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## Coordinated Population Forecast for Polk County, its Urban Growth Boundaries (UGB), and Area Outside UGBs 2017-2067

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## Coordinated Population Forecast



# 2017

Through

2067

## Polk County

Urban Growth Boundaries (UGB) & Area Outside UGBs



Photo Credit: A field of sunflowers off Helmick Road south of Monmouth. (Photo No. polDA0055). Gary Halvorson, Oregon State Archives http://arcweb.sos.state.or.us/pages/records/local/county/scenic/polk/11.html

## Coordinated Population Forecast for Polk County, its Urban Growth Boundaries (UGB), and Area Outside UGBs 2017-2067

Prepared by

### **Population Research Center**

### **College of Urban and Public Affairs**

## **Portland State University**

June 30, 2017

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## How to Read this Report

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

Specifically, the reader should refer to the following documents:

- *Methods and Data for Developing Coordinated Population Forecasts*—Provides a detailed description and discussion of the forecast methods employed. This document also describes the assumptions that feed into these methods and determine the forecast output.
- *Forecast Tables*—Provides complete tables of population forecast numbers by county and all subareas within each county for each five-year interval of the forecast period (2017-2067).

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## **Executive Summary**

#### Historical

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

Polk County's total population has grown moderately since 2000, with an average annual growth rate just below two percent between 2000 and 2010 (**Figure 1**). However, some of its sub-areas experienced more rapid population growth. The Polk County portion of Salem-Keizer, the most populous UGB, posted an annual average growth rate of 2.8 percent, while both Independence and Monmouth saw average annual growth rates above those of the county, at 3.4 and 2.1 percent respectively, during the 2000 to 2010 period.

Polk County's positive population growth in the 2000s was largely the result of substantial net inmigration, though a small natural increase contributed as well. While in 2000 Polk County's total fertility rate (TFR) was below that of Oregon as a whole, the state's rate dropped by 2010 while the county's did not. Steady total fertility rates in the 2000s compared to the state average led to a relatively steady rate of natural increase during the 2000-2010 period. This has continued in recent years (2010-2015). While net in-migration far outweighed natural increase during the bulk of the last decade, as net in-migration has slowed the gap between these two components has diminished in recent years, thus slowing total population growth in the county (Figure 12).

#### Forecast

Total population in Polk County as a whole and in its sub-areas will likely grow at a slightly faster pace in the near-term (2017 to 2035) compared to the long-term (**Figure 1**). The tapering of growth rates is largely driven by an aging population—a demographic trend which is expected to contribute towards a waning natural increase (more births than deaths). As natural increases lessens, population growth will become increasingly reliant on net in-migration.

Even so, Polk County's total population is forecast to increase by more than 24,000 over the next 18 years (2017-2035) and by more than 68,000 over the entire 50 year forecast period (2017-2067). Subareas that showed strong population growth in the 2000s are expected to experience similar rates of population growth during the forecast period.

|                         |               | Historica |             | Forecast |         |         |             |             |
|-------------------------|---------------|-----------|-------------|----------|---------|---------|-------------|-------------|
|                         |               |           | AAGR        |          |         |         | AAGR        | AAGR        |
|                         | 2000          | 2010      | (2000-2010) | 2017     | 2035    | 2067    | (2017-2035) | (2035-2067) |
| Polk County             | <i>62,380</i> | 75,403    | 1.9%        | 81,089   | 105,217 | 149,203 | 1.5%        | 1.1%        |
| Dallas UGB              | 13,277        | 15,356    | 1.5%        | 16,414   | 22,665  | 33,208  | 1.8%        | 1.2%        |
| Falls City UGB          | 966           | 947       | -0.2%       | 1,003    | 1,119   | 1,285   | 0.6%        | 0.4%        |
| Independence UGB        | 6,248         | 8,696     | 3.4%        | 9,326    | 13,803  | 21,741  | 2.2%        | 1.4%        |
| Monmouth UGB            | 7,834         | 9,598     | 2.1%        | 9,944    | 12,943  | 17,708  | 1.5%        | 1.0%        |
| Salem/Keizer UGB (Polk) | 19,919        | 26,139    | 2.8%        | 27,888   | 36,936  | 54,045  | 1.6%        | 1.2%        |
| Willamina UGB (Polk)    | 731           | 866       | 1.7%        | 898      | 1,049   | 1,277   | 0.9%        | 0.6%        |
| Outside UGBs            | 13,405        | 13,801    | 0.3%        | 15,616   | 16,702  | 19,940  | 0.4%        | 0.6%        |

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

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

## **Historical Trends**

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

#### Population

Polk County's total population grew from roughly 41,000 in 1975 to nearly 79,000 in 2015 (Figure 2). During this 40-year period, the county experienced the highest growth rates during the late 1970s, which coincided with a period of relative economic prosperity. During the early 1980s, challenging economic conditions, both nationally and within the county, led to a small population decline. Again, during the early and mid-1990s population growth rates increased, but challenging economic conditions in the late 1990s yielded reduced rates of population growth. Over the last decade (2000-2010) Polk County experienced positive but slowing population growth—averaging a little less than two percent per year. More recently, in the period between 2010 and 2015 growth rates more than halved, resulting in lower population growth.



#### Figure 2. Polk County—Total Population by Five-year Intervals (1975-2015)

Polk County's overall population change is equal to the sum of its sub-areas. During the 2000s, Polk County's average annual population growth rate stood at just under two percent (Figure 3). At the same time the Polk County portion of Salem-Keizer, accounting for the bulk of growth in the county, recorded

an average annual growth rate of 2.8 percent. Independence and Monmouth also grew faster than the county at 3.4 and 2.1 percent, respectively. The second largest UGB, Dallas, as well as the Polk portion of Willamina, saw growth rates below that of the county at 1.5 and 1.7 percent, respectively. The areas outside UGBs saw minimal growth at 0.3 percent, while only one UGB, Falls City, experienced population decline during the decennial with an average annual growth rate of -0.2 percent.

|                         | 2000          | 2010   | AAGR<br>(2000-2010) | Sh<br>Cour | are of<br>nty 2000 | Share of<br>County 2010 |
|-------------------------|---------------|--------|---------------------|------------|--------------------|-------------------------|
| Polk County             | <i>62,380</i> | 75,403 | 1.9%                | 10         | 0.0%               | 100.0%                  |
| Dallas UGB              | 13,277        | 15,356 | 1.5%                | 2          | 1.3%               | 20.4%                   |
| Falls City UGB          | 966           | 947    | -0.2%               | 1          | .5%                | 1.3%                    |
| Independence UGB        | 6,248         | 8,696  | 3.4%                | 1          | 0.0%               | 11.5%                   |
| Monmouth UGB            | 7,834         | 9,598  | 2.1%                | 1          | 2.6%               | 12.7%                   |
| Salem/Keizer UGB (Polk) | 19,919        | 26,139 | 2.8%                | 3          | 1.9%               | 34.7%                   |
| Willamina UGB (Polk)    | 731           | 866    | 1.7%                | 1          | .2%                | 1.1%                    |
| Outside UGBs            | 13,405        | 13,801 | 0.3%                | 2          | 1.5%               | 18.3%                   |

Figure 3. Polk County and Sub-areas—Total Population and Average Annual Growth Rate (AAGR) (2000 and 2010)<sup>1</sup>

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

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

#### Age Structure of the Population

The age structure of Polk County's population remained remarkably stable between 2000 and 2010, particularly compared to most areas across Oregon (Figure 4). Underscoring Polk County's modest trend in aging, the median age saw only a small increase from 36.5 in 2000 to just over 37 in 2010 and to 37.4 in 2015.<sup>2</sup> This increase is less than a quarter of what is observed statewide and is significantly smaller than was seen in many of Oregon's counties over the same time period.

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

<sup>&</sup>lt;sup>2</sup> Median age is sourced from the U.S. Census Bureau's 2000 and 2010 Censuses and 2011-2015 ACS 5-year Estimates.



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

#### **Race and Ethnicity**

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

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

|  |        |        |             |        | Absolute | Relative |
|--|--------|--------|-------------|--------|----------|----------|
| Hispanic or Latino and Race                      | 200    | 00     | <b>20</b> 1 | LO     | Change   | Change   |
| Total population                                 | 62,380 | 100.0% | 75,403      | 100.0% | 13,023   | 20.9%    |
| Hispanic or Latino                               | 5,480  | 8.8%   | 9,088       | 12.1%  | 3,608    | 65.8%    |
| Not Hispanic or Latino                           | 56,900 | 91.2%  | 66,315      | 87.9%  | 9,415    | 16.5%    |
| White alone                                      | 53,394 | 85.6%  | 60,702      | 80.5%  | 7,308    | 13.7%    |
| Black or African American alone                  | 229    | 0.4%   | 394         | 0.5%   | 165      | 72.1%    |
| American Indian and Alaska Native alone          | 1,078  | 1.7%   | 1,380       | 1.8%   | 302      | 28.0%    |
| Asian alone                                      | 671    | 1.1%   | 1,403       | 1.9%   | 732      | 109.1%   |
| Native Hawaiian and Other Pacific Islander alone | 152    | 0.2%   | 201         | 0.3%   | 49       | 32.2%    |
| Some Other Race alone                            | 57     | 0.1%   | 79          | 0.1%   | 22       | 38.6%    |
| Two or More Races                                | 1,319  | 2.1%   | 2,156       | 2.9%   | 837      | 63.5%    |

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

#### **Births**

Historical fertility rates for Polk County do not mirror trends similar to Oregon as a whole. Total fertility rates remained constant in Polk County from 2000 to 2010, while they decreased for the state over the same time period (**Figure 6**). At the same time fertility for women over 30 year of age marginally increased in both Polk County and Oregon (**Figure 7** and **Figure 8**). As **Figure 7** demonstrates, fertility rates for younger women in Polk County are lower in 2010 compared to earlier decades largely because women are having children at older ages, although this change is less pronounced in Polk County than in Oregon as a whole. Both Polk County and Oregon as a whole have total fertility rates below replacement fertility; although for the state total fertility continues to fall further.

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

|             | 2000 | 2010 |
|-------------|------|------|
| Polk County | 1.85 | 1.85 |
| 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 9** shows the number of births by the area in which the mother resides. Note that the number of births fluctuates from year to year. For example, a sub-area with an increase in births between two years may show a decrease during a different time period. For the 10-year period from 2000 to 2010

the county as a whole and all of its sub-areas saw an increase in births, though the absolute change for the areas outside UGBs was quite small.

|                     |      |      | Absolute | Relative | Share of    | Share of    |
|---------------------|------|------|----------|----------|-------------|-------------|
|                     | 2000 | 2010 | Change   | Change   | County 2000 | County 2010 |
| Polk County         | 696  | 922  | 226      | 32.5%    | 100.0%      | 100.0%      |
| Dallas              | 166  | 183  | 17       | 10.2%    | 23.9%       | 19.8%       |
| Independence        | 107  | 150  | 43       | 40.2%    | 15.4%       | 16.3%       |
| Salem/Keizer (Polk) | 236  | 336  | 100      | 42.4%    | 33.9%       | 36.4%       |
| Outside UGBs        | 117  | 119  | 2        | 1.7%     | 16.8%       | 12.9%       |
| Smaller UGBs        | 70   | 134  | 64       | 91.4%    | 10.1%       | 14.5%       |

| Figure 9. Polk County and Sub-Areas—Total Births | (2000 and 2 | 2010) |
|--|-------------|-------|
|--|-------------|-------|

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

Polk County's population is aging, but contrary to the statewide trend life expectancy declined in the 2000s.<sup>3</sup> In 2000, life expectancy for males was 79 years and for females was 83 years. By 2010, life expectancy had declined for both males and females at 78 and 82, respectively. For both Polk County and Oregon, the survival rates changed little between 2000 and 2010—underscoring the fact that mortality is the most stable component, relative to birth and migration rates, of population change. Even so, the total number of countywide deaths increased (Figure 10).

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

|                     |      |      | Absolute | Relative | Share of    | Share of    |
|---------------------|------|------|----------|----------|-------------|-------------|
|                     | 2000 | 2010 | Change   | Change   | County 2000 | County 2010 |
| Polk County         | 483  | 661  | 178      | 36.9%    | 100.0%      | 100.0%      |
| Dallas              | 167  | 190  | 23       | 13.8%    | 34.6%       | 28.7%       |
| Independence        | N/A  | 47   | -        | -        | -           | 7.1%        |
| Salem/Keizer (Polk) | 129  | 222  | 93       | 72.1%    | 26.7%       | 33.6%       |
| Outside UGBs        | 179  | 112  | -67      | -37.4%   | 37.1%       | 16.9%       |
| Smaller UGBs        | 8    | 90   | 82       | 1025.0%  | 1.7%        | 13.6%       |

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

<sup>&</sup>lt;sup>3</sup> Researchers have found evidence for a widening rural-urban gap in life expectancy; life expectancy declined for some rural areas in Oregon during the 2000's. 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.* 

#### **Migration**

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

From 2000 to 2010, younger individuals (ages with the highest mobility levels) moved out of the county, likely in search of employment and educational opportunities. This out-migration of young adults is a trend typical of most Oregon counties. At the same time however, Polk County attracted migrants from other age groups. Many in-migrants were accompanied by their children as shown by the in-migration of persons under the age of 14.





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

In summary, Polk County's positive population growth in the 2000s was the result of steady but small natural increase and fluctuations in the number of in-migrants, followed by an extended period of substantial net in-migration (Figure 12). The larger number of births relative to deaths has led to natural increase (more births than deaths) in every year from 2000 to 2015, although the rate of natural increase has gradually declined from a 2006 high, with year to year variation. After the substantial, sustained net in-migration of the mid and late 2000s, recent years have witnessed a slowdown of in-migration to Polk County. Despite this, net in-migration accounts for the majority of the county's population change.



Figure 12. Polk County—Components of Population Change (2000-2015)

#### Housing and Households

The total number of housing units in Polk County increased rapidly during the middle years of this last decade (2000 to 2010), but this growth slowed with the onset of the Great Recession in 2008. Over the entire 2000 to 2010 period, the total number of housing units increased by about twenty-four percent countywide; this was nearly 6,000 new housing units (**Figure 13**). The Polk portion of Salem-Keizer added over 2,500 housing units, slightly increasing its share of the county total in 2010 with Independence also recording an increase, while Dallas and the Polk portion of Willamina held nearly identical shares compared to 2000. Monmouth and the areas outside UGBs, while continuing to add housing units, saw their share of the county total shrink in 2010. In terms of relative housing growth, Independence grew the most during the 2000s; its total housing unit stock increased more than 45 percent (1,003 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. Housing growth rates may differ slightly from population growth rates because (1) the numbers of total housing units are smaller than the numbers of people, (2) the UGB has experienced changes in the average number of persons per household, or (3) occupancy rates have changed (typically most pronounced in coastal locations with vacation-oriented housing). However, the patterns of population and housing change in Polk County are relatively similar.

|                     |        |        | AAGR        | Share of    | Share of    |
|---------------------|--------|--------|-------------|-------------|-------------|
|                     | 2000   | 2010   | (2000-2010) | County 2000 | County 2010 |
| Polk County         | 24,461 | 30,302 | 2.2%        | 100.0%      | 100.0%      |
| Dallas              | 5,233  | 6,449  | 2.1%        | 21.4%       | 21.3%       |
| Falls City          | 373    | 395    | 0.6%        | 1.5%        | 1.3%        |
| Independence        | 2,212  | 3,215  | 3.8%        | 9.0%        | 10.6%       |
| Monmouth            | 2,966  | 3,484  | 1.6%        | 12.1%       | 11.5%       |
| Salem/Keizer (Polk) | 8,260  | 10,818 | 2.7%        | 33.8%       | 35.7%       |
| Willamina (Polk)    | 280    | 347    | 2.2%        | 1.1%        | 1.1%        |
| Outside UGBs        | 5,137  | 5,594  | 0.9%        | 21.0%       | 18.5%       |

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

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

Note: 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 UGBs where fewer housing units allow for larger changes (in relative terms) in occupancy rates. From 2000 to 2010, the occupancy rate in Polk County decreased by just under one percent; this was most likely due to slack in demand for housing as individuals experienced the effects of the Great Recession (Figure 14). The Polk County portion of Willamina, Independence, and Dallas, at -4.7, -3.3, and -1.5 percent respectively, saw decreases in occupancy rate larger than that of Polk County, while the Polk County portion of Salem-Keizer and the areas outside UGBs both saw decreases of -0.5 percent. Falls City and Monmouth witnessed increases of 2 and 0.1 percent, respectively, in occupancy rates.

Average household size, or PPH, in Polk County was 2.6 in 2010, identical to 2000 (Figure 14). Polk 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 six UGBs, with all of them falling between two and a half and three persons per household. Dallas and Monmouth registered the lowest PPH at 2.5; Independence was highest at 3.0.

|                     | Persons | Persons Per Household (PPH) |           |       | Occupancy Rate |           |  |  |
|---------------------|---------|-----------------------------|-----------|-------|----------------|-----------|--|--|
|                     |         | Change                      |           |       |                | Change    |  |  |
|                     | 2000    | 2010                        | 2000-2010 | 2000  | 2010           | 2000-2010 |  |  |
| Polk County         | 2.6     | 2.6                         | 0.0       | 94.3% | 93.4%          | -0.9%     |  |  |
| Dallas              | 2.6     | 2.5                         | -0.1      | 95.3% | 93.8%          | -1.5%     |  |  |
| Falls City          | 2.9     | 2.6                         | -0.3      | 90.6% | 92.7%          | 2.0%      |  |  |
| Independence        | 3.0     | 3.0                         | 0.0       | 93.6% | 90.3%          | -3.3%     |  |  |
| Monmouth            | 2.5     | 2.5                         | 0.0       | 94.0% | 94.1%          | 0.1%      |  |  |
| Salem/Keizer (Polk) | 2.5     | 2.6                         | 0.1       | 94.5% | 94.0%          | -0.5%     |  |  |
| Willamina (Polk)    | 2.8     | 2.8                         | 0.0       | 94.3% | 89.6%          | -4.7%     |  |  |
| Outside UGBs        | 2.8     | 2.6                         | -0.1      | 93.6% | 93.1%          | -0.5%     |  |  |

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

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

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

## **Assumptions for Future Population Change**

Evaluating past demographic trends provides clues about what the future will look like and helps determine the most likely scenarios for population change. Past trends also explain the dynamics of population growth specific to local areas. Relating recent and historical population change to events that influence population change serves as a gauge for what might realistically occur in a given area over the long-term. Our forecast period is 2017-2067.

Assumptions about fertility, mortality, and migration were developed for Polk County's population forecast as well as for the forecasts of larger sub-areas.<sup>4</sup> The assumptions are derived from observations based on life events as well as trends unique to Polk County and its larger sub-areas. Polk County locations falling into this category include Dallas, Independence, Monmouth, and the Polk County portion of the Salem-Keizer UGB.

Population change for smaller sub-areas is determined by the change in the number of total housing units, occupancy rates, 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. Polk County locations falling into this category include Falls City and the Polk County portion of Willamina.

#### Assumptions for the County and Larger Sub-Areas

During the forecast period, the population in Polk County is expected to age more quickly during the first half of the forecast period and then remain relatively stable over the forecast horizon. Fertility rates are expected to slightly decline throughout the forecast period. Total fertility in Polk County is forecast to decrease from 1.69 children per woman in the 2010-15 period to 1.67 children per woman by 2065. Similar patterns of declining total fertility are expected within the county's larger sub-areas.

Changes in mortality and life expectancy are more stable compared to fertility and migration. Polk County and its 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, Polk County's aging population 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

<sup>&</sup>lt;sup>4</sup> County sub-areas with populations greater than 7,000 in the forecast launch year were forecast using the cohortcomponent 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.

change, and natural amenities—occurring both inside and outside the study area can affect both the direction and the volume of migration.

We assume net migration rates will change in line with historical trends unique to Polk County. Net outmigration of younger persons and net in-migration of middle-age individuals will persist throughout the forecast period. Countywide average annual net in-migration is expected to increase dramatically from 1,911 net in-migrants in 2015 to 5,229 net in-migrants in 2020. Over the rest of forecast period, average annual net in-migration is expected to be more steady, remaining at just under 6,000 net in-migrants through 2065. Net in-migration is expected to account for the majority of Polk County's population growth throughout the entire forecast period.

#### **Assumptions for Smaller Sub-Areas**

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

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

In addition, for sub-areas experiencing population growth we assume a higher growth rate in the nearterm, 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 (or as specified by local officials). Finally, for county sub-areas where population growth has been flat or declining 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 Polk County, countywide and sub-area populations are expected to increase over the forecast period. The countywide population growth rate is forecast to peak in 2020 and then slowly decline throughout the forecast period. A reduction in population growth rates is driven by both (1) an aging population — contributing to a steady increase in deaths — as well as (2) the expectation of relatively stable in-migration over the second half of the forecast period. The combination of these factors will likely result in population growth rates slowing as time progresses.

Polk County's total population is forecast to grow by 68,114 persons (84 percent) from 2017 to 2067, which translates into a total countywide population of 149,203 in 2067 (Figure 15). The population is forecast to grow at the highest rate—over one percent per year—in the near-term (2017-2025). This anticipated population growth in the near-term is based on two core assumptions: (1) Polk County's economy will continue to strengthen in the next 10 years; (2) middle-aged persons will continue to migrate into the county, bringing their families or having more children. The largest component of growth during this initial period is net in-migration. Over 2,000 more births than deaths are forecast for the 2017 to 2025 period. At the same time nearly than 9,900 in-migrants are also forecast, combining with natural increase for strong population growth.





Polk County's four largest UGBs—the Polk County portion of Salem-Keizer, Dallas, Monmouth, and Independence—are forecast to experience a combined population growth of more than 22,000 from 2017 to 2035 and over 40,300 from 2035 to 2067 (Figure 16). The Polk portion of the Salem-Keizer UGB is expected to increase by 9,000 persons from 2017 to 2035, growing from a total population of 27,888 in 2017 to 36,936 in 2035. The Dallas UGB is forecast to increase by a slightly faster rate than the Polk County portion of the Salem-Keizer UGB (1.8% AAGR), growing from 16,414 persons in 2017 to a population of 22,665 in 2035. In the 2017-2035 period, Independence is expected to see the highest growth rate in the county (2.2% AAGR), while Monmouth's growth is expected to mirror Polk County. Thus, Independence will overtake Monmouth as Polk County's third largest UGB. Growth is expected to occur more slowly for the Polk County portion of Salem-Keizer, Dallas, Independence, and Monmouth during the second part of the forecast period. The Polk County portion of Salem-Keizer, Dallas, and Independence are all expected to grow as a share of total county population, while Monmouth is forecast to decrease as a share of total population.

The areas outside the UGBs are expected to add over 1,000 people between 2017 and 2035, with an additional 3,200 people by 2067. These areas are expected to decline as a share of total countywide population over the forecast period, composing just over 19 percent in 2017 and falling to just over 13 percent in 2067.

|                         |        |         |         | AAGR        | AAGR        | Share of    | Share of    | Share of    |
|-------------------------|--------|---------|---------|-------------|-------------|-------------|-------------|-------------|
|                         | 2017   | 2035    | 2067    | (2017-2035) | (2035-2067) | County 2017 | County 2035 | County 2067 |
| Polk County             | 81,089 | 105,217 | 149,203 | 1.5%        | 1.1%        | 100.0%      | 100.0%      | 100.0%      |
| Dallas UGB              | 16,414 | 22,665  | 33,208  | 1.8%        | 1.2%        | 20.2%       | 21.5%       | 22.3%       |
| Independence UGB        | 9,326  | 13,803  | 21,741  | 2.2%        | 1.4%        | 11.5%       | 13.1%       | 14.6%       |
| Monmouth UGB            | 9,944  | 12,943  | 17,708  | 1.5%        | 1.0%        | 12.3%       | 12.3%       | 11.9%       |
| Salem/Keizer UGB (Polk) | 27,888 | 36,936  | 54,045  | 1.6%        | 1.2%        | 34.4%       | 35.1%       | 36.2%       |
| Outside UGBs            | 15,616 | 16,702  | 19,940  | 0.4%        | 0.6%        | 19.3%       | 15.9%       | 13.4%       |
| Smaller UGBs            | 1,900  | 2,168   | 2,561   | 0.7%        | 0.5%        | 2.3%        | 2.1%        | 1.7%        |

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

Source: Forecast by Population Research Center (PRC)

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

The portion of Salem-Keizer within Polk County, the county's largest UGB, and Dallas are expected to capture the largest share of total countywide population growth during the initial 18 years of the forecast period from 2017 to 2035 (Figure 17) and both are forecast to capture similar shares during the final 32 years of the forecast period from 2035 to 2067. Independence, Monmouth, and the smaller UGBs are all projected to see their shares of countywide growth shrink slightly between the two periods.

| Figure 17. | Polk County and  | d Larger Sub-Areas | -Share of Cou | ntvwide Pop | ulation Growth |
|------------|------------------|--------------------|---------------|-------------|----------------|
|            | . one county and |                    | 011010 01 000 |             |                |

|                         | 2017-2035 | 2035-2067 |
|-------------------------|-----------|-----------|
| Polk County             | 100.0%    | 100.0%    |
| Dallas UGB              | 25.9%     | 24.0%     |
| Independence UGB        | 18.6%     | 18.0%     |
| Monmouth UGB            | 12.4%     | 10.8%     |
| Salem/Keizer UGB (Polk) | 37.5%     | 38.9%     |
| Outside UGBs            | 4.5%      | 7.4%      |
| Smaller UGBs            | 1.1%      | 0.9%      |

Source: Forecast by Population Research Center (PRC)

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

The smaller UGBs are expected to grow by a combined number of about 260 persons from 2017 to 2035, with a combined average annual growth rate of less than one percent (Figure 16). This growth rate is due to modest growth expected in all smaller UGBs, such as Falls City and the Polk County portion of Willamina (Figure 18). 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 2067). The smaller UGBs are expected to collectively add nearly 400 people from 2035 to 2067.

| Figure 18. Polk County and Smaller Sub-Areas—Forecast Population and AAGF |
|---|
|---|

|                      |        |         |         | AAGR        | AAGR        | Share of    | Share of    | Share of    |
|----------------------|--------|---------|---------|-------------|-------------|-------------|-------------|-------------|
|                      | 2017   | 2035    | 2067    | (2017-2035) | (2035-2067) | County 2017 | County 2035 | County 2067 |
| Polk County          | 81,089 | 105,217 | 149,203 | 1.5%        | 1.1%        | 100.0%      | 100.0%      | 100.0%      |
| Falls City UGB       | 1,003  | 1,119   | 1,285   | 0.6%        | 0.4%        | 1.2%        | 1.1%        | 0.9%        |
| Willamina UGB (Polk) | 898    | 1,049   | 1,277   | 0.9%        | 0.6%        | 1.1%        | 1.0%        | 0.9%        |
| Outside UGBs         | 15,616 | 16,702  | 19,940  | 0.4%        | 0.6%        | 19.3%       | 15.9%       | 13.4%       |
| Larger UGBs          | 63,572 | 86,347  | 126,702 | 1.7%        | 1.2%        | 78.4%       | 82.1%       | 84.9%       |

Source: Forecast by Population Research Center (PRC)

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

Polk County's smaller sub-areas are expected to compose just over 1 percent of countywide population growth during the first 18 years of the forecast period and 1 percent in the final 32 years (Figure 17). Each smaller UGB is expected to capture a decreasing share of countywide population growth, with Falls City and the Polk County portion of Willamina each losing 0.1 percentage points of the county population share between the initial 18 and final 32 years of the forecast period.

|                      | 2017-2035 | 2035-2067 |
|----------------------|-----------|-----------|
| Polk County          | 100.0%    | 100.0%    |
| Falls City UGB       | 0.5%      | 0.4%      |
| Willamina UGB (Polk) | 0.6%      | 0.5%      |
| Outside UGBs         | 4.5%      | 7.4%      |
| Larger UGBs          | 94.4%     | 91.7%     |

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

Source: Forecast by Population Research Center (PRC)

Note: 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 2017 to 2035 the proportion of county population 65 and older is forecast to grow from 17.5 percent to about 19 percent, and the proportion of the population 65 and older is expected to continue increasing from 2035 to 2067, ending the period at just over 21 percent (Figure 20). For a more detailed look at the age structure of Polk County's population see the final forecast table published to the forecast program website (<u>http://www.pdx.edu/prc/opfp</u>).



Figure 20. Polk County—Age Structure of the Population (2017, 2035, and 2067)

As the countywide population ages in the near-term—contributing to a slow-growing population of women in their years of peak fertility—and as more women choose to have fewer children and have them at older ages, the increase in average annual births is expected to slow. This, combined with the rise in the number of deaths is expected to cause natural increase to decrease in magnitude (Figure 21).

Net in-migration is forecast to increase rapidly in the near-term and then remain relatively stable over the remainder of the forecast period. The majority of these net in-migrants are expected to be middleaged individuals and children under the age of 14.

In summary, a slight decline in the magnitude of natural increase and stable net in-migration are expected to lead to population growth remaining steady through 2045, before reaching its peak in 2055 and then slightly tapering through the remainder of the forecast period (**Figure 21**). An aging population is expected to not only lead to an increase in deaths, but also to a smaller proportion of women in their childbearing years, likely resulting in a long-term decline in birth rates. Net in-migration is expected to remain relatively steady throughout the forecast period after an initial increase.





## **Glossary of Key Terms**

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

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

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

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

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

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

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

## Appendix A: Surveys and Supporting Information

Supporting information is based on planning documents and reports, and from submissions to PRC from city officials and staff, and other stakeholders. The information pertains to characteristics of each city area, and to changes thought to occur in the future. The cities of Falls City, Independence, Salem, Keizer and Willamina did not submit survey responses.

| Dallas — Polk Cour  | nty—11/3/202   | 16   |   |   |   |   |
|---|--|--|---|---|---|---|
| Observations about<br>Population<br>Composition (e.g.<br>about children, the<br>elderly, racial ethnic<br>groups)<br>Low ethnic diversity,<br>higher than average #<br>of retirees shrinking<br>school enrollment<br>population | Observations<br>about<br>Housing<br>(including<br>vacancy rates)<br>Low vacancy<br>rates,<br>especially for<br>rentals | Planned<br>Housing<br>Development/<br>Est. Year<br>Completion<br>40 unit<br>independent<br>senior living<br>apartments<br>under<br>construction<br>(completion<br>Dec 2016). 2<br>master<br>planned<br>developments<br>in process with | Future Group<br>quarters<br>Facilities<br>Jefferson<br>Lodge possible<br>construction of<br>40 beds for<br>assisted living<br>facility. | <b>Future Employers</b><br>American Gas and<br>Tehcnology 100+<br>employees. Mill<br>facility 50+<br>employees. | Infrastructure<br>No major<br>constraints to<br>public utility<br>systems. Power<br>upgrade<br>planned in 2017<br>– 2018. | Promotions (Promos) and<br>Hindrances (Hinders) to<br>Population and Housing Growth;<br>Other notes<br>Promos: UGB sufficient<br>serviceable land for residential,<br>industrial and redevelopment<br>commercial uses. City is 16 miles<br>from Salem/Keizer metro area,<br>and highly livable community.<br>Hinders: 25 miles from I-5<br>corridor, no active rail service,<br>limited large commercial sites (3-<br>5 acres) read for development.<br>Older demographics makes it |
|   |  | 400 – 450 units<br>each.   |   |   |   | hard to pass school bonds. Aging school facilities.   |

| Dallas — Polk Coun   | nty—11/3/2016   |
|--|---|
| Highlights or summary<br>from planning<br>documents of<br>influences on or<br>anticipation of<br>population and<br>housing growth<br>(including any plans<br>for UGB expansion and<br>the stage in the<br>expansion process) | City vision planning for additional growth while maintaining high quality of life. Seeking strong redevelopment in downtown core similar to McMinnville that takes advantage of wine/food industries. |
| Other information  | According to PRC background research:   |
| (e.g. planning   | - there may be some minor constraints to developable land due to the existence of flood pains but overall no significant  |
| documents, email   | constraints.  |
| correspondence,  | - available industrial land is not currently considered to be a constraint for the city's economic growth going   |
| housing development  | forward   |
| survey)  | - The city's 2030 vision plan identifies lower median housing values in Dallas compared to the rest of the  |
|  | county or the state, but noted that about 33.1% of Dallas residents experience a 'housing cost burden'.   |

| Falls City — Polk Co  | ounty— NO R  | ESPONSE   |  |                  |                |  |
|---|--|---|--|------------------|----------------|--|
| Observations about<br>Population<br>Composition (e.g.<br>about children, the<br>elderly, racial ethnic<br>groups) | Observations<br>about<br>Housing<br>(including<br>vacancy rates) | Planned<br>Housing<br>Development/<br>Est. Year<br>Completion | Future Group<br>quarters<br>Facilities | Future Employers | Infrastructure | Promotions (Promos) and<br>Hindrances (Hinders) to<br>Population and Housing Growth;<br>Other notes<br>Promos:<br>Hinders: |
|   |  |   |  |                  |                |  |
| Highlights or summary   |  | L   | l                                      | I                | I              |  |
| from planning   |  |   |  |                  |                |  |
| documents of  |  |   |  |                  |                |  |
| influences on or  |  |   |  |                  |                |  |
| anticipation of   |  |   |  |                  |                |  |
| population and  |  |   |  |                  |                |  |
| housing growth  |  |   |  |                  |                |  |
| (including any plans  |  |   |  |                  |                |  |
| for UGB expansion and   |  |   |  |                  |                |  |

| Falls City — Polk Co   | ounty— NO RESPONSE |
|--|--------------------|
| the stage in the<br>expansion process)   |                    |
| Other information<br>(e.g. planning<br>documents, email<br>correspondence,<br>housing development<br>survey) | N/A                |

| Independence — P  | olk County—  | NO RESPONSE   |  |                  |                |   |
|---|--|---|--|------------------|----------------|---|
| Observations about<br>Population<br>Composition (e.g.<br>about children, the<br>elderly, racial ethnic<br>groups) | Observations<br>about<br>Housing<br>(including<br>vacancy rates) | Planned<br>Housing<br>Development/<br>Est. Year<br>Completion | Future Group<br>quarters<br>Facilities | Future Employers | Infrastructure | Promotions (Promos) and<br>Hindrances (Hinders) to<br>Population and Housing Growth;<br>Other notes |
|   |  |   |  |                  |                | Promos:   |
|   |  |   |  |                  |                | Hinders:  |
| Highlights or summary   |  |   |  |                  |                |   |
| from planning   |  |   |  |                  |                |   |
| influences on or  |  |   |  |                  |                |   |
| anticipation of   |  |   |  |                  |                |   |
| population and  |  |   |  |                  |                |   |
| including any plans   |  |   |  |                  |                |   |
| for UGB expansion and   |  |   |  |                  |                |   |

| Independence — P   | olk County— NO RESPONSE |
|--|-------------------------|
| the stage in the<br>expansion process)   |                         |
| Other information<br>(e.g. planning<br>documents, email<br>correspondence,<br>housing development<br>survey) | N/A                     |

| Keizer — Polk Cour     | nty—NO SUR\    | /EY RESPONSE |              |                  |                |                                |
|------------------------|----------------|--------------|--------------|------------------|----------------|--------------------------------|
| Observations about     |                |              |              |                  |                |                                |
| Population             | Observations   | Planned      |              |                  |                |                                |
| Composition (e.g.      | about          | Housing      |              |                  |                | Promotions (Promos) and        |
| about children, the    | Housing        | Development/ | Future Group |                  |                | Hindrances (Hinders) to        |
| elderly, racial ethnic | (including     | Est. Year    | quarters     |                  |                | Population and Housing Growth; |
| groups)                | vacancy rates) | Completion   | Facilities   | Future Employers | Infrastructure | Other notes                    |
|                        |                |              |              |                  |                | Promos:                        |
|                        |                |              |              |                  |                |                                |
|                        |                |              |              |                  |                | Hinders:                       |
|                        |                |              |              |                  |                |                                |
|                        |                |              |              |                  |                |                                |
|                        |                |              |              |                  |                |                                |
|                        |                |              |              |                  |                |                                |
|                        |                |              |              |                  |                |                                |
|                        |                |              |              |                  |                |                                |
| Highlights or summary  | N/A            |              |              |                  |                |                                |
| from planning          |                |              |              |                  |                |                                |
| documents of           |                |              |              |                  |                |                                |
| influences on or       |                |              |              |                  |                |                                |
| anticipation of        |                |              |              |                  |                |                                |
| population and         |                |              |              |                  |                |                                |
| housing growth         |                |              |              |                  |                |                                |
| (including any plans   |                |              |              |                  |                |                                |
| for UGB expansion and  |                |              |              |                  |                |                                |

| Keizer — Polk County—NO SURVEY RESPONSE  |     |  |  |  |  |  |  |  |
|--|-----|--|--|--|--|--|--|--|
| the stage in the<br>expansion process)   |     |  |  |  |  |  |  |  |
| Other information<br>(e.g. planning<br>documents, email<br>correspondence,<br>housing development<br>survey) | N/A |  |  |  |  |  |  |  |

| Monmouth — Polk County— 1/9/2017  |  |  |  |   |  |   |  |  |  |  |
|---|--|--|--|---|--|---|--|--|--|--|
| Observations about<br>Population<br>Composition (e.g.<br>about children, the<br>elderly, racial ethnic<br>groups) | Observations<br>about<br>Housing<br>(including<br>vacancy rates) | Planned<br>Housing<br>Development/<br>Est. Year<br>Completion  | Future Group<br>quarters<br>Facilities                       | Future Employers  | Infrastructure   | Promotions (Promos) and<br>Hindrances (Hinders) to<br>Population and Housing Growth;<br>Other notes   |  |  |  |  |
| The Hispanic<br>population seems to be<br>increasing.   | Demand for<br>multi-family<br>housing<br>remains<br>strong.      | Projected<br>residential<br>construction<br>for 2017 →<br>construction of<br>19 SFR units,<br>10<br>triplex/fourplex<br>units, and 13<br>duplex/triplex<br>units to begin<br>summer 2017.<br>10 SFR units<br>are nearly<br>complete. |  | Several small-<br>scale food and<br>retail employers<br>plan to establish<br>businesses in<br>2017. | Infrastructure<br>capacity and<br>condition are<br>both adequate<br>to<br>accommodate<br>growth. | Promos:<br>Hinders: Growth of single-family<br>residential housing is limited at<br>this time. Buildable land is<br>available within the UGB, but<br>owners of larger parcels are not<br>interested in annexation and<br>development. |  |  |  |  |
| Highlights or summary<br>from planning<br>documents of<br>influences on or<br>anticipation of                     | The Housing an complete. A dra high-density res                  | d Land Use elemer<br>aft buildable lands<br>idential land will b   | its of the Compreh<br>inventory has bee<br>he needed to meet | nensive Plan will be up<br>en completed. Prelim<br>needs through 2040.                              | odated in 2017-18 c<br>inary data show tha<br>No UGB expansior                                   | once the population forecast is<br>at about 50 additional acres of<br>a is anticipated.   |  |  |  |  |

| Monmouth — Polk   | County— 1/9/2017 |
|---|------------------|
| population and<br>housing growth<br>(including any plans<br>for UGB expansion and<br>the stage in the<br>expansion process) |                  |
| Other information<br>(e.g. planning<br>documents, email<br>correspondence,<br>housing development<br>survey)                | N/A              |

| Salem — Polk County—11/2/2016   |  |   |   |  |   |   |  |  |  |  |
|---|--|---|---|--|---|---|--|--|--|--|
| Observations about<br>Population<br>Composition (e.g.<br>about children, the<br>elderly, racial ethnic<br>groups)   | Observations<br>about Housing<br>(including<br>vacancy rates)  | Planned<br>Housing<br>Development/<br>Est. Year<br>Completion   | Future<br>Group<br>quarters<br>Facilities | Future Employers   | Infrastructure  | Promotions (Promos) and<br>Hindrances (Hinders) to<br>Population and Housing<br>Growth; Other notes   |  |  |  |  |
| Relatively young<br>population (In 2010 the<br>median age was 35,<br>compared to 38 for<br>Oregon). Salem is also<br>growing older (24% 60<br>and older projected by<br>2035). Large share of<br>single person<br>households (29% in<br>2010, compared to<br>27% for Oregon). More<br>families with children<br>(34% in 2012,<br>compared to 27% for<br>Oregon).<br>Hispanic/Latino<br>population has grown<br>(15% in 2000, 20% in<br>2010). | New single family<br>residential<br>subdivision and<br>multi-family<br>apartment<br>development is<br>generally picking<br>up, as shown in<br>housing<br>development<br>survey. Projected<br>need for more<br>multiple family<br>units over the<br>next 20 years. City<br>has started a work<br>plan to address<br>the projected<br>future need for<br>addition multi- | <ul> <li>738 SFR units</li> <li>in the pipeline</li> <li>of which 368</li> <li>are under</li> <li>construction,</li> <li>144 have been</li> <li>approved and</li> <li>226 are under</li> <li>review.</li> <li>868 MF units in</li> <li>the pipeline of</li> <li>which 279</li> <li>units are under</li> <li>construction,</li> <li>381 have been</li> <li>approved and</li> <li>208 are under</li> <li>review.</li> </ul> |   | <ul> <li>Henningsen Cold</li> <li>Storage: 5</li> <li>employees (phase</li> <li>1); additional 3</li> <li>phases planned</li> <li>with an additional</li> <li>estimated 20</li> <li>employees</li> <li>Local brewery</li> <li>expansion:</li> <li>additional 5-10</li> <li>employees</li> <li>Open Source</li> <li>Dental (they are</li> <li>locating on</li> <li>Kuebler</li> <li>Boulevard) - they</li> <li>went through site</li> <li>plan review; don't</li> </ul> | Many<br>undeveloped<br>areas lack<br>adequate water<br>and/or sewer<br>infrastructure,<br>but SDC funding<br>is available for<br>growth-related<br>infrastructure.<br>5-year CIP<br>includes "Pump<br>station<br>upgrades to<br>serve new<br>employment<br>center" which is<br>indirectly<br>related to | <ul> <li>Promos: Salem's industrial land<br/>base is unique within the<br/>Willamette Valley. Salem has<br/>about 900 acres of high value<br/>industrial land, in areas such as<br/>the Mill Creek Corporate<br/>Center. Salem also has a<br/>surplus of single family<br/>residential land.</li> <li>Hinders: Projected deficit of<br/>271 acres of land designated<br/>for commercial uses over next<br/>20-years. Adopted EOA<br/>includes recommendations to<br/>address this deficit. Projected<br/>deficit of approx 207 acres<br/>(2,900 units) of multiple family<br/>land over the next 20 years.<br/>The City has a work plan in<br/>place to address this projected</li> </ul> |  |  |  |  |

| Salem — Polk County—11/2/2016 |   |  |  |   |                       |   |  |  |  |  |
|-------------------------------|---|--|--|---|-----------------------|---|--|--|--|--|
|                               | through exploring<br>possibility of<br>allowing accessory<br>dwelling units and<br>additional density<br>(duplex and<br>triplexes) in some<br>single family<br>residential areas. |  |  | employee<br>estimates<br>- Spec buildings at<br>Mill Creek<br>Corporate Center<br>to accommodate<br>new/expanding<br>businesses<br>(100,000 SF<br>(100,000 SF<br>construction to<br>start spring 2017)<br>- estimate of 50<br>jobs for end of<br>2017 - early 2018?<br>- Two local food<br>processing<br>companies -<br>expansions<br>planned in 2017 -<br>estimate<br>additional 25 jobs | population<br>growth. | need for more multiple family<br>dwelling units, as described<br>above. |  |  |  |  |

| Salem — Polk Cour     | nty—11/2/2016   |
|-----------------------|---|
| Highlights or summary | The Salem portion of the shared Salem-Keizer LIGB is expected to grow area is projected to grow from 210.035 in 2015 to             |
| from planning         | 269 274 in 2035 (Salem HNA 2014) Our recent HNA and EOA conclude that no LIGB expansion is peeded. HNA identifies a                 |
| documents of          | projected deficit of 2,000 multifamily units (about 207 acres) over the payt 20 years. The City is addressing this projected        |
|                       | projected denot of 2,500 multiality diffs (about 207 acres) over the flext 20 years. The city is addressing this projected          |
| influences on or      | deficit with a work plan, as described above. Currently important industries in Salem are: Food and Beverage Manufacturing,         |
| anticipation of       | Medical Services, and Government Services. Employment in medical services will grow with population growth to the extent            |
| population and        | that Salem continues to offer medical services not available in surrounding areas. Salem will continue to be a center for           |
| housing growth        | government jobs, especially for jobs in State Government. Salem's competitive advantages in attracting new employers                |
| (including any plans  | include: location on I-5 and in close proximity to other cities and resources, presence of state government, access to highly       |
| for UGB expansion and | skilled workers, and high quality of life. Salem is targeting the following industries for future growth, based on research about a |
| the stage in the      | wide range of potential target industries that might be appropriate for Salem, considering our competitive advantages:              |
| expansion process)    | Technology manufacturing, Equipment manufacturing, Specialty metal manufacturing, Specialty food and beverage                       |
|                       | manufacturing, and Chemical manufacturing.  |
|                       |   |
| Other information     | N/A   |
| (e.g. planning        |   |
| documents, email      |   |
| correspondence,       |   |
| housing development   |   |
| survey)               |   |
|                       |   |
|                       |   |

| Willamina — Polk County— NO RESPONSE |                |              |              |                  |                |                                |  |  |  |  |
|--------------------------------------|----------------|--------------|--------------|------------------|----------------|--------------------------------|--|--|--|--|
| Observations about                   |                |              |              |                  |                |                                |  |  |  |  |
| Population                           | Observations   | Planned      |              |                  |                |                                |  |  |  |  |
| Composition (e.g.                    | about          | Housing      |              |                  |                | Promotions (Promos) and        |  |  |  |  |
| about children, the                  | Housing        | Development/ | Future Group |                  |                | Hindrances (Hinders) to        |  |  |  |  |
| elderly, racial ethnic               | (including     | Est. Year    | quarters     |                  |                | Population and Housing Growth; |  |  |  |  |
| groups)                              | vacancy rates) | Completion   | Facilities   | Future Employers | Infrastructure | Other notes                    |  |  |  |  |
|                                      |                |              |              |                  |                | Promos:                        |  |  |  |  |
|                                      |                |              |              |                  |                |                                |  |  |  |  |
|                                      |                |              |              |                  |                | Hinders:                       |  |  |  |  |
|                                      |                |              |              |                  |                |                                |  |  |  |  |
|                                      |                |              |              |                  |                |                                |  |  |  |  |
|                                      |                |              |              |                  |                |                                |  |  |  |  |
|                                      |                |              |              |                  |                |                                |  |  |  |  |
|                                      |                |              |              |                  |                |                                |  |  |  |  |
| Highlights or summary                |                |              |              |                  |                |                                |  |  |  |  |
| from planning                        |                |              |              |                  |                |                                |  |  |  |  |
| documents of                         |                |              |              |                  |                |                                |  |  |  |  |
| influences on or                     |                |              |              |                  |                |                                |  |  |  |  |
| anticipation of                      |                |              |              |                  |                |                                |  |  |  |  |
| population and                       |                |              |              |                  |                |                                |  |  |  |  |
| housing growth                       |                |              |              |                  |                |                                |  |  |  |  |
| (including any plans                 |                |              |              |                  |                |                                |  |  |  |  |
| for UGB expansion and                |                |              |              |                  |                |                                |  |  |  |  |

| Willamina — Polk County— NO RESPONSE   |     |  |  |  |  |  |  |  |
|--|-----|--|--|--|--|--|--|--|
| the stage in the<br>expansion process)   |     |  |  |  |  |  |  |  |
| Other information<br>(e.g. planning<br>documents, email<br>correspondence,<br>housing development<br>survey) | N/A |  |  |  |  |  |  |  |

## **Appendix B: Specific Assumptions**

#### Dallas

Total fertility rates are assumed to deviate from a historical trend (observed from the 2000 to 2010 period) and decline slightly over the forecast period. Survival rates are assumed to be the same as those forecast for the county as a whole; these rates are expected to gradually increase over the 50-year period. Age specific net migration rates are assumed to follow historical county patterns, but at slightly higher rates for multiple age groups over the forecast period.

#### **Falls City**

The 5-year average annual housing unit growth rate is assumed to increase to 0.71 percent during the first 10 years and then decline thereafter. The occupancy rate is assumed to be steady at 92.7 percent throughout the 50 year horizon. PPH is assumed to be stable at 2.72 over the forecast period. There is no group quarters population in Falls City.

#### Independence

Total fertility rates are assumed to follow a historical trend (observed from the 2000 to 2010 period) and gradually decline over the forecast period. Survival rates are assumed to be the same as those forecast for the county as a whole; these rates are expected to gradually increase over the 50-year period. Age specific net migration rates are assumed to follow historical county patterns.

#### Monmouth

Total fertility rates are assumed to increase in the near term, then decline slightly for the remainder the forecast period. Survival rates are assumed to be the same as those forecast for the county as a whole; these rates are expected to gradually increase over the 50-year period. Age specific net migration rates are assumed to deviate from historical county patterns, with the sub-area experiencing a net inmigration of college-aged populations and a corresponding net out-migration of post graduates.

#### Salem-Keizer

Total fertility rates are assumed to follow a historical trend (observed from the 2000 to 2010 period) and gradually decline over the forecast period. Survival rates are assumed to be the same as those forecast for the county as a whole; these rates are expected to gradually increase over the 50-year period. Age specific net migration rates are assumed to follow historical county patterns.

#### Willamina

The 5-year average annual housing unit growth rate is assumed to decline throughout the forecast period. The occupancy rate is assumed to steadily increase from 89.6 percent to 92 percent throughout

the 50 year horizon. PPH is assumed to be stable at 2.78 over the forecast period. There is no group quarters population in Willamina.

#### Outside UGBs

The 5-year average annual housing unit growth rate is assumed to increase to 0.8 percent during the first 10 years and then decline thereafter. The occupancy rate is assumed to be steady at 93.4 percent throughout the 50 year horizon. PPH is assumed to gradually decrease from 2.61 to 2.37 over the forecast period. There is no group quarters population within the area outside the UGBs in Polk county.

## **Appendix C: Detailed Population Forecast Results**

| Population<br>Forecasts by Age |        |        |        |        |         |         |         |         |         |         |         |         |
|--------------------------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| Group / Year                   | 2017   | 2020   | 2025   | 2030   | 2035    | 2040    | 2045    | 2050    | 2055    | 2060    | 2065    | 2067    |
| 00-04                          | 5,268  | 5,449  | 5,695  | 5,995  | 6,340   | 6,753   | 7,107   | 7,369   | 7,632   | 7,895   | 8,200   | 8,316   |
| 05-09                          | 5,270  | 5,698  | 6,049  | 6,317  | 6,640   | 7,010   | 7,439   | 7,808   | 8,067   | 8,332   | 8,603   | 8,731   |
| 10-14                          | 5,561  | 5,727  | 6,489  | 6,822  | 7,051   | 7,399   | 7,713   | 8,164   | 8,537   | 8,796   | 9,068   | 9,181   |
| 15-19                          | 6,195  | 6,412  | 6,699  | 7,522  | 7,831   | 8,010   | 8,376   | 8,709   | 9,186   | 9,581   | 9,854   | 9,971   |
| 20-24                          | 6,102  | 6,229  | 6,621  | 6,911  | 7,753   | 8,056   | 8,209   | 8,560   | 8,866   | 9,325   | 9,708   | 9,813   |
| 25-29                          | 4,775  | 4,959  | 5,215  | 5,604  | 5,909   | 6,691   | 7,002   | 7,193   | 7,552   | 7,885   | 8,275   | 8,405   |
| 30-34                          | 4,587  | 4,769  | 5,098  | 5,358  | 5,751   | 6,054   | 6,831   | 7,129   | 7,297   | 7,641   | 7,965   | 8,117   |
| 35-39                          | 4,919  | 5,216  | 5,585  | 5,965  | 6,263   | 6,712   | 7,042   | 7,926   | 8,245   | 8,420   | 8,803   | 8,947   |
| 40-44                          | 4,962  | 5,347  | 5,915  | 6,329  | 6,757   | 7,082   | 7,566   | 7,919   | 8,886   | 9,221   | 9,402   | 9,567   |
| 45-49                          | 4,782  | 5,005  | 5,690  | 6,291  | 6,724   | 7,164   | 7,484   | 7,975   | 8,318   | 9,309   | 9,645   | 9,716   |
| 50-54                          | 4,846  | 4,916  | 5,325  | 6,048  | 6,672   | 7,115   | 7,557   | 7,869   | 8,351   | 8,682   | 9,699   | 9,831   |
| 55-59                          | 4,870  | 4,839  | 4,975  | 5,384  | 6,106   | 6,724   | 7,144   | 7,565   | 7,846   | 8,303   | 8,616   | 9,002   |
| 60-64                          | 4,763  | 4,819  | 4,788  | 4,922  | 5,318   | 6,022   | 6,610   | 7,006   | 7,390   | 7,647   | 8,079   | 8,197   |
| 65-69                          | 4,396  | 4,652  | 4,763  | 4,730  | 4,858   | 5,250   | 5,928   | 6,491   | 6,860   | 7,227   | 7,469   | 7,635   |
| 70-74                          | 3,607  | 4,088  | 4,474  | 4,543  | 4,513   | 4,635   | 5,001   | 5,642   | 6,166   | 6,510   | 6,859   | 6,952   |
| 75-79                          | 2,702  | 3,128  | 3,802  | 4,167  | 4,231   | 4,202   | 4,305   | 4,642   | 5,226   | 5,704   | 6,021   | 6,150   |
| 80-84                          | 1,821  | 2,025  | 2,581  | 3,148  | 3,461   | 3,521   | 3,496   | 3,586   | 3,869   | 4,361   | 4,769   | 4,879   |
| 85+                            | 1,658  | 1,735  | 1,996  | 2,445  | 3,040   | 3,592   | 3,986   | 4,258   | 4,527   | 4,918   | 5,523   | 5,794   |
| Total                          | 81,089 | 85,012 | 91,761 | 98,501 | 105,217 | 111,991 | 118,797 | 125,810 | 132,823 | 139,758 | 146,559 | 149,203 |

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

Population Forecasts prepared by: Population Research Center, Portland State University, June 30, 2017.

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

| Area / Year             | 2017   | 2020   | 2025   | 2030   | 2035    | 2040    | 2045    | 2050    | 2055    | 2060    | 2065    | 2067    |
|-------------------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| Polk County             | 81,089 | 85,012 | 91,761 | 98,501 | 105,217 | 111,991 | 118,797 | 125,810 | 132,823 | 139,758 | 146,559 | 149,203 |
| Dallas UGB              | 16,414 | 17,479 | 19,269 | 20,996 | 22,665  | 24,279  | 25,858  | 27,465  | 29,128  | 30,823  | 32,535  | 33,208  |
| Falls City UGB          | 1,003  | 1,014  | 1,051  | 1,087  | 1,119   | 1,150   | 1,179   | 1,206   | 1,231   | 1,255   | 1,276   | 1,285   |
| Independence UGB        | 9,326  | 10,096 | 11,355 | 12,578 | 13,803  | 15,032  | 16,276  | 17,520  | 18,768  | 20,015  | 21,256  | 21,741  |
| Monmouth UGB            | 9,944  | 10,378 | 11,264 | 12,129 | 12,943  | 13,639  | 14,317  | 15,012  | 15,776  | 16,596  | 17,399  | 17,708  |
| Salem/Keizer UGB (Polk) | 27,888 | 29,066 | 31,545 | 34,200 | 36,936  | 39,644  | 42,306  | 44,971  | 47,676  | 50,378  | 53,013  | 54,045  |
| Willamina UGB (Polk)    | 898    | 928    | 970    | 1,011  | 1,049   | 1,086   | 1,122   | 1,158   | 1,193   | 1,228   | 1,263   | 1,277   |
| Outside UGB Area        | 15,616 | 16,051 | 16,308 | 16,502 | 16,702  | 17,161  | 17,740  | 18,478  | 19,050  | 19,462  | 19,816  | 19,940  |

Population Forecasts prepared by: Population Research Center, Portland State University, June 30, 2017.