Oregon Population Forecast Program
Regional Forecast Meeting – March 13, 2015

Preliminary Coordinated Forecasts for Deschutes County, its Urban Growth Boundaries (UGBs), and the Area Outside UGBs
Agenda

• Present and discuss preliminary forecast results
  • Proposed Forecast – March 31, 2015; Posted on Oregon Population Forecast Program (OPFP) website: http://www.pdx.edu/prc/opfp

• Explain our assumptions for future change

• Obtain your feedback
Assumptions for County and Larger Sub-Area Forecasts

1. In general, as the economy continues to strengthen we assume an increase in net in-migration and a corresponding growth in housing construction.
   a) Net in-migration will accelerate in the near-term and then stabilize over time.

2. We incorporate national trends into our assumptions for fertility and mortality rates.
   a) As a result of aging Baby Boomers, deaths increase and peak in 2030, with total deaths tapering through 2050.
   b) Total fertility rates decline throughout the entire forecast period; although only slightly in some areas.
      i. As a result areas will experience natural decrease, or if it is already occurring, a natural decrease of a larger magnitude.

3. Population increases will become more dependent on net in-migration.
   a) Some areas will experience population decreases due to natural decrease around 2030-2040, and will only increase if net in-migration accelerates.
Preliminary Forecast Results

Deschutes County—Total Population by Five-year Intervals (2015-2065)

Source: Forecast by Population Research Center (PRC)

These numbers represent Preliminary Forecast Results
Preliminary Forecast Results

Deschutes County—Components of Population Change by Five-year Intervals (2015-2065)

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Mig.</th>
<th>Nat. Inc.</th>
<th>AAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>9,871</td>
<td>1,685</td>
<td>1.6%</td>
</tr>
<tr>
<td>2020</td>
<td>15,864</td>
<td>1,160</td>
<td>2.3%</td>
</tr>
<tr>
<td>2025</td>
<td>18,807</td>
<td>606</td>
<td>2.0%</td>
</tr>
<tr>
<td>2030</td>
<td>19,729</td>
<td>-101</td>
<td>1.8%</td>
</tr>
<tr>
<td>2035</td>
<td>19,777</td>
<td>-721</td>
<td>1.6%</td>
</tr>
<tr>
<td>2040</td>
<td>20,894</td>
<td>-1,168</td>
<td>1.5%</td>
</tr>
<tr>
<td>2045</td>
<td>20,935</td>
<td>-1,303</td>
<td>1.3%</td>
</tr>
<tr>
<td>2050</td>
<td>21,850</td>
<td>-1,529</td>
<td>1.2%</td>
</tr>
<tr>
<td>2055</td>
<td>22,384</td>
<td>-1,663</td>
<td>1.2%</td>
</tr>
<tr>
<td>2060</td>
<td>22,675</td>
<td>-1,902</td>
<td>1.1%</td>
</tr>
<tr>
<td>2065</td>
<td>22,942</td>
<td>-2,105</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

Source: Forecast by Population Research Center (PRC)

These numbers represent Preliminary Forecast Results
Historical and Forecast Trends

Deschutes County—Average Annual Births

<table>
<thead>
<tr>
<th>Year</th>
<th>Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1,754</td>
</tr>
<tr>
<td>2015</td>
<td>1,694</td>
</tr>
<tr>
<td>2020</td>
<td>1,766</td>
</tr>
<tr>
<td>2025</td>
<td>1,899</td>
</tr>
<tr>
<td>2030</td>
<td>2,103</td>
</tr>
<tr>
<td>2035</td>
<td>2,298</td>
</tr>
<tr>
<td>2040</td>
<td>2,585</td>
</tr>
<tr>
<td>2045</td>
<td>2,715</td>
</tr>
<tr>
<td>2050</td>
<td>2,867</td>
</tr>
<tr>
<td>2055</td>
<td>2,961</td>
</tr>
<tr>
<td>2060</td>
<td>3,080</td>
</tr>
<tr>
<td>2065</td>
<td>3,224</td>
</tr>
</tbody>
</table>

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

These numbers represent **Preliminary** Forecast Results.
Historical and Forecast Trends

These numbers represent Preliminary Forecast Results

Deschutes County—Average Annual Deaths

<table>
<thead>
<tr>
<th>Year</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1,068</td>
</tr>
<tr>
<td>2015</td>
<td>1,357</td>
</tr>
<tr>
<td>2020</td>
<td>1,534</td>
</tr>
<tr>
<td>2025</td>
<td>1,778</td>
</tr>
<tr>
<td>2030</td>
<td>2,123</td>
</tr>
<tr>
<td>2035</td>
<td>2,443</td>
</tr>
<tr>
<td>2040</td>
<td>2,818</td>
</tr>
<tr>
<td>2045</td>
<td>2,976</td>
</tr>
<tr>
<td>2050</td>
<td>3,172</td>
</tr>
<tr>
<td>2055</td>
<td>3,294</td>
</tr>
<tr>
<td>2060</td>
<td>3,460</td>
</tr>
<tr>
<td>2065</td>
<td>3,645</td>
</tr>
</tbody>
</table>

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

These numbers represent Preliminary Forecast Results

Deschutes County—Average Annual Natural Increase

<table>
<thead>
<tr>
<th>Year</th>
<th>Nat. Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>686</td>
</tr>
<tr>
<td>2015</td>
<td>337</td>
</tr>
<tr>
<td>2020</td>
<td>232</td>
</tr>
<tr>
<td>2025</td>
<td>121</td>
</tr>
<tr>
<td>2030</td>
<td>-20</td>
</tr>
<tr>
<td>2035</td>
<td>-144</td>
</tr>
<tr>
<td>2040</td>
<td>-234</td>
</tr>
<tr>
<td>2045</td>
<td>-261</td>
</tr>
<tr>
<td>2050</td>
<td>-306</td>
</tr>
<tr>
<td>2055</td>
<td>-333</td>
</tr>
<tr>
<td>2060</td>
<td>-380</td>
</tr>
<tr>
<td>2065</td>
<td>-421</td>
</tr>
</tbody>
</table>

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

These numbers represent *Preliminary* Forecast Results

<table>
<thead>
<tr>
<th>Total Fertility Rate (TFR)</th>
<th>2000</th>
<th>2010</th>
<th>2015</th>
<th>2035</th>
<th>2065</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deschutes County</td>
<td>2.06</td>
<td>1.81</td>
<td>1.84</td>
<td>1.80</td>
<td>1.73</td>
</tr>
<tr>
<td>Oregon</td>
<td>1.98</td>
<td>1.79</td>
<td>1.83</td>
<td>1.79</td>
<td>1.73</td>
</tr>
</tbody>
</table>

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

*Note: 2000 and 2010 are annual TFRs, whereas the TFRs for 2015, 2035, and 2065 are for the preceding five-year forecast period. In other words the TFR for 2035 is calculated for the 2030 to 2035 forecast period.*
## Life Expectancy (Years)—Both Genders

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2010</th>
<th>2060</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deschutes County</td>
<td>79</td>
<td>81</td>
<td>88</td>
</tr>
<tr>
<td>Oregon</td>
<td>78</td>
<td>80</td>
<td>87</td>
</tr>
</tbody>
</table>

*Source: U.S. Census Bureau.*
Historical and Forecast Trends

These numbers represent Preliminary Forecast Results

Deschutes County—Average Annual Net Migration

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Mig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>3,550</td>
</tr>
<tr>
<td>2015</td>
<td>1,974</td>
</tr>
<tr>
<td>2020</td>
<td>3,173</td>
</tr>
<tr>
<td>2025</td>
<td>3,761</td>
</tr>
<tr>
<td>2030</td>
<td>3,946</td>
</tr>
<tr>
<td>2035</td>
<td>3,955</td>
</tr>
<tr>
<td>2040</td>
<td>4,179</td>
</tr>
<tr>
<td>2045</td>
<td>4,187</td>
</tr>
<tr>
<td>2050</td>
<td>4,370</td>
</tr>
<tr>
<td>2055</td>
<td>4,477</td>
</tr>
<tr>
<td>2060</td>
<td>4,535</td>
</tr>
<tr>
<td>2065</td>
<td>4,588</td>
</tr>
</tbody>
</table>

Note: The years signify the end of the period for which average annual numbers were calculated. The average annual numbers for "2010" were calculated for the 2000-2010 period, with the remaining years calculated for their preceding five-year periods.
Deschutes County—Age Structure of the Population

Source: Forecast by Population Research Center (PRC)

These numbers represent Preliminary Forecast Results
Historical and Forecast Trends

Deschutes County’s Larger Sub-Areas—Average Annual Net Migrants

<table>
<thead>
<tr>
<th></th>
<th>2000-2010</th>
<th>2015-2035</th>
<th>2035-2065</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bend</td>
<td>2059</td>
<td>2151</td>
<td>2545</td>
</tr>
<tr>
<td>Redmond</td>
<td>901</td>
<td>942</td>
<td>1114</td>
</tr>
<tr>
<td>Outside UGBs</td>
<td>425</td>
<td>444</td>
<td>525</td>
</tr>
</tbody>
</table>

Note: The average annual numbers were calculated for the 10 year period (2000-2010), the 20 year period (2015-2035), and the 30 year period (2035-2065)

These numbers represent Preliminary Forecast Results
## County and Larger Sub-Areas—Population and Average Annual Growth Rate (AAGR) (2015, 2035, and 2065)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2035</th>
<th>2065</th>
<th>AAGR (2015-2035)</th>
<th>AAGR (2035-2065)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deschutes County</td>
<td>170,606</td>
<td>249,037</td>
<td>357,345</td>
<td>1.9%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Bend</td>
<td>85,737</td>
<td>132,209</td>
<td>194,793</td>
<td>2.2%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Redmond</td>
<td>27,715</td>
<td>39,812</td>
<td>64,785</td>
<td>1.8%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Smaller UGBs</td>
<td>4,002</td>
<td>7,389</td>
<td>13,048</td>
<td>3.1%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Outside UGBs</td>
<td>53,151</td>
<td>69,627</td>
<td>84,719</td>
<td>1.4%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Share of County 2015</th>
<th>Share of County 2035</th>
<th>Share of County 2065</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deschutes County</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Bend</td>
<td>50.3%</td>
<td>53.1%</td>
<td>54.5%</td>
</tr>
<tr>
<td>Redmond</td>
<td>16.2%</td>
<td>16.0%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Smaller UGBs</td>
<td>2.3%</td>
<td>3.0%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Outside UGBs</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

These numbers represent *Preliminary* Forecast Results
1. For UGBs experiencing population growth, we assume a higher growth rate in the near-term, with growth stabilizing over the remainder of the forecast period.
2. If planned housing units were reported in the surveys, then we account for them being constructed over the next 5-10 years.
3. For county sub-areas where population growth has been flat or declined, and there is no planned housing construction, we hold population growth stable with no change.
## Preliminary Forecast Results

### County and Smaller Sub-Areas—Population and AAGR (2015, 2035, and 2065)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2035</th>
<th>2065</th>
<th>AAGR (2015-2035)</th>
<th>AAGR (2035-2065)</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>
</tr>
<tr>
<td><strong>Sisters(^1)</strong></td>
<td>2,315</td>
<td>4,375</td>
<td>7,212</td>
<td>3.2%</td>
<td>1.7%</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>
</tr>
<tr>
<td><strong>Larger UGBs(^2)</strong></td>
<td>113,453</td>
<td>172,021</td>
<td>259,578</td>
<td>2.1%</td>
<td>1.4%</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>
</tr>
</tbody>
</table>

### Share of County—Population and AAGR (2015, 2035, and 2065)

<table>
<thead>
<tr>
<th></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>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Sisters(^1)</strong></td>
<td>1.4%</td>
<td>1.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td><strong>La Pine</strong></td>
<td>1.0%</td>
<td>1.2%</td>
<td>1.6%</td>
</tr>
<tr>
<td><strong>Larger UGBs(^2)</strong></td>
<td>66.5%</td>
<td>69.1%</td>
<td>72.6%</td>
</tr>
<tr>
<td><strong>Outside UGBs</strong></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.

These numbers represent **Preliminary** Forecast Results.
Historical and Forecast Populations for Deschutes County and its Sub-Areas

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deschutes County</td>
<td>115,367</td>
<td>157,733</td>
<td>3.2%</td>
<td>170,606</td>
<td>249,037</td>
<td>357,345</td>
<td>1.9%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Bend (^1)</td>
<td>52,041</td>
<td>76,858</td>
<td>4.0%</td>
<td>85,737</td>
<td>132,209</td>
<td>194,793</td>
<td>2.2%</td>
<td>1.3%</td>
</tr>
<tr>
<td>La Pine</td>
<td>899</td>
<td>1,653</td>
<td>6.3%</td>
<td>1,687</td>
<td>3,014</td>
<td>5,836</td>
<td>2.9%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Redmond</td>
<td>15,524</td>
<td>26,508</td>
<td>5.5%</td>
<td>27,715</td>
<td>39,812</td>
<td>64,785</td>
<td>1.8%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Sisters</td>
<td>961</td>
<td>2,038</td>
<td>7.8%</td>
<td>2,315</td>
<td>4,375</td>
<td>7,212</td>
<td>3.2%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Outside UGBs</td>
<td>45,942</td>
<td>50,676</td>
<td>1.0%</td>
<td>53,151</td>
<td>69,627</td>
<td>84,719</td>
<td>1.4%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

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

\(^1\) For simplicity each UGB is referred to by its primary city's name.
Local Input and Additional Information

• Questions?
• Discussion time