170,606</td>
<td>249,037</td>
<td>357,345</td>
</tr>
<tr>
<td>Bend(^1)</td>
<td>52,041</td>
<td>76,858</td>
<td>85,737</td>
<td>132,209</td>
<td>194,793</td>
</tr>
<tr>
<td>La Pine</td>
<td>899</td>
<td>1,653</td>
<td>1,687</td>
<td>3,014</td>
<td>5,836</td>
</tr>
<tr>
<td>Redmond</td>
<td>15,524</td>
<td>26,508</td>
<td>27,715</td>
<td>39,812</td>
<td>64,785</td>
</tr>
<tr>
<td>Sisters</td>
<td>961</td>
<td>2,038</td>
<td>2,315</td>
<td>4,375</td>
<td>7,212</td>
</tr>
<tr>
<td>Outside UGBs</td>
<td>45,942</td>
<td>50,676</td>
<td>53,151</td>
<td>69,627</td>
<td>84,719</td>
</tr>
</tbody>
</table>

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

\(^1\) For simplicity each UGB is referred to by its primary city’s name.
Historical Trends

Different growth patterns occur in different parts of the County. Each of Deschutes 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 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, population growth rates for the county are collectively influenced by local trends within its sub-areas.

Births

Historical fertility rates for Deschutes County mirror trends similar to Oregon as a whole; while total fertility rates decreased for both the county and state from 2000 to 2010 (Figure 2), fertility for older women marginally increased in both Deschutes County and Oregon (Figure 3 and Figure 4). As Figure 3 demonstrates, fertility rates for younger women in Deschutes County are lower in 2010 compared to earlier decades, and women are choosing to have children at older ages. While these statistics largely mirror statewide changes, the decline in total fertility in Deschutes County during the 2000s was slightly more pronounced than the statewide decline during this same period. At the same time, total fertility in the county remains below replacement fertility.

Figure 2. Deschutes County and Oregon—Total Fertility Rates (2000 and 2010)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deschutes County</td>
<td>2.06</td>
<td>1.81</td>
</tr>
<tr>
<td>Oregon</td>
<td>1.98</td>
<td>1.79</td>
</tr>
</tbody>
</table>

Sources: U.S. Census Bureau, 2000 and 2010 Censuses.
Oregon Health Authority, Center for Health Statistics.
Calculations by Population Research Center (PRC).
Figure 3. Deschutes County—Age Specific Fertility Rate (2000 and 2010)

Figure 4. Deschutes County and Oregon—Age Specific Fertility Rate (2000 and 2010)

Figure 5 shows the number of births by the area in which the mother resides. Please note that the number of births fluctuates from year to year. It is worth noting that a sub-area with an increase in births between two years could easily show a decrease for a different time period; however for the 10-
During the 10-year period from 2000 to 2010, the county as a whole and all UGBs saw an increase in births, while the area outside UGBs recorded a decrease in births (Figure 5).

**Figure 5. Deschutes County and Sub-Areas—Total Births (2000 and 2010)**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2010</th>
<th>Absolute Change</th>
<th>Relative Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deschutes County</td>
<td>1,438</td>
<td>1,709</td>
<td>271</td>
<td>18.8%</td>
</tr>
<tr>
<td>Bend</td>
<td>747</td>
<td>934</td>
<td>187</td>
<td>25.0%</td>
</tr>
<tr>
<td>Redmond</td>
<td>274</td>
<td>408</td>
<td>135</td>
<td>49.3%</td>
</tr>
<tr>
<td>Smaller UGBs</td>
<td>28</td>
<td>38</td>
<td>10</td>
<td>35.1%</td>
</tr>
<tr>
<td>Outside UGBs</td>
<td>389</td>
<td>328</td>
<td>(61)</td>
<td>-15.6%</td>
</tr>
</tbody>
</table>

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

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

**Deaths**

While the population in the county as a whole is aging, more people are living longer. For Deschutes County in 2000, life expectancy for males was 77 years and for females was 80 years. By 2010, life expectancy had increased to 79 for males and 83 for females. For both Deschutes County and Oregon, the survival rates changed little between 2000 and 2010—underscoring the fact that mortality is the most stable component of population change. Even so, the total number of county-wide deaths increased (Figure 6).

**Figure 6. Deschutes County and Sub-Areas—Total Deaths (2000 and 2010)**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2010</th>
<th>Absolute Change</th>
<th>Relative Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deschutes County</td>
<td>916</td>
<td>1,250</td>
<td>334</td>
<td>36.5%</td>
</tr>
<tr>
<td>Bend</td>
<td>418</td>
<td>585</td>
<td>167</td>
<td>40.0%</td>
</tr>
<tr>
<td>Redmond</td>
<td>140</td>
<td>203</td>
<td>63</td>
<td>44.8%</td>
</tr>
<tr>
<td>All other areas</td>
<td>358</td>
<td>462</td>
<td>104</td>
<td>29.1%</td>
</tr>
</tbody>
</table>

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

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

**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 7 shows the historical age-specific migration rates by five-year age group, both for Deschutes County and Oregon. The migration rate is shown as the number of net migrants per person by age group.

From 2000 to 2010, a small number of younger individuals (ages with the highest mobility levels) moved out of the county in search of employment and education opportunities, as well as military service. At
the same time however, the county attracted a substantial number of both younger and older migrants. It is likely that both young and old in-migrants moved into the county for the high quality of life the region has to offer, with its natural beauty and recreational amenities.

Figure 7. Deschutes County and Oregon—Five-year Migration Rates (2000-2010)

![Migration Rates Graph]

Historical Trends in Components of Population Change

In summary, Deschutes County’s positive population growth in the 2000s was the direct result of substantial net in-migration and steady natural increase (Figure 15). Meanwhile an aging population not only led to an increase in deaths, but also resulted in a smaller proportion of women in their childbearing years and a consequent slowing in the number of births. The growing number of deaths and shrinking number of births caused natural increase—the difference between births and deaths—to decline between 2007 and 2014. While net in-migration and steady natural increase contributed to population growth during the early and middle years of the last decade, it is clear than in more recent years (i.e., 2010 to 2014) net in-migration played the most prominent role in population growth.
Housing and Households

The total number of housing units in Deschutes County increased rapidly during the middle years of this last decade, but this growth slowed with the onset of the national recession in 2007. Over the entire 2000 to 2010 period, the total number housing units increased by 47 percent county-wide; this was more than 45,000 new housing units (Figure 9). Bend and Redmond UGBs captured the largest shares of the growth in total county-wide housing units. In terms of relative housing growth Sisters grew the most during the 2000s, its total housing units increased nearly 130 percent (626 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 than 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 or in occupancy rates. However, the pattern of population and housing change in the county is relatively similar.
Occupancy rates tend to fluctuate more than PPH. This is particularly true in smaller UGB areas where fewer housing units allow for larger changes—in relative terms—in occupancy rates. From 2000 to 2010 the occupancy rate in Deschutes County declined slightly; this was most likely due to slack in demand for housing as individuals experienced the effects of the Great Recession. A slight drop in occupancy rates was mostly uniform across all sub-areas, but some smaller UGBs experienced more extreme declines in the occupancy rate.

Average household size, or PPH, in Deschutes County was 2.4 in 2010, down from 2.5 in 2000 (Figure 10). Deschutes County’s PPH in 2010 was slightly lower than for Oregon as a whole, which had a PPH of 2.5. PPH varied across all sub-areas, with all of them falling between 2.3 and 2.6 persons per household. In 2010 the highest PPH was in Redmond with 2.6 and the lowest in La Pine at 2.3.

**Figure 9. Deschutes County and Sub-Areas—Total Housing Units (2000 and 2010)**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2010</th>
<th>Change 2000-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deschutes County</td>
<td>54,583</td>
<td>80,139</td>
<td>3.9%</td>
</tr>
<tr>
<td>Bend</td>
<td>22,511</td>
<td>36,117</td>
<td>4.8%</td>
</tr>
<tr>
<td>La Pine</td>
<td>523</td>
<td>942</td>
<td>6.1%</td>
</tr>
<tr>
<td>Redmond</td>
<td>6,373</td>
<td>11,092</td>
<td>5.7%</td>
</tr>
<tr>
<td>Sisters</td>
<td>483</td>
<td>1,109</td>
<td>8.7%</td>
</tr>
<tr>
<td>Outside UGBs</td>
<td>24,693</td>
<td>30,879</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Share of County 2000</th>
<th>Share of County 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>41.2%</td>
<td>45.1%</td>
</tr>
<tr>
<td>1.0%</td>
<td>1.2%</td>
</tr>
<tr>
<td>11.7%</td>
<td>13.8%</td>
</tr>
<tr>
<td>0.9%</td>
<td>1.4%</td>
</tr>
<tr>
<td>45.2%</td>
<td>38.5%</td>
</tr>
</tbody>
</table>

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

1 For simplicity each UGB is referred to by its primary city’s name.

**Figure 10. Deschutes County and Sub-Areas—Persons per Household (PPH) and Occupancy Rate**

<table>
<thead>
<tr>
<th>Persons Per Household (PPH)</th>
<th>Occupancy Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change 2000-2010</td>
</tr>
<tr>
<td>Deschutes County</td>
<td>2.5 2.4</td>
</tr>
<tr>
<td>Bend1</td>
<td>2.4 2.4</td>
</tr>
<tr>
<td>La Pine</td>
<td>2.2 2.3</td>
</tr>
<tr>
<td>Redmond</td>
<td>2.6 2.6</td>
</tr>
<tr>
<td>Sisters</td>
<td>2.4 2.4</td>
</tr>
<tr>
<td>Outside UGBs</td>
<td>2.6 2.4</td>
</tr>
</tbody>
</table>

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

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 forecast for the future will look like, and helps determine the realm of likely possibilities. Past trends explain the dynamics of population growth particular to local areas. Relating recent and historical population change to events that influenced the 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 Deschutes County’s population forecast as well as the forecasts for larger sub-areas. The assumptions are derived from observations based on life course events, as well as trends unique to Deschutes County and its larger sub-areas. Population change in the smaller sub-areas is determined by the change in the number of total housing units and PPH. Assumptions around housing unit growth as well as occupancy rates are derived from observations of historical building patterns and current plans for future housing development. In addition assumptions for PPH are based on observed historical patterns of household demographics—for example the average age of householder. The forecast period is 2015-2065.

Assumptions for the County and Larger Sub-Areas

During the forecast period, as the population in Deschutes County is expected to continue to age, fertility rates will begin to decline in the near term and continue on this path throughout the forecast period. Total fertility in Deschutes County is forecast to decrease from 1.8 children per woman in 2015 to 1.7 children per woman by 2065. Similar patterns of declining fertility are expected within the county’s larger sub-areas.

Changes in mortality and life expectancy are more stable compared to fertility and migration. One influential factor affecting mortality and life expectancy is advances in medical technology. The county and larger sub-areas are projected to follow the statewide trend of increasing life expectancy throughout the forecast period—progressing from a life expectancy of 81 years in 2010 to 88 in 2060. However, in spite of increasing life expectancy and the corresponding increase in survival rates, Deschutes 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 and social factors—such as employment, educational opportunities, housing availability, family ties, cultural affinity, and natural amenities—occurring both inside and outside the study area can affect both directionality and volume of migration. Net migration rates will change in line with historical trends unique to Deschutes County. Slight net out-migration of some younger persons and net in-migration of both younger and older individuals will persist.

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1 County sub-areas with populations greater than 8,000 in the forecast launch year were forecast using the cohort-component method. County sub-areas with populations less than 8,000 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.
throughout the forecast period. County-wide, average annual net migration is expected to increase from 1,974 net in-migrants in 2015 to 3,955 net in-migrants in 2035. Over the last 30 years of the forecast period average annual net migration is expected to be steadier, increasing to 4,588 net in-migrants by 2065. With natural increase diminishing in its potential to contribute to population growth, net in-migration will become an increasingly important component of population growth.

**Assumptions for Smaller Sub-Areas**

Rates of population growth for the smaller UGBs are assumed to be determined by corresponding growth in the number of housing units, as well as changes in housing occupancy rates and PPH. The change in housing unit growth is much more variable than change in housing occupancy rates or PPH.

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

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 we account for them being constructed over the next 5-15 years. Finally, for county sub-areas where population growth has been flat or declined, and there is no planned housing construction, we hold population growth mostly stable with little to no change.
Forecast Trends

Under the most-likely population growth scenario in Deschutes County, county-wide and sub-area populations are expected to increase over the forecast period. The county-wide population growth rate is forecast to peak in 2020 and then slowly decline throughout the forecast period. Forecasting tapered population growth is largely driven by an aging population, which will contribute to an increase in deaths, as well as a decrease in births—fewer women within child bearing years ages 15 to 49. The aging population will in turn contribute to declining natural increase over the forecast period. Net migration is expected to increase steadily throughout the forecast period, but this growth will not fully offset the decline in natural increase. The combination of these factors will most likely result in a slowly declining population growth rate as time progresses through the forecast period.

Deschutes County’s total population is forecast to grow by almost 187,000 persons (110 percent) from 2015 to 2065, which translates into a total county-wide population of 357,345 in 2065 (Figure 11). The population is forecast to grow at the highest rate—approximately two percent per year—in the near-term (2015-2020). This anticipated population growth in the near-term is based on two core assumptions: 1) Deschutes County’s economy will continue to strengthen in the next five years, and; 2) an increasing number of Baby Boomers will retire to the county. The single largest component of growth in this initial period is net in-migration. Nearly 16,000 net in-migrants are forecast for the 2015 to 2020 period.

Figure 11. Deschutes County—Total Forecast Population by Five-year Intervals (2015-2065)

Deschutes County’s two largest UGBs, Bend and Redmond, will see a combined population growth of more than 58,000 from 2015 to 2035 and more than 87,000 from 2035 to 2065. The Bend UGB will increase by more than 46,000 persons from 2015 to 2035, growing from a total population of 85,737 in
2015 to 132,209 in 2035. The Redmond UGB will increase by a slightly slower rate, growing from 27,715 persons in 2015 to a population of 59,812 in 2035. Growth will occur more slowly for both Bend and Redmond during the second part of the forecast period, with total population increasing to 194,793 and 64,785 respectively by 2065. Both Bend and Redmond UGBs are expected to grow as a share of total county population.

Population outside UGBs is expected to grow by more than 16,000 people from 2015 to 2035, but is expected to grow at a much slower rate during the second half of the forecast period, only adding a little more than 15,000 people from 2035 to 2065. The population of the area outside UGBs will decline as a share of total county-wide population over the forecast period, composing 31 percent of the county-wide population in 2015 and about 24 percent in 2065.

**Figure 12. Deschutes County and Larger Sub-Areas—Forecast Population and AAGR**

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2035</th>
<th>2065</th>
<th>AAGR (2015-2035)</th>
<th>AAGR (2035-2065)</th>
<th>Share of County 2015</th>
<th>Share of County 2035</th>
<th>Share of County 2065</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deschutes County</strong></td>
<td>170,606</td>
<td>249,037</td>
<td>357,345</td>
<td>1.9%</td>
<td>1.2%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Bend</strong>¹</td>
<td>85,737</td>
<td>132,209</td>
<td>194,793</td>
<td>2.2%</td>
<td>1.3%</td>
<td>50.3%</td>
<td>53.1%</td>
<td>54.5%</td>
</tr>
<tr>
<td><strong>Redmond</strong></td>
<td>27,715</td>
<td>39,812</td>
<td>64,785</td>
<td>1.8%</td>
<td>1.6%</td>
<td>16.2%</td>
<td>16.0%</td>
<td>18.1%</td>
</tr>
<tr>
<td><strong>Smaller UGBs²</strong></td>
<td>4,002</td>
<td>7,389</td>
<td>13,048</td>
<td>3.1%</td>
<td>1.9%</td>
<td>2.3%</td>
<td>3.0%</td>
<td>3.7%</td>
</tr>
<tr>
<td><strong>Outside UGBs</strong></td>
<td>53,151</td>
<td>69,627</td>
<td>84,719</td>
<td>1.4%</td>
<td>0.7%</td>
<td>31.2%</td>
<td>28.0%</td>
<td>23.7%</td>
</tr>
</tbody>
</table>

Source: Forecast by Population Research Center (PRC)

¹ For simplicity each UGB is referred to by its primary city’s name.
² Smaller UGBs are those with populations less than 8,000 in forecast launch year.

The remaining smaller UGBs are expected to grow by a combined number of more than 3,300 persons from 2015 to 2035, with a combined average annual growth rate of more than three percent (Figure 12). This growth rate is driven by expected rapid growth in both Sisters and La Pine (Figure 13). Similar to the larger UGBs and the county as a whole, population growth rates will decline for the second half of the forecast period (2035 to 2065). The smaller UGBs will collectively add a little more than 5,600 people from 2035 to 2065.

**Figure 13. Deschutes County and Smaller Sub-Areas—Forecast Population and AAGR**

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2035</th>
<th>2065</th>
<th>AAGR (2015-2035)</th>
<th>AAGR (2035-2065)</th>
<th>Share of County 2015</th>
<th>Share of County 2035</th>
<th>Share of County 2065</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deschutes County</strong></td>
<td>170,606</td>
<td>249,037</td>
<td>357,345</td>
<td>1.9%</td>
<td>1.2%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Sisters</strong>¹</td>
<td>2,315</td>
<td>4,375</td>
<td>7,212</td>
<td>3.2%</td>
<td>1.7%</td>
<td>1.4%</td>
<td>1.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td><strong>La Pine</strong></td>
<td>1,687</td>
<td>3,014</td>
<td>5,836</td>
<td>2.9%</td>
<td>2.2%</td>
<td>1.0%</td>
<td>1.2%</td>
<td>1.6%</td>
</tr>
<tr>
<td><strong>Larger UGBs²</strong></td>
<td>113,453</td>
<td>172,021</td>
<td>259,578</td>
<td>2.1%</td>
<td>1.4%</td>
<td>66.5%</td>
<td>69.1%</td>
<td>72.6%</td>
</tr>
<tr>
<td><strong>Outside UGBs</strong></td>
<td>53,151</td>
<td>69,627</td>
<td>84,719</td>
<td>1.4%</td>
<td>0.7%</td>
<td>31.2%</td>
<td>28.0%</td>
<td>23.7%</td>
</tr>
</tbody>
</table>

Source: Forecast by Population Research Center (PRC)

¹ For simplicity each UGB is referred to by its primary city’s name.
² Larger UGBs are those with populations greater than 8,000 in forecast launch year.

**Forecast Trends in Components of Population Change**

As previously discussed, a key factor in both declining fertility and increasing morbidity is Deschutes County’s aging population. From 2015 to 2035 the proportion of county population 65 or older will grow
from a little under 18 percent to nearly 23 percent. By 2065 about 25 percent of the total population will be 65 or older (Figure 14).

As the county-wide population ages—contributing to a slow-growing population of women in their years of peak fertility—total fertility in Deschutes County is expected to decline over the forecast period. This decline is in line with the forecast trend for the state. Average annual births are expected to increase over the forecast period, but deaths will increase at a slightly faster rate, leading to a natural decrease in later years of the forecast period. The total numbers of deaths county-wide are expected to increase more rapidly from 2015 through 2040, followed by slower growth during the later years of the forecast period. This pattern of initial growth in the numbers of deaths is explained by the relative size and aging pattern of the Baby Boom generation. For example, in Deschutes County deaths will increase significantly during the 2015-2040 period as Baby Boomers succumb to morbidity.
Figure 14. Deschutes County—Age Structure of the Population (2015, 2035, and 2065)

Source: Forecast by Population Research Center (PRC)
As the increase in the numbers of deaths outpaces births, population growth in Deschutes County will become increasingly reliant on net in-migration; and in fact positive net in-migration is expected to persist throughout the forecast period. The majority of these net in-migrants are expected to be middle-aged and older individuals.

In summary, declining natural increase and steady net in-migration will result in population growth reaching its peak in 2020 and then taper through the remainder of the forecast period (Figure 15). An aging population will not only lead to an increase in deaths, but a smaller proportion of women in their childbearing years will almost certainly result in a long-term slowing of the growth of births. Net migration is expected to grow steadily throughout the forecast period, but this growth will not fully offset the decline in natural increase.

**Figure 15. Deschutes County—Components of Population Change, 2015-2065**

[Diagram showing components of population change from 2015 to 2065 with net migration, natural increase, and AAGR showing trends over the forecast period.]
Glossary of Key Terms

**Cohort-Component Method**: Predicts future populations based on likely changes in births, deaths, and migration over time.

**Coordinated population forecast**: A population forecast adopted by all levels of government for the entire county, including urban growth boundary (UGB) areas, as well as areas outside UGBs within the county. A population forecast prepared concurrently for the county and for its city UGB areas and non-UGB unincorporated 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**: Predicts future populations based on changes in housing unit counts, vacancy rates, and the average numbers of persons per household (PPH).

**Occupancy rate**: The proportion of total housing units that are occupied by an individual or group of persons. If the individual or group is absent on Census Day (April 1), but will be returning soon, the housing unit is still considered occupied.

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

**Replacement Level Fertility**: The average number of children each woman needs to bear in order to replace the population (to replace each male and female) under current mortality conditions in the U.S.
Photo Credit: Sparks Lake and the South Sister in the Cascade Mountains. (Photo No. desDB3262) Gary Halvorson, Oregon State Archives

http://arcweb.sos.state.or.us/pages/records/local/county/scenic/deschutes/130.html