Population Forecasts for Lane County, its Cities and Unincorporated Area 2008-2035

Prepared by:
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May 2009

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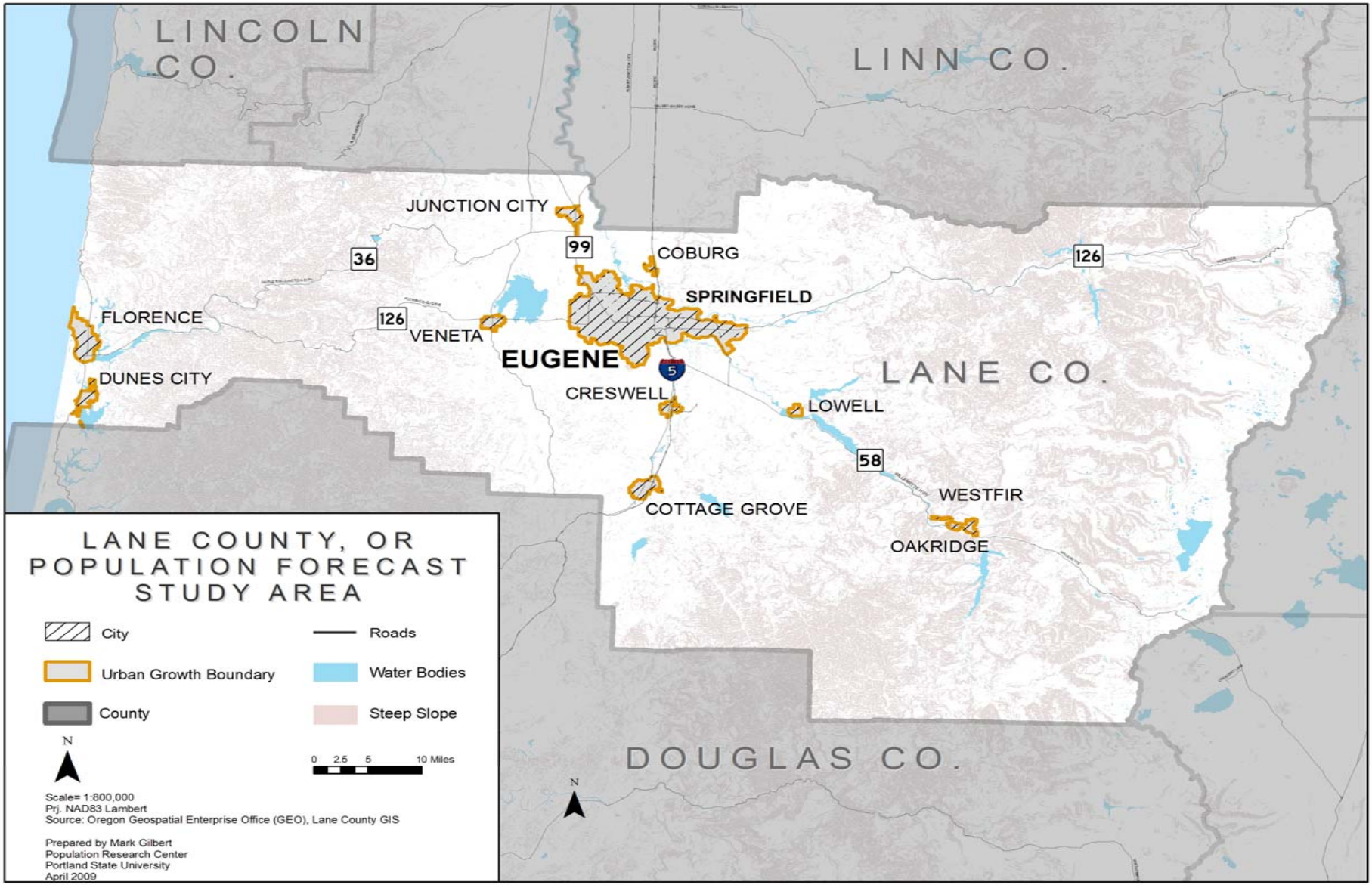
STUDY AREA


LINCOLN CO.
LINN CO.
LANE CO.
DOUGLAS CO.
JUNCTION CITY
COBURG
SPRINGFIELD
EUGENE
FLORENCE
VENETA
DUNES CITY
CRESWELL
LOWELL
COTTAGE GROVE
WESTFIR
OAKRIDGE
99
36
126
126
5
58
LANE COUNTY, OR
POPULATION FORECAST
STUDY AREA
City
Urban Growth Boundary
County
Roads
Water Bodies
Steep Slope
N
0 2.5 5 10 Miles
Scale= 1:800,000
Prj. NAD83 Lambert
Source: Oregon Geospatial Enterprise Office (GEO), Lane County GIS
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Portland State University
April 2009
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INTRODUCTION

Lane County officials commissioned Portland State University's Population Research Center (PRC) to produce long-term population forecasts for the County, the two largest cities of Eugene and Springfield, the shared Eugene-Springfield urban growth boundary area (UGB), the UGB areas for the County's remaining 10 cities (for some cities this includes the surrounding unincorporated area in addition to the area within the city limits), and for the unincorporated area outside the UGBs. The forecast horizon extends 27 years from 2008 to 2035, and the forecasts are produced in 5-year intervals between 2010 and 2035. The County will use the forecasts to coordinate revisions of the comprehensive plans for each of these areas. The projections are benchmarked to the Population Research Center's 2008 certified population estimates for the city and county populations.

In 2008, Lane County's population was 345,880 and about 70 percent resided in the County's major urban area: the Eugene-Springfield UGB. For the county-wide forecast, the cities of Eugene and Springfield, and the Eugene-Springfield UGB, three scenarios of population and housing changes were developed to account for different probabilities of demographic events. These forecasts were produced for a most-likely, or medium growth scenario, and for lower growth and higher growth situations.

The 2008 population estimates for each of Lane County's ten smaller cities (or 'city areas') are all under 10,000, ranging from 340 to 9,830 persons. Population forecasts for these smaller cities and the unincorporated area outside UGBs (non-UGB unincorporated area) were based on a most-likely, or medium growth, scenario.

. Consideration was given to factors that influence Lane County's population dynamics, such as the population's ethnic and age composition, the number of annual births that occur, employment and commuting patterns, the number of building permits issued, and public school enrollment in the county's school districts. Data used to develop the forecasts include vital statistics; population, land use, building permit, and employment data; and school enrollments for districts within Lane County. Several different

demographic methods and models were employed to prepare the forecasts, including the development of cohort-component models for the County and larger areas, and housing unit models for each of the county's smaller cities and the non-UGB unincorporated area. The cohort-component model incorporates rates of fertility, mortality, and migration. The housing unit model assumes a number of future added housing units, levels of housing occupancy, and averages of the number of persons per household. A description of recent demographic trends throughout the County and a summary of recent significant population changes during the forecast period are included in this report. Also, the data sources and methods utilized in the development of the forecasts are described in more detail later.

The different growth assumptions about future trends in the forecasts for the County and for all but one of its sub-areas in our study each suggest that there will be continuing increases in population, but at slightly different rates from the beginning to the end of the forecast period. There are variations in the forecasts for the size and timing of the annual population increases. The large share that the Eugene-Springfield UGB represents of the county's total population does not change much during the forecast period, while the share that the sum of the remaining cities captures, increases from about 13 percent to over 18 percent. The share that the non-UGB unincorporated area represents decreases from about 17 percent to 12 percent. This shift of persons residing in rural areas to more urbanized areas is a common trend throughout Oregon and the United States that has been ongoing for many years.

In the most-likely growth scenario for the population forecasts, we assume that the downturn of the local economy will be more severe than that seen in the early 2000s and will not recover until the 2010s. Therefore, housing construction is anticipated to be sluggish for a few years in most areas, but will accelerate after 2015. At that time the net in-migration of families with children, the elderly, and Hispanics is predicted to increase and continue throughout most of the forecast period.

Caveats Regarding the Report

The body of this report covers demographic information and analysis for Lane County and its geographic sub-areas. With the exception of Eugene and Springfield, and the non-UGB unincorporated area, the sub-areas in this study at times are called 'cities' but are actually 'city areas', which refer to the area within the city limits combined with its corresponding UGB area outside city limits; or in other words, all of the area within the city's urban growth boundary. The information and forecasts are reported for the Eugene-Springfield UGB area, but because both cities share one UGB that is not divided between them, a forecast for the individual cities without the unincorporated UGB area is also presented. The unincorporated area refers to the area outside of any city and UGB. For this study, this area is referred to as the 'non-UGB unincorporated area'.

Five of Lane County's cities, Lowell, Veneta, Dunes City, Coburg, and Westfir, either have a UGB that is identical, or nearly identical, to their city boundary. The other cities have a UGB outside the city limits where a portion of the city area's housing stock is located. Twenty-one percent of Florence's housing units are in its unincorporated UGB area. The percentage of housing that is located in the Eugene-Springfield and the Junction City unincorporated UGB areas is around 12 percent, and represents over 12,000 and over 300 housing units, respectively. The cities of Oakridge, Creswell, and Cottage Grove each have a UGB where between 3 and 6 percent of the housing units (a range of 50 to 200 units) are located.

In order to minimize skewing of demographic trends within our study area, 1990 and 2000 Census data were aggregated to correspond to 2008 jurisdictional boundaries obtained from the Lane County Council of Governments' GIS Division. Comparing data that represent geographic areas that are consistent over time removes the influence that changing boundaries have on determining actual population trends in a jurisdiction. Please note that some populations reported in our tables for 1990 and 2000 may slightly differ from 1990 and 2000 Census published populations. The difference is due to the data reallocation process to conform to the 2008 boundaries. Because the 2000 and 2008 boundaries are from two different sources, they are not perfectly matched to one another.

We determined that any differences between the published Census data and the data we reallocated for this study are negligible and have no effect on demographic trends and population forecasts.

Historical demographic trends in this report are described for 2000-2008. Certified 2008 population estimates for Lane County and its cities are adjusted to include their UGBs and are shown on page 6 of this report. The 2000-2008 demographic data and trends are incorporated into the forecasts, and how they are incorporated is described in the methods section of this document.

The annual certified population estimates produced by PRC represent the area within the city limits. If a city does not send annual housing and population data to the estimates program, its certified estimate is held constant to the previous year and may not account for recent changes. As mentioned above, the populations shown in this report for 2008 represent the 2008 certified estimates adjusted to incorporate the city UGB areas. In instances where annual data for the city were not available, the population reported for 2008 may not include all changes that occurred from 2000 to 2008. However, the population forecasts for 2010 and beyond account for any annual data that may be lacking.

The 2010-2040 population forecast for Lane County produced by Oregon's Office of Economic Analysis (OEA) is used as a gauge for our county-wide forecast results. The published OEA forecast currently available on their website was produced in 2004, and our forecast results are quite lower than those. However, OEA is, at this time revising their forecasts to become more up-to-date and to reflect the recent economic downturn experienced nationwide. It is our understanding that the OEA's revised forecast will become available within a few weeks after completion of this report. We conferred with OEA staff when producing our own forecast and had the privilege to review OEA's preliminary revised forecast. Our forecast results for Lane County were very close to OEA's preliminary forecast, but slightly lower in the early part of the forecast period, and slightly higher toward the end. The differences never exceeded 2,700, or less than one percent, in any 5-year time period.

A Note of Caution about the Forecasts Themselves

Given that these projections are developed for long-term trends, they are conservative. This means that they, especially the medium growth forecasts, do not assume drastic changes to the population trends, such as seen during a depression, and large fluctuations in growth rates are not envisioned.

Policy makers should view population projections as one of several available sources of information about likely future conditions. The forecasts in this report are based on assumptions developed from analysis of historical trends and expectations of the future. While the past gives some indication of what is likely to happen in the future, there is always the possibility of the occurrence of unforeseen events that could have a significant impact on population change. Thus, users of these projections should be aware that unexpected changes could happen and that it is wise to evaluate projections periodically in future years. Given the uncertainty of the timing, occurrence and magnitude of future events, several points should be kept in mind when interpreting the population forecasts in this report.

First, the Lane County population projections represent a forecast derived from assumptions representing our best judgment as to the possibilities for future conditions. It is not possible to judge at this time which of the assumptions, or combinations of assumptions, may best forecast future populations. The next several years will better reveal whether the modeled demographic trends are likely to occur. If different conditions arise, then it would be appropriate to revise the population projections, taking into account new assumptions.

Second, variations in forecasts become larger in the long run. As years go by, the population forecasts depend increasingly on assumptions about who and how many persons will move into and out of Lane County and the number of births that will occur annually to parents who reside in Lane County. The population forecasts become less certain over longer periods of time.

Third, the smaller the population, the harder it is to develop an accurate forecast. Slight unpredicted variations in demographic trends can cause larger fluctuations in the population forecasts than those for larger populations. Forecasts for large cities and counties tend to be more precise than forecasts for small cities or towns.

Finally, there is a temptation in interpreting forecasts to ask: "Which is the correct forecast?" Asking such a question implies that there is need to pick one forecast at present and then base future plans on it. The more appropriate use of the forecasts is to consider that there is likely to be some variation around the medium, or most-likely, forecast and that we will want to update them as conditions evolve. Instead of deciding which outcome will occur over the twenty-seven year forecast horizon, we urge government officials and the public to "monitor and manage" the changing conditions that will affect future populations. The most-likely forecast presented in this report can best serve as a guideline in this process of monitoring and managing.

OVERVIEW OF THE REPORT

This report presents the results of a study conducted by the Population Research Center (PRC) to address the long-range planning needs of Lane County and produce population forecasts at the county and sub-county level. This report considers recent and historical demographic changes experienced within the County and provides forecasts from 2008 to 2035 in 5-year intervals. Expected future populations that result from the most-likely demographic trends throughout Lane County are presented in this report. Sub-county populations and forecasts in this study represent the area within each city's urban growth boundary with the exception of the non-UGB county unincorporated area, and the cities of Eugene and Springfield. Since Eugene and Springfield currently share a UGB, populations are reported for each city separately and for the entire area within their UGB area (which includes both cities).

Two additional sets forecasts were developed for the largest geographic areas in this study: Lane County, Eugene, Springfield, and the Eugene-Springfield UGB. These additional forecasts are based on lower and higher growth scenarios to provide a range of possible populations should the assumptions in the most-likely (or medium) growth scenario be in error.

For the sake of organization of this report and discussion of demographic characteristics, trends and forecasts, Lane County and its sub-areas are grouped into 2 categories: 1) the major urbanized area of the Eugene-Springfield UGB, which captures about 70 percent of the County population; and 2) the remaining ten cities with their UGBs (each of which have a 2008 population estimate of less than 10,000 persons), and the non-UGB County unincorporated area. Although the unincorporated area represented in this study has a 2008 population estimate of 59,026, slightly larger than the city of Springfield, it is grouped with the smaller, less urbanized cities in this report as it is more rural. Lane County, its two most populous cities, and the Eugene-Springfield UGB area are sometimes discussed within one group; and the remaining ten cities and non-UGB unincorporated area in Lane County are discussed in another group. Within the group of smaller cities, all but two are

located in the Southern Willamette Valley. The cities of Florence and Dunes City are situated on the Oregon coast away from the Willamette Valley. The 2008 population estimates and the grouping of the study area's jurisdictions are shown in the table below.

Table 1. Populations in Lane County

Area			2008 Population Estimate*
		Lane County	345,880
Lane County's Major Urbanized Area		Eugene (city only)	154,620
		Springfield (city only)	58,005
		Eugene-Springfield UGB	242,156
Lane County's Ten Smaller Cities	Willamette Valley Cities	Coburg	1,075
		Cottage Grove	9,828
		Creswell	5,321
		Junction City	6,375
		Lowell	1,015
		Oakridge	3,764
		Veneta	4,840
		Westfir	352
	Coastal Cities	Dunes City	1,360
		Florence	10,767
		Non-UGB Unincorporated Area	58,908

* The certified 2008 populations adjusted to include the UGB.

This report covers the following topics:

Demographic Trends in Lane County and its Sub-Areas. A description of recent demographic trends and influencing population changes in the County, such as fertility, migration, and housing growth. Also included in this section is a description of some additional factors that influence population changes throughout the County: age and Hispanic composition of the population, housing construction, and employment trends. Significant demographic trends that are specific to the individual geographic sub-areas of the Lane County study area are also described.

Population Growth Assumptions for the County and its Larger Areas. A description of the assumptions used in the low, medium, and high growth population forecasts for the County and its major urban area of Eugene, Springfield and their UGB.

Population Growth Assumptions for the Smaller City Areas and the non-UGB Unincorporated Area. A description of the assumptions used in population forecasts for Lane County's 10 less populous city areas, and for the non-UGB unincorporated area.

The Most-Likely, and High and Low Forecasts (County-wide and Larger Area Results). A summary of the forecast results and the predicted population changes for the County, and Eugene, Springfield, and the Eugene-Springfield UGB.

Population Forecasts for the County's Ten Smaller City Areas and the non-UGB Unincorporated Area. A summary of the forecast results and the predicted population changes in Lane County's 10 less populous city areas and the non-UGB unincorporated area.

Methods and Data Employed for County-wide and other Larger Area Forecasts. A description of the population forecast models and data sources used for the larger area forecasts.

Methods and Data Employed for the Smaller City Areas and non-UGB Unincorporated Area Population Forecasts. A description of the demographic models and data used to develop these forecasts.

Several Appendices provide more detailed information, including:

APPENDIX 1. Tables with detailed forecasts and historical populations in 5-year intervals for Lane County, the 2 larger cities, and the Eugene-Springfield UGB.

APPENDIX 2. Tables with detailed forecasts and historical populations in 5-year intervals for Lane County's 10 smaller cities and the non-UGB unincorporated area.

APPENDIX 3. Assumptions of demographic rates for Lane County, Eugene, Springfield, and the Eugene-Springfield UGB.

APPENDIX 4. A table holding information considered when developing the forecasts and adjusting the forecast models for the ten smaller city areas and the non-UGB unincorporated area

APPENDIX 5. Tables presenting a compilation of demographic data and rates for Lane County and its sub-areas; and the rates and data assumed for the forecast populations.

APPENDIX 6. Map showing housing density within Lane County (2008).

APPENDIX 7. Data sources and data used are described.

APPENDIX 8. Additional Information for the cities of Eugene, Springfield, and Lowell.

RECENT DEMOGRAPHIC TRENDS AFFECTING LANE COUNTY POPULATIONS

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.

Different growth patterns occur in different parts of the County. Each of the twelve cities (or city areas), the Eugene-Springfield UGB, and the non-UGB unincorporated area 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 births, age and racial/ethnic composition of the population, housing construction activity, and school enrollment and employment trends. It should be noted that population trends of individual cities and the unincorporated area often differ from the demographic trends of the County as a whole. However, in general, population growth rates in 2007 were lower than in 2006 and previous years. This deceleration of rates was seen again in 2008.

POPULATION

The total population in Lane County in 2008 is estimated to be 345,880. Its average annual growth rate from 2000 to 2008, which is assumed to be lower than that for the State of Oregon (1.2 percent per year), is around 0.8 percent. At this rate, an average of 2,865 persons per year has been added to Lane County's population since 2000. The share of Oregon's population residing in Lane County in 2008 is about 9.1 percent, which decreased very slightly from 9.4 percent in 2000. The share of the County's population that the sum of the cities represent experienced a continuous increase during the same time period, while the share of population residing in the non-UGB unincorporated area decreased.

Since at least 2000, about 70 percent of Lane County's population has resided within the Eugene-Springfield UGB. In 2008, 89 percent of the Eugene-Springfield UGB residents lived in one of the two cities, and 11 percent in the unincorporated UGB area. Eugene, Lane County's largest city, represented 64 percent of Eugene-Springfield UGB's total population and Springfield, 24 percent. Both cities saw an increase in their shares of the this population from 2000-2008. The entire Eugene-Springfield UGB experienced an average annual increase of about one percent.

In 2008, the ten smaller city areas collectively were home to 13 percent of the population in Lane County (44,695 persons), an increase from 11 percent in 2000. This population experienced an average annual increase of 3 percent from 2000-2008, or by 1,077 per year.

The population in the non-UGB unincorporated area was about 59,000 in 2008. From 2000 to 2008 this area experienced a decrease of almost 3,500 persons, with an average loss of 1.1 percent per year. The non-UGB unincorporated area represented about 17 percent of the County population in 2008 and about half resided within the Eugene-Springfield UGB. The share of population residing in the non-UGB unincorporated area decreased continuously from 22.3 percent in 2000.

From 2000 to 2008, all of Lane County's cities saw a small increase in their share of County population of only one-half of one percentage point or less, except Eugene. The share of that Eugene represented in 2008 increased by two percentage points. The non-UGB unincorporated area is estimated to have seen the greatest change with a decline in its share of county population by three percentage points during 2000-2008. Any slight shifting in the shares that the cities may have experienced is spread amongst most cities throughout Lane County. A rural to urban shift of where persons choose to reside has been a common occurrence throughout Oregon and in the United States over many years.

Table 2 below displays the recent population for Lane County and its cities, and non-UGB unincorporated area. Also shown are the shares that cities represent of the county population and average annual change from 2000-2008.

Of all of Lane County's cities, Veneta, Creswell, and Florence experienced the highest average annual growth rates from 2000-2008 (at least 2.7 percent). The average growth rates for the other cities range around 1.0 to 2.2 percent per year during the same period. All the cities experienced average annual growth rates higher than the County.

Table 2. Lane County Populations by Jurisdiction

Major Urban Area	**Population**		**Share of County Population**		**# Ave. Annual Change**	**% Ave. Annual Change**
	2000*	**2008**	**2000**	**2008**		
Lane County	322,977	345,880			2,776	0.8%
Eugene	139,090	154,620	42.7%	44.7%	1,882	1.3%
Springfield	53,662	58,005	16.4%	16.8%	526	1.0%
Eugene-Springfield UGB	222,264	242,156	68.8%	70.0%	2,411	1.0%
Other Willamette Valley cities	**Population**		**Share of County Population**		**# Ave. Annual Change**	**% Ave. Annual Change**
	2000*	**2008**	**2000**	**2008**		
Coburg	969	1,075	0.3%	0.3%	13	1.3%
Cottage Grove	8,867	9,826	2.7%	2.8%	116	1.3%
Creswell	3,851	5,321	1.2%	1.5%	178	4.0%
Junction City	5,476	6,375	1.7%	1.8%	109	1.9%
Lowell	880	1,015	0.3%	0.3%	16	1.7%
Oakridge	3,251	3,764	1.0%	1.1%	62	1.8%
Veneta	2,762	4,840	0.9%	1.4%	252	7.0%
Westfir	293	352	0.1%	0.1%	7	2.2%
Coastal Cities	**Population**		**Share of County Population**		**# Ave. Annual Change**	**% Ave. Annual Change**
	2000*	**2008**	**2000**	**2008**		
Dunes City	1,241	1,360	0.4%	0.4%	14	1.1%
Florence	8,643	10,767	2.7%	3.2%	310	2.7%
Unincorporated Area (non-UGB)	64,479	59,026	20.0%	17.0%	-675	-1.1%

*Population for 2000 is allocated to 2008 boundaries and includes UGB areas; the 2000 population in this table may differ from Census 2000 published population (see caveat explanation on page 3).

The number of persons in age groups 18-64, and 65 and older residing in Lane County increased from 2000 to 2008. However, there was a decrease in the population shares that

two of the age groups represent. The population ages 0-17 years and ages 65 and older decreased slightly, from 23 to 21 percent and from 13 to 12 percent, respectively. The share of persons ages 18-64 increased from 64 to 65 percent during the same time period.

In 2008, the share that persons ages 0-17 represented in Lane County was lower than the State by 2 percentage points, but the share of persons ages 18-64 and 65 and older, were higher by one percentage point

The most recent age-group data available for Lane County's cities are from the 2000 Census. In 2000, the cities with the highest shares of residents 65 years and older were Dunes City, Florence, and Oakridge. The share of elderly in each of these cities was 20 percent or higher.

If characteristics described by 2000 Census data are still true, the cities with the highest share of children (ages 0-17) are Creswell, Veneta, and Westfir. In 2000, persons ages 0-17 captured 30 percent or more of the total population in each of these cities.

SCHOOL ENROLLMENT

Changes in school enrollment in local school districts serve as an indicator of population change, especially for the 5-17 age group. Elementary and secondary school enrollment data for years 2000-2008 show a decrease in school enrollment in Lane County (2.2 percent, or an average annual decrease of 0.3 percent). Enrollment grew between 2000 and 2008 modestly for Kindergarten and more significantly for grades 11 and 12. All other classes (grades 1-10) experienced lower enrollment levels. Changes in enrollment have also been geographically asymmetrical. Growth was most significant in the Bethel School District, located in Eugene, which experienced an enrollment increase of 1,084 between 2000 and 2008; approximately a 21.3 percent increase. The following school districts also saw enrollment increases: Blachly School District (located in the non-UGB unincorporated area and including Triangle Lake), Creswell School District, and Springfield School District. All other school districts in Lane County experienced falling enrollment between those years. In five of the school districts, declines were significant, amounting to more

than 25 percent losses between 2000 and 2008: Lowell School District, Mapleton School District (in the unincorporated area east of Florence), McKenzie School District (in the unincorporated area in NE Lane County), Oakridge School District, and Pleasant Hill School District (in the unincorporated area between Creswell and Lowell).

RACE AND ETHNICITY

In 2007 (the most recent year for which data are available), white non-Hispanics accounted for 86 percent of the County's population and ethnic minorities accounted for 14 percent. Hispanics represented the largest share of the ethnic minority population (approximately 44 percent), followed by Asian/Pacific Islanders (21 percent) followed by persons who identified themselves as of more than one race (17 percent). Blacks and Native Americans represented about 1 percent, and 7 percent of the County's ethnic minority population, respectively. Of the total County population, Hispanics represented 6.1 percent.

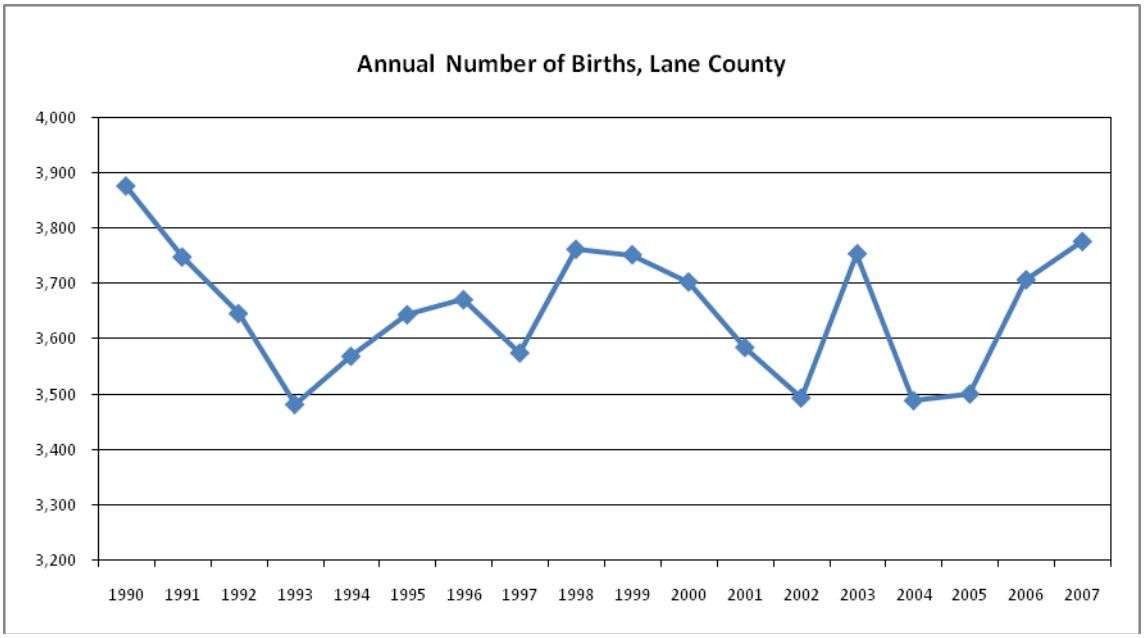
According to the Census in 2000, Eugene and Springfield had by far the largest Hispanic populations, a reflection of their larger overall populations. Two other cities, however, had a higher percentage of Hispanics in their populations: Junction City (8 percent) and Creswell (7 percent). According to post-2000 data from the Census Bureau's American Community Survey (ACS), the population share of white non-Hispanics in Lane County and in the City of Eugene (the only areas for which ACS data are available) has been decreasing in the last several years, while the share of ethnic minority population (mainly the Hispanic population) has been increasing. The share of population that Hispanics represent in the County increased from under 5 percent to over 6 percent from 2000 to 2007. In Eugene, their share increased from 5 percent to 7 percent. This trend was also seen during the 1990s.

BIRTHS AND FERTILITY

Since 2000, there have been between 3,495 and 3,775 births in Lane County annually (see Figure 1). The number of births has fluctuated each year since 1990, but has remained relatively constant over the past 17 years around 3,600 or 3,700 births annually. This trend is different than seen in the State. Like much of the rest of Oregon, net migration (persons

moving in minus persons moving out) rather than natural increase (births minus deaths) accounts for most of the added population in Lane County.

Figure 1. Lane County Births



In 2007, the largest number of births occurred in the two most populous cities. Together, they captured 64 percent of County births, within one percentage point of its share in 2000. The Eugene-Springfield UGB alone captured 73 percent of County births. All ten of the smaller cities saw more births in 2007 than in 2000. The unincorporated area, however, experienced fewer births. Eugene experienced the largest decrease among cities during the same period; there were 27 fewer births in 2007 than in 2000. There were 60 fewer births in non-UGB unincorporated area, a decline of almost 11 percent.

Table 3 below 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 city with an increase in births between two years could easily show a decrease for a different two year period.

Table 3. Births, 2000-2007

Major Urban Area	Number of Births		2000-2007	
	2000	2007	# Change	% Change
Lane County	3,703	3,772	69	1.9%
Eugene	1,554	1,527	-27	-1.7%
Springfield	856	896	40	4.7%
Eugene-Springfield UGB	2,753	2,760	7	0.3%
Other Willamette Valley cities	**Number of Births**		**2000-2007**	
	2000	**2007**	**2000**	**2007**
Coburg	8	10	2	25.0%
Cottage Grove	116	133	17	14.7%
Creswell	50	78	28	56.0%
Junction City	80	109	29	36.3%
Lowell	8	11	3	37.5%
Oakridge	23	30	7	30.4%
Veneta	43	64	21	48.8%
Westfir	4	6	2	50.0%
Coastal Cities	**Number of Births**		**2000-2007**	
	2000	**2007**	**2000**	**2007**
Dunes City	6	7	1	16.7%
Florence	61	73	12	19.7%
Non-UGB Unincorporated Area	551	491	-60	-10.9%

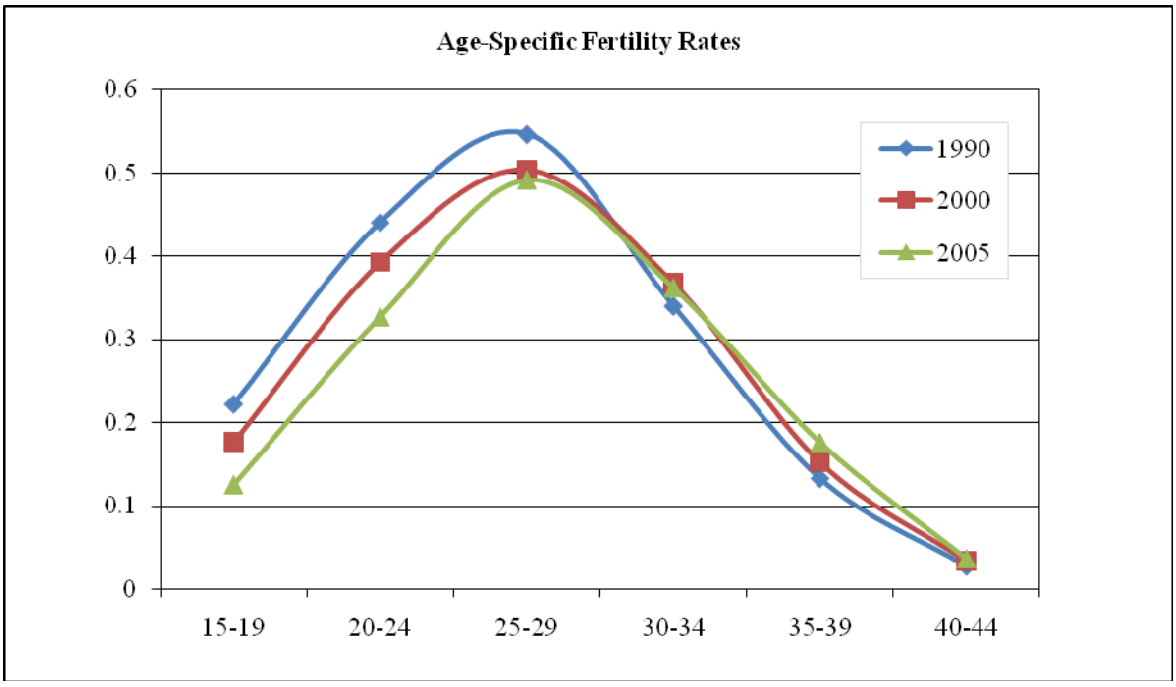
The shares of County births in the cities coincide fairly well with the shares of population, with some exceptions. The share of County births that Eugene captures in 2007 is about four percentage points lower than its share of the County's population. This is accounted for by its large university population. Springfield's share of County births is 24 percent, significantly higher than its share of population: 17 percent. All other deviations were within one percentage point. The variation in Springfield means that either the fertility rate, or the percentage of households that are families, or both, is higher in Springfield than in the County; and conversely for Eugene, that the fertility rate, or percentage of family households, or both, is lower.

Lane County Fertility

The total fertility rate in the County was 1.63 in 2000, meaning that the average woman would bear 1.63 children by the end of her child-bearing years. This rate is somewhat lower than the State average which was 1.98 children per woman in 2000, and even lower than the 1990 County rate (1.71). The trend of declining fertility rates over the past 2 decades is assumed to have continued, and the total fertility rate in Lane County is estimated to have dropped slightly further to 1.52 in 2005. A larger decrease in fertility rates has been offset by the increase of the female Hispanic population which is associated with higher fertility rates than the majority population of white non-Hispanics.

Age-specific fertility rates in the County have shifted slightly in recent years (see Figure 2). As also seen statewide, there has been an increase in the percentage of women postponing child-bearing or deciding not to have children at all. In addition, there is now a smaller share of younger mothers than in the past.

Figure 2. Lane County Fertility



In 2005, 81.7 percent of all births in Lane County were to white non-Hispanics, 11.5 percent were to Hispanics, and 6.9 percent were to either Asians/Pacific Islanders, blacks,

Native Americans, or to women of other or multiple races. Since 2000 and earlier, the percentage of births to Hispanics has increased while the percentage of births to white non-Hispanics has decreased. The share of births that occurred to mothers of other races and ethnicities, collectively, also increased during the same period. The total fertility rate of Hispanic women in Lane County was 2.02 in 2000, which rose to an estimated 2.90 in 2005. This is significantly higher than the overall fertility rate for Lane County in 2005 of 1.52.

Table 4. Percentage of Lane County Births by Race/Hispanic Origin of Mother

Year	**White, non-Hispanic**	**Hispanic**	**Other Race/Ethnicity**
2000	87.9%	7.4%	4.7%
2005	81.7%	11.5%	6.9%

HOUSING AND HOUSEHOLDS

Five of Lane County's cities, Lowell, Veneta, Dunes City, Coburg, and Westfir, either have a UGB that is identical, or nearly identical, to their city boundary. The percentage of housing units outside the city limits in the UGBs of Oakridge, Creswell, and Cottage Grove range between 3.4 percent and 5.7 percent. The unincorporated UGB area of Eugene and Springfield combined and Junction City hold around 12 percent of the city area's housing stock; and in Florence twenty-one percent is in the unincorporated UGB area.

The rates of increase in the number of housing units in Lane County and its cities and unincorporated area are similar to the growth rates of their corresponding populations for most of the ten smaller cities in Lane County. The growth rates for housing may slightly differ than the rates for population because the numbers of housing units are smaller than the numbers of persons, or the city 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.

Since 2000, approximately 1,539 net additional units have been added to Lane County's housing stock annually. Approximately 67 percent of housing in Lane County is single-family dwellings, but overall, approximately 76 percent of new housing construction in the County during 2000-2008 was single-family dwellings (see Table 5). Multi-family housing units accounted for about 23 percent of new housing in Lane County. The highest percentage of new multi-family housing was in Eugene (25 percent), Florence (26 percent), and Springfield (34 percent). Multi-family units represented at least one-quarter of the existing housing inventory in the cities of Eugene, Florence, Junction City, and Springfield in 2008.

Table 5. Building Permits Issued for Net Added Housing Units by Geographic Area

Major Urban Area	**Permits for Net Added New Units 2000-2008***	**Percent Single-family Units**
Lane County	12,308	76%
Eugene	7,125	64%
Springfield	1,822	76%
E/S UGB		
Other Willamette Valley cities	**Net Units Added 2000-2008**	**Percent Single-family Units***
Coburg	26	100%
Cottage Grove	377	67%
Creswell	571	96%
Junction City	201	86%
Lowell	67	91%
Oakridge	87	92%
Veneta	555	100%
Westfir	10	100%
Coastal Cities	**Net Units Added 2000-2008**	**Percent Single-family Units***
Dunes City	171	49%
Florence	912	71%
Unincorporated Area (non-UGB)	381	100%

* Net units accounts new permits minus demolitions.

Housing Occupancy

We estimate Lane County's 2008 occupancy rate to be about 93 percent, which is higher than the rate for Oregon (about 91 percent). ACS data show that the County rate has not fluctuated much from 2000 to 2007, but is about 2 percentage points lower than in 1990. Coastal cities (Dunes City and Florence) have the lowest occupancy rates because of the presence of vacation homes and seasonal housing. These cities have occupancy rates of 79 percent and 86 percent, respectively. The places with the highest occupancy rates – above 96 percent - are Veneta, Westfir, and unincorporated areas of the Eugene-Springfield UGB.

Average Household Size

In 2008, 97 percent of Lane County's population resided in households. The average number of persons that occupy a household (PPH), or household size, is influenced by several factors. The age and racial/ethnic composition of a population provides some indication of the size of the area's PPH. A high share of elderly population versus the share of married couples and growing families yields a smaller PPH due to the propensity of elderly to live alone; whereas higher PPH may be attributed to the tendency to have larger families or share housing by some racial/ethnic groups than others. Changes in an area's fertility rates and school enrollment also have a bearing on changes in PPH. An increase in PPH is supported by higher fertility rates and increasing school enrollment. A stable PPH could mean the population composition, and the number of births is stable; but it could also mean that an increase in the number of births, married couples and growing families is being offset by an increase in the number of elderly.

The PPH in Lane County is around 2.2 and is somewhat lower than it is statewide (2.5). The PPH has not changed much in Lane County since 2000, but is slightly lower than it was in 1990 (2.5). The highest PPH in the County is in Veneta and Westfir, where an average of 2.8 persons reside per household.

By housing type, the PPH in single-family units (SFR) is typically higher than in multi-family residences (MFR), or mobile homes. This is the case in Lane County, its

unincorporated area, and most of its cities. In Junction City, however, the PPH is higher in mobile homes than in other housing unit types.

Group Quarters Population

In 2008, 3.0 percent of Lane County's population, or 10,670 persons, resided in group quarters facilities such as nursing homes, college dormitories, or prisons. The percentage has increased from 2.3 percent in 2000 and even 2.6 percent in 1990, and numbers have increased as well, up 3,180 since 1990. The City of Eugene is home to about 82 percent of the County's group quarters population, with 90 percent of persons in group quarters residing within the Eugene-Springfield UGB.

ANNEXATIONS

Between 2000 and 2008, housing units with a total of 479 persons were annexed out of the unincorporated area and into the cities listed in Table 6 below. Seven of Lane County's cities experienced at least one annexation. The highest number of persons added from annexation was in Springfield, followed by Eugene.

Table 6. Annexations in Lane County, 2000-2008

Major Urban Area	**Annexed Population 2000-2008**
Lane County	479
Eugene	115
Springfield	273
Other Willamette Valley cities	**Annexed Population 2000-2008**
Coburg	9
Cottage Grove	7
Creswell	7
Junction City	67
Lowell	0
Oakridge	0
Veneta	0
Westfir	0
Coastal Cities	**Annexed Population 2000-2008**
Dunes City	0
Florence	1

MIGRATION

Seventy-five percent of Lane County's population increase from 2000 to 2008 was accounted for by net-migration (movers in minus movers out). An average of 2,088 more persons moved into Lane County than moved out annually during this period. Migration rates are estimated to be highest among young adults, and retirees. However, rates overall are estimated to be lower post-2000 than were seen during the 1990s.

In 2007 (the most recent year for which we have these data), about 21 percent of Lane County's population moved within the previous 12 months. Of the movers, 73 percent stayed within the County. Of those who moved into Lane County from somewhere else, 55 percent came from another county within Oregon, 32 percent came from out of state, and 13 percent moved from another country.

EMPLOYMENT

The unemployment rate in Lane County was higher than the rate for Oregon in 1990 and in 2000. In 2007, the annual unemployment rate for Lane County was 5.2 percent, close to the statewide rate of 5.1 percent. The rate for Lane County has improved from 6.1 percent in 1990 (compared to state average of 5.4 percent) and from 5.4 percent in 2000 (compared to state average of 5.1 percent). However, unemployment rates have increased since 2007 with no turnaround in sight yet.

In 2000 (the most recent year for which we have data for cities), the lowest unemployment rate was in the city of Coburg (less than 1 percent) followed by Junction City (3.3 percent). The areas with unemployment rates higher than the County rate by at least 2 percentage points in 2000 were Cottage Grove, Creswell, Florence, Lowell, Oakridge, Springfield, and Veneta.

According to 2002-2004 data on commuting patterns from the Census Bureau (Local Employment Dynamics data, or LED), about 84 percent of workers residing in Lane County are employed in jobs located in Lane County. Over half the workers are employed in the Eugene-Springfield area. Cities with the smallest percentage of workers commuting

to Eugene-Springfield – all under 50 percent – are Cottage Grove, Junction City, Oakridge, Westfir, Dunes City, and Florence. Outside of the Eugene-Springfield area, Florence and Cottage Grove capture the highest percentage of their resident workers (almost 50 and 30 percent, respectively).

DEMOGRAPHIC ASSUMPTIONS
FOR THE COUNTY-WIDE AND SUB-AREA POPULATION FORECASTS

An area's demographic characteristics affect the rate at which its population changes over time. These characteristics include the age and gender structure, propensity to have children, and race/ethnicity. The gender and age structure of the population influences household size and mortality rates; the age structure and ethnicity of the female population influences fertility rates. In addition, the economy, employment opportunities, and housing availability also influence population change. When the local economy is struggling and unemployment rates and inflation are high, the rate of in-migration decelerates. When the economy is strong, job growth increases, goods and services are more affordable to a higher percentage of population and in-migration increases to areas that are accessible to jobs and housing, while out-migration decreases. The demographic characteristics of the in and-out-migrants influence how local populations change as well. For example, the net in-migration of young families has a different affect on a population growth versus the net in-migration of elderly single householders as the number of births and household size are amongst these two population groups that are at opposite ends of the scale.

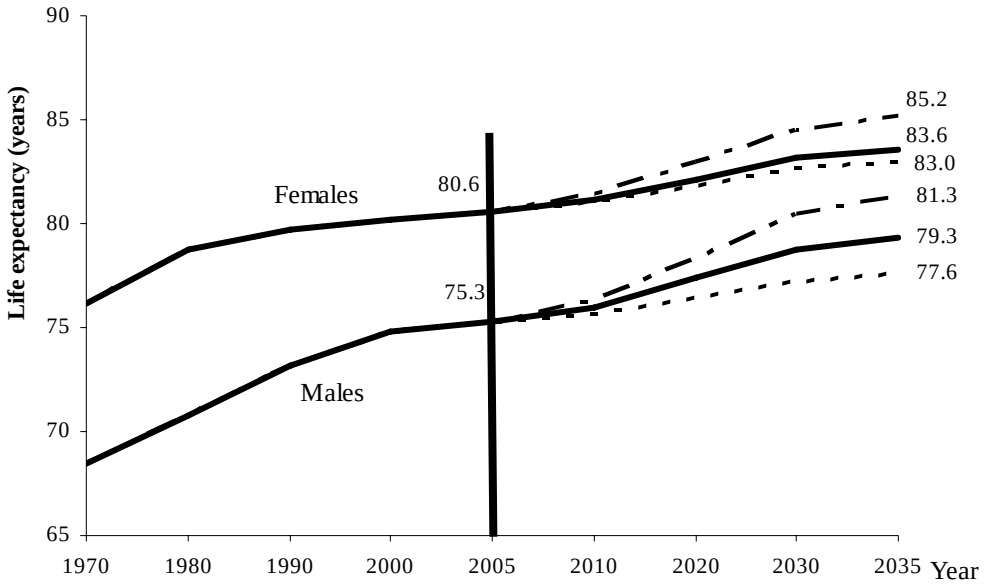
Assumptions about fertility, mortality, and migration for three growth scenarios (low, medium, and high) were developed for Lane County's population forecast and for the forecasts of Eugene, Springfield, and the Eugene-Springfield UGB. The different scenarios are based on predictions of county-wide and local demographic trends and how robust the economy will be during the next twenty-seven years. The population forecasts produced for Lane County's ten smaller city areas and the non-UGB unincorporated area are based on a medium, or most likely, growth scenario.

A listing of the demographic rates assumed for future change for Lane County, Eugene, Springfield, and Eugene-Springfield UGB is presented in Appendix 3 and in Appendix 5.

SPECIFIC ASSUMPTIONS FOR THE THREE GROWTH SCENARIOS

All three growth scenarios for Lane County, Eugene, Springfield, and the Eugene-Springfield UGB assume that current mortality will improve during the forecast period with the largest improvement in the high scenario and lowest improvement in the low scenario. We assume that gender difference in life expectancy at birth under all scenarios will mostly maintain the current level (see Figure 3).

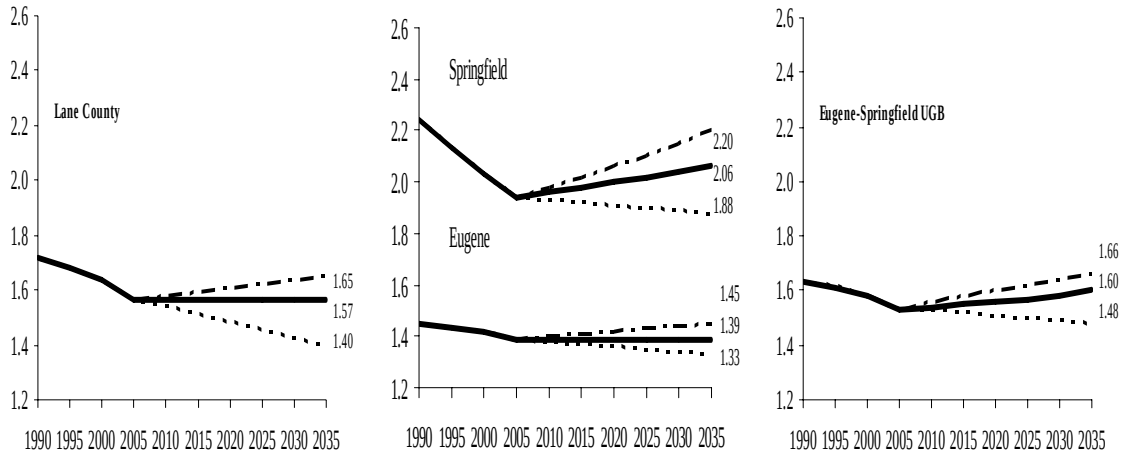
Figure 3 Life Expectancy at Birth for Lane County, 1970-2035.



Under the medium scenario, the total fertility rates (TFR) for the County and Eugene from 2010 to 2035 will maintain at a level of the average of the rates between 2000 and 2005, whereas the TFR for Springfield will slightly increase in the future to account for a higher growth in Hispanic population. The TFR for Eugene-Springfield UGB under the medium scenario, therefore, will slightly increase, by taking a weighted average by female populations of reproductive age in Eugene and Springfield. Under the high growth scenario, we assume TFRs for the County, two largest cities and the Eugene-Springfield UGB will rebound to the level of the early 1990s. Under the low scenario, we assume TFRs for these areas will continue the current declining trends but with slowing paces (see

Figure 4). In all scenarios, we further assume that the mean age at all births will slightly increase, which is consistent with the U.S., state, and county historical trends since the 1960s.

Figure 4 Total Fertility Rate, Lane County, Eugene, Springfield, Eugene-Springfield UGB, 1990-2035.



Migration rates, a more difficult demographic factor to estimate than the other factors, are assumed to be a main component affecting population changes in Lane County, Eugene, Springfield, and the Eugene-Springfield UGB. Around three fourths of the population growth in the County since 2000 is attributed to net migration (movers in minus movers out). Yet, migration is unpredictable and sensitive to changes in the economy. Therefore, we have invested a lot of effort in projecting the future trend of migration for the County based on various approaches, including pure a demographic method, a time series, and economic growth methods. The pure demographic approach is to use the age-sex-specific net migration rate to predict the future possible net migration, while the time series approach is based on the time series from the late 1970s to 2008. Economic growth methods hereby refer to a simple analysis of the association of net-migration with economic growth rates (such as the annual GDP growth rate and the unemployment rate) and net migration for both total population and labor force population. The final projected

net migration is the hybrid of these three approaches. Yet, given the unpredictability of future economic growth and large unexplainable variance of net migration by GDP growth and labor force participation rate, we developed three scenarios for net migration.

In each of the three growth scenarios for Lane County, Eugene, Springfield and the Eugene-Springfield UGB, **net migration** from 2005 to 2035 is predicted to differ slightly to account for the influence of economic growth. The differences between the scenarios' assumptions represent varying magnitudes of either a faltering or a booming economy. Figure 5 below shows that the net migration was negative in the 1980s, and was about -10,000 residents (meaning 10,000 more persons moved out of Lane County than moved in), or 3.5 percent of total population. Net migration was positive in the 1990s, about 30,000 residents, or about 11 percent of the total population. The negative net migration in the 1980s was marked by Oregon's most severe economic downturn since the Great Depression, while the large positive net migration in the 1990s was more prosperous, with strong job growth. From 2000 to 2008, population growth in Lane County due to net migration was estimated to be around six to seven percent. Positive net migration was seen despite some economic downturns in the economy in first few years of the decade. The highest job increase since at least 2000 occurred in 2005, however, the economy was showing signs of weakening again in 2007 and hasn't yet recovered. Still, we continue to see a positive in-flow of net migrants to Lane County.

While no forecast can predict the exact timing of economic cycles, the **medium growth scenario** assumes that there will be both downturns and upswings as there have been in the past, and that net migration will continue to contribute a moderate amount of population to the County over the long run. Net in-migration will continue throughout the forecast period. Specifically, we assume that net migration will be lower in the 2000s than in the 1990s and that a downturn will continue over the next few years. However, we expect net in-migration will regain vitality after 2015 due to an economic recovery. Due to the relatively larger population base that has been increasing since at least 1990, total net migration in the 2010s is slightly higher than in 1990 although it will be at lower rates. Net

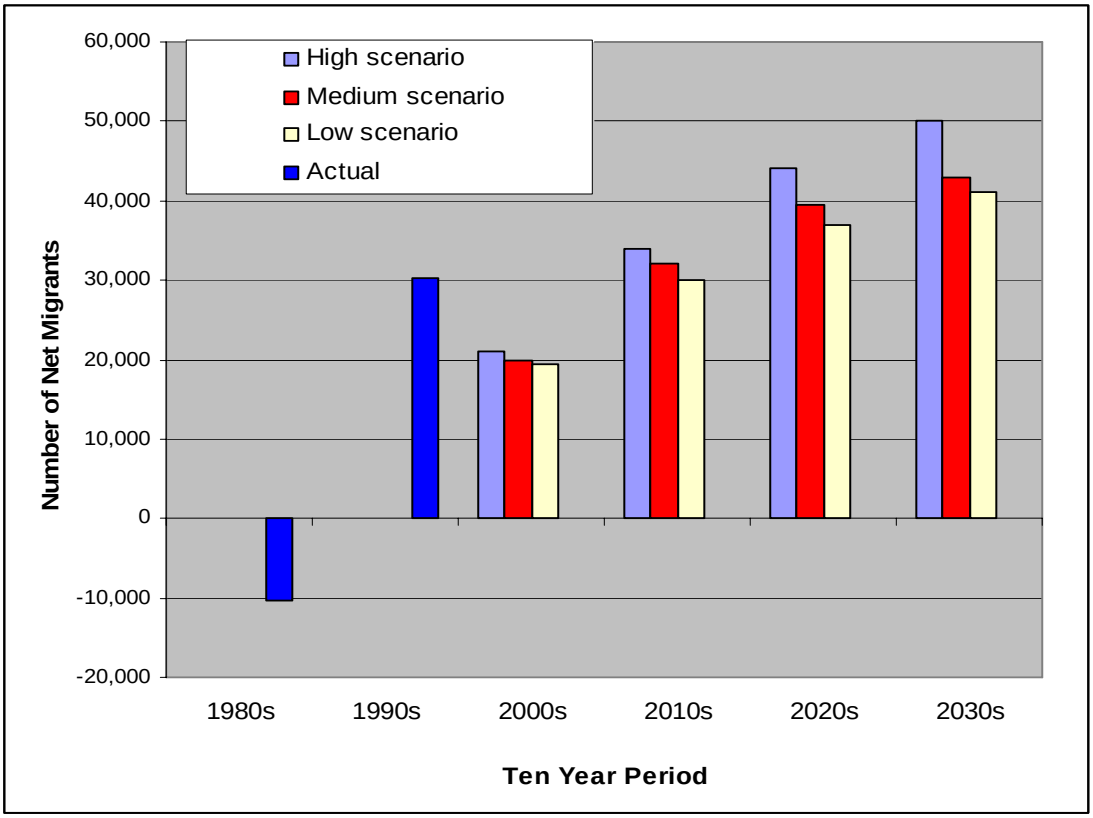
in-migration will accelerate some and will gain momentum until around 2030 when the magnitude lessens a bit.

When we developed the alternate forecasts to account for different growth scenarios, we made assumptions about the magnitude of difference in net-migration, and thus the forecasts themselves. The degrees of difference the three growth scenarios produce in the forecasts vary. The alternate forecasts for the County, Eugene, Springfield, and the Eugene-Springfield UGB each are about 0.5 percent lower and higher in 2010 than the medium growth forecast assumes. By the end of the forecast horizon, the differences are closer to 5 percent.

Under the **high growth scenario**, a quicker and stronger upswing in the economy than in the medium scenario will occur and a higher level of net-in-migration of persons is anticipated. In this case, larger increases are forecast for Lane County and levels of net in-migration are closer to levels seen during the 1990s (see Figure 5). In addition, fertility rates are slightly higher than in the medium scenario due to an assumed increase in the Hispanic population.

The **low growth scenario** assumes that the economy will take a longer period to recover than in the medium growth scenario, and as a result, net migration will occur at lower levels than seen in the 1990s until the 2020s. Under this low growth assumption, net migration will increase more gradually than in the other two scenarios, but the recession is not expected to be severe as seen during the 1980s. We anticipate here that the current economic recession is unlikely to continue for a long period and that the U.S. economy is anticipated to recover no later than the mid-2010s. Since Oregon is a state that normally has positive net migration even during times of a weakened economy (as seen in the early part of the current decade), we do not expect extremely low, or negative net migration to occur during the next thirty years. The average annual net migration under the low growth scenario is somewhat reflective of the past 27-year trend from 1981 to 2008. Additionally, under the low scenario, we do assume that people will tend to reside in larger cities and urban areas where the public transit is more developed than in the non-UGB unincorporated areas. This assumption accounts for the potential impacts of high gas prices and the aging population.

Figure 5. Assumptions for Net Migration under Different Growth Scenarios for Lane County



DEMOGRAPHIC ASSUMPTIONS FOR LANE COUNTY'S TEN SMALLER CITY AREAS

As mentioned above, the population forecasts produced for Lane County's ten smaller city areas and the non-UGB unincorporated area are based on a medium, or most likely, growth scenario. Rates of population growth for these areas are assumed to be determined by corresponding growth in the number of housing units, and changes in housing occupancy rates and average number of persons per household (PPH). The change in housing unit growth is much more variable than change in housing occupancy rates or PPH.

Some general and broad assumptions about future housing growth apply to the group of the ten smaller cities. First, the housing growth trends from 1990 to 2008 were assumed to have bearing on how housing growth rates will change during the forecast period. For some cities in Lane County, housing growth rates are not predicted to be as high as during

the 1990s, but not as low as during the 1980s. In these cases, growth rates are expected to be more similar to those seen in more recent years. In other cities, there are events or circumstances that caused past housing trends to be skewed, such as the occurrence of a building moratorium that hindered the construction of additional housing. Consideration was given to these circumstances and growth rates were assumed to be higher in the future than previously experienced. Second, generally for all city areas, as the availability of buildable lands approaches capacity, housing growth rates tend to decelerate. If boundaries expand, and additional housing growth can be accommodated, then rates rebound. Our study is not a land capacity study, but changing growth rates can be partially attributed to the amount of buildable land that is available. Third, the expected future changes in the County have at least some influence on what is predicted to occur in the cities. However, individual or specific situations unique to each city has more bearing on the cities' population forecasts.

Making assumptions about housing occupancy and PPH are also necessary when forecasting household population by the housing unit method. In the ten cities, housing is not assumed to change significantly during the forecast period. The rates for all cities are predicted to either remain fairly stable or undergo slight changes. We assumed marginal declines in more urban cities to account for increasing multi-family housing.

The PPH is assumed not to change much either throughout the forecast period, but is expected to decline slightly. Smaller household size is associated with an aging population and the population is aging in Lane County and its sub-areas. In cities where the Hispanic share of population is significantly increasing, such as Creswell and Junction City, the PPH is anticipated to undergo less change than in other areas. This is due to the smaller PPH of the elderly population being offset by the higher PPH associated with Hispanics.

The number of persons residing in group quarters is a component of population that is added to the number of persons residing in households. In our forecasts produced by the housing unit method, the number of persons residing in group housing is assumed to remain fairly stable during the forecast period except where there are known plans for

development of group quarters facilities (such as the prison and state hospital in Junction City). Since 1990, there has not been much change overall in group quarters population and this situation is expected to continue throughout the forecast period.

The assumptions regarding future housing growth used to develop the forecasts for the individual cities outside of the Eugene-Springfield UGB are summarized below. For additional supporting information, considerations, and assumed rates for each of the forecasts see Appendices 4 and 5.

Coburg: Housing growth rates are assumed to accelerate due to the expansion of and improvements to infrastructure, the city's proximity to the Eugene-Springfield area, and the availability of buildable land.

Cottage Grove: Growth rates are assumed to increase due to expanded infrastructure and planned housing development.

Creswell: We assume that the availability of affordable housing will continue to attract young families and retirees and that the strong Hispanic community will continue to attract newcomers. Planned housing development and an increase in future jobs will also contribute to higher population increases than seen in the past.

Dunes City: Past trends are assumed to continue. There are no public utilities and no planned future housing or commercial development.

Florence: Past trends are assumed to continue; the elderly will continue to find Florence a desirable place to retire.

Junction City: The jobs that the new group quarters facilities will create are assumed to increase the demand for new housing. The expansion of infrastructure will support the growth; planned housing development and additional employers will also contribute to higher growth than in the past.

Lowell: Pro-growth policies and plans, and actions of city officials (such as changes in zoning, applying for Urban Renewal Zone designation) to promote population growth are assumed to have a positive affect on housing growth rates; higher growth rates, are assumed to occur due to improved infrastructure and the physical desirability of the landscape. See Appendix 8 for additional information on Lowell.

Oakridge: Planned housing development will increase growth rates, but its proximity to the national forest and limitations on expanding its UGB is assumed to prevent growth rates as high to continue throughout the forecast period.

Veneta: Higher rates of increase are assumed and attributed to the affordable housing that will continue to attract young families; a continued increase in the Hispanic population will also be seen. Planned housing development supports higher rates of growth than in the past, but more development is planned for 2015-2020 than in 2010-2015. As the economy recovers housing construction will continue to be strong.

Westfir: We assumed that past trends will continue.

Non-UGB Unincorporated Area: As cities grow, the unincorporated area will shrink. We assume that the rural to urban shift of population seen in Lane County and nationwide will continue. Also, small increases to the large population base cause population declines due to the aging population and smaller PPH. Occupancy rates are assumed to remain some of the lowest in the county.

POPULATION FORECASTS FOR LANE COUNTY AND ITS SUB-AREAS

Under the most-likely population growth scenario, one which will extend similar demographic trends to those recently seen in Lane County, county-wide population and populations in all of its cities are expected to increase from 2008 to 2035, while the population in the non-UGB unincorporated area is likely to decline slightly. The rates of increase in most of the County's cities and non-UGB unincorporated area will lessen as time progresses through the forecast period. Lane County will undergo an increase of around 89,700 persons from 345,880 in 2008 so that by 2035 its population will reach almost 435,600.

The Eugene-Springfield UGB will increase by 61,731 persons from 2008 to 2035 and will increase from 242,156 to almost 303,900. The average annual growth rate of the sum of these cities is predicted to be 0.98 percent. The share of the Eugene-Springfield UGB of the County population will continue to be stable at around 70 percent with a slight increase during the period.

Lane County's ten smaller cities will experience population increases so that by 2035, the sum of their populations will capture about 18 percent of the County-wide population, which represents an increase of 5 percentage points from 2008. The number of persons added to these smaller cities combined is predicted to be almost 35,280 during the forecast period, with an average rate of increase of 2 percent per year.

Population in the non-UGB unincorporated area of the County is foreseen to follow a slight downward trend. About 7,390 fewer persons will be residing in the unincorporated area in 2035 than in 2008 with an average annual decrease rate of -0.5%. The share of County population in the unincorporated area is presumed to decline from 17 percent to 12 percent during the 27-year forecast period.

Figure 6 below shows historical and forecast populations for Lane County, each of the combined city areas, and the on-UGB unincorporated area. Figure 7 displays the County share of the historical and forecast population captured by each area.

Figure 6. Historical and Forecast Populations for Cities Combined and for Lane County

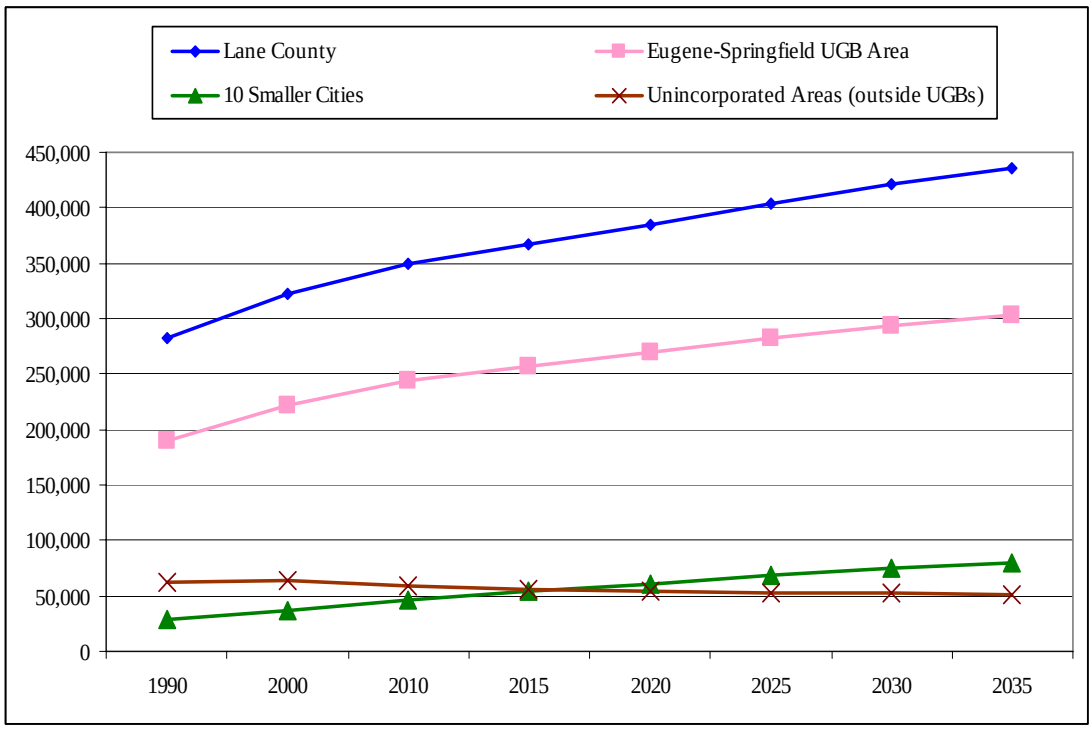
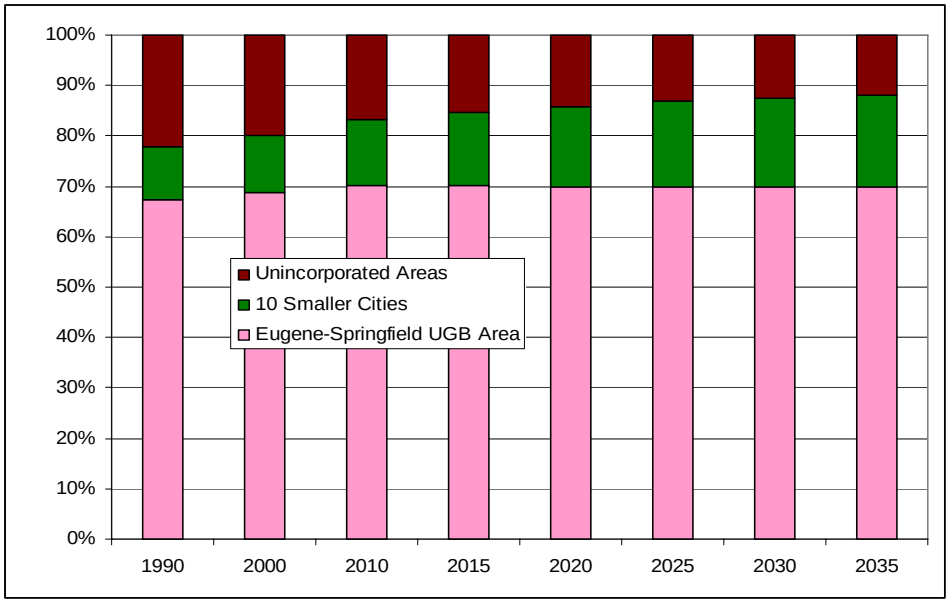


Figure 7. Historical and Forecast Shares of Population, Larger Cities, Smaller Cities, and Unincorporated Area



POPULATION FORECASTS FOR LANE COUNTY, EUGENE, SPRINGFIELD, AND EUGENE-SPRINGFIELD UGB

Under the three different assumptions for population growth considered for the County-wide forecasts and the forecasts for Eugene, Springfield, and the Eugene-Springfield UGB, increases in population will continue throughout the forecast period. The rate and timing at which population will increase and the magnitude of the increases differ in each of the three forecast scenarios as well as in each of the geographic areas. Overall, the rates of population increase will lessen over time. The differences in population change under the three growth scenarios become more pronounced with time expanding in the horizon for each geographic area. In 2010, there are relatively smaller differences between the three set forecasts for the County, Eugene, Springfield, and the Eugene-Springfield UGB. By 2035, the differences are greatest (see Figure 8 below for the Lane County forecasts).

In the medium growth scenario, from 2008 to 2035, the rates of increase in population for Lane County, Eugene, Springfield, and the Eugene-Springfield UGB range from 26 to 35 percent; in the low growth scenario, the range is 21-31 percent; and in the high growth scenario, it is 31-41 percent. In all three scenarios Springfield is anticipated to undergo population increases at the fastest pace, which is faster than the rate of population increase for the County.

Some of the highlights of the forecast results are mentioned below. The forecast populations are shown in Tables 7, 8 and 9. More detailed forecast results are included in Appendix 1.

Medium Growth (most-likely) Scenario

In the most-likely growth scenario, populations throughout Lane County are forecasted to continue to increase during 2008-2035, but at slower rates as time progresses. However, the number of persons added each decade will be greater starting in 2010 than in previous years. A County-wide population of just over 435,600 is anticipated to be seen by 2035, an increase of over 89,700, or by 26 percent from 2008.

Population in Eugene, Springfield, and the Eugene-Springfield UGB is expected to continue to increase throughout the forecast period. Eugene's population is predicted to increase by 31 percent adding 47,945 persons by 2035 to the current total. Springfield's population is expected to increase by 35 percent from 2008-2035. About 20,400 additional persons are forecast to be residing in Springfield by 2035. The Eugene-Springfield UGB area will see an increase of 61,731 persons, nearly 27 percent increase during the same time period.

Figure 8. Historical, Current and Projected Population: Three Growth Scenarios in Lane County, Eugene, Springfield, and the Eugene-Springfield UGB, 1990-2035

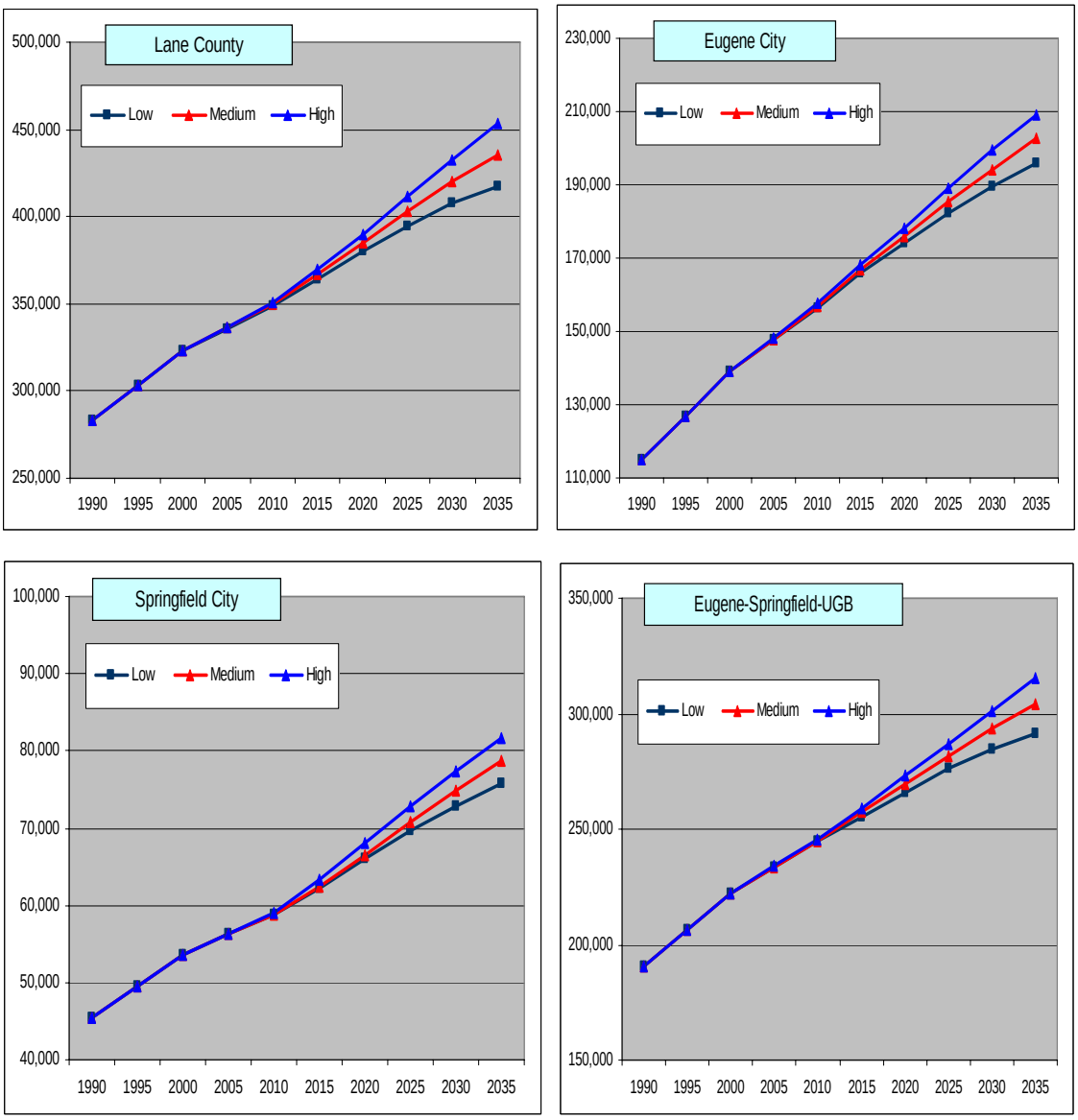


Table 7. Medium Growth Population Forecasts

Medium Growth Scenario	2008 (est)	2010	2020	2030	2035	2008-2035 Change		Average Annual Change	
						Number	Percent	Number	Percent
Lane County	345,880	349,505	384,930	420,481	435,615	89,735	25.9%	3,324	0.9%
Eugene	154,620	156,844	176,124	194,314	202,565	47,945	31.0%	1,776	1.0%
Springfield	58,005	58,891	66,577	74,814	78,413	20,408	35.2%	756	1.1%
Eugene Springfield -UGB	242,156	244,806	269,380	293,391	303,887	61,731	25.5%	2,286	0.8%

High Growth Scenario

In the high growth scenario, 453,350 more persons are predicted to reside in Lane County in 2035 than in 2008. This gain in population over the 27-year period represents a 31 percent increase, with an average of about 1.0 percent per year. Under this scenario, Eugene, Springfield, and the Eugene-Springfield UGB will all experience average annual growth rates of at least 1.0 percent with 1.3 percent for Springfield, 1.1 percent for Eugene, and 1.0 percent for the Eugene-Springfield UGB. The increased numbers of persons residing in these three geographic locations are 54,664, 23,742, and 73,208, respectively.

Table 8 below displays population forecasts for Lane County, Eugene, Springfield, and the Eugene-Springfield UGB. For more detailed results of their forecasts, see Appendix 1.

Table 8. High Growth Population Forecasts

High Growth Scenario	2008 (est)	2010	2020	2030	2035	2008-2035 Change		Average Annual Change	
						Number	Percent	Number	Percent
Lane County	345,878	350,853	389,856	432,380	453,352	107,472	31.1%	3,980	1.0%
Eugene	154,620	157,506	178,325	199,390	209,284	54,664	35.4%	2,025	1.1%
Springfield	58,005	59,081	68,046	77,308	81,747	23,742	40.3%	879	1.3%
Eugene-Springfield UGB	242,156	245,620	273,050	301,210	315,364	73,208	30.2%	2,711	1.0%

Low Growth Scenario

Under the low growth assumption, Lane County's population is predicted to increase by 21 percent, with around 71,830 more persons in 2035 than in 2008. Eugene will increase by around 27 percent, or 41,200 persons. Springfield will grow by around 31 percent, or 17,720. The corresponding figures for the Eugene-Springfield UGB are 20 percent and 49,197.

Table 9. Low Growth Population Forecasts

Low Growth Scenario	2008 (est)	2010	2020	2030	2035	2008-2035 Change		Average Annual Change	
						Number	Percent	Number	Percent
Lane County	345,880	348,904	379,838	407,374	417,712	71,832	20.8%	2,660	0.7%
Eugene	154,620	156,545	174,117	189,533	195,821	41,201	26.7%	1,526	0.9%
Springfield	58,005	58,811	65,961	72,844	75,725	17,720	30.5%	656	1.0%
Eugene-Springfield UGB	242,156	244,413	266,129	284,487	291,353	49,197	20.3%	1,822	0.7%

POPULATION FORECASTS FOR LANE COUNTY'S TEN SMALLER CITY AREAS AND THE NON-UGB UNINCORPORATED AREA

Under a medium growth scenario, four of Lane County's ten smaller city areas are expected to experience population increases of over 5,000 persons from 2008 to 2035. They are: Creswell, Florence, Junction City, and Veneta. Five out ten will see their population double during the same period. They are Coburg, Creswell, Junction City, Lowell, and Veneta. However, even the population size is predicted to double in Coburg and Lowell, the rates of change translates to an addition of an average of only about less than 60 persons per year because of their small size. The other five cities will witness a much slower growth in the same period. Westfir will experience the lowest growth with an annual increase of about 4 persons from 2008 to 2035.

The unincorporated area (excluding population in the Eugene-Springfield UGB) in Lane County is anticipated to experience a decrease of 12 percent, or about 7,300 persons, during the forecast period. At this rate, an average of 274 persons will be lost annually for the area. The population in the unincorporated area is expected to decline down to 51,634 by 2035.

Table 10 below shows population forecasts for the ten smaller cities beginning in 2010. For more detailed results of the smaller city areas and non-UGB unincorporated area forecasts, see Appendix 2.

Table 10. Population Forecasts for Lane County's Ten Smaller Cities and Unincorporated Area (Medium Scenario)

Medium Growth Scenario	2008 (est)	2010	2020	2030	2035	2008-2035 Change		Average Annual Change	
						Number	Percent	Number	Percent
Coburg	1,075	1,092	1,567	2,322	2,659	1,584	147.4%	59	3.4%
Cottage Grove	9,828	9,957	11,424	12,856	13,542	3,714	37.8%	138	1.2%
Creswell	5,321	5,647	8,263	11,060	12,172	6,851	128.8%	254	3.1%
Dunes City	1,360	1,457	1,640	1,777	1,823	463	34.0%	17	1.1%
Florence	10,767	11,212	13,747	16,323	17,434	6,667	61.9%	247	1.8%
Junction City	6,375	6,567	10,799	13,136	13,887	7,512	117.8%	278	2.9%
Lowell	1,015	1,043	1,459	2,022	2,345	1,330	131.0%	49	3.2%
Oakridge	3,764	3,859	4,672	5,061	5,280	1,516	40.3%	56	1.3%
Veneta	4,840	4,976	7,251	9,847	10,505	5,665	117.1%	210	2.9%
Westfir	352	359	384	426	448	96	27.3%	4	0.9%
Non-UGB Unincorporated Area	59,026	58,531	54,344	52,261	51,634	-7,392	-12.5%	-274	-0.5%

METHODS AND DATA FOR POPULATION FORECASTS

Consistent boundaries for the geographic parts of the study area (such as those for cities and UGBs), those defined in 2008, were used to compile population, birth, housing, and land use data. Historical and recent demographic statistics and rates were calculated for these areas so that any annexations or boundary changes that occurred during the time span covered in this study would not skew demographic trends.

Developing long-term population forecasts for the County and its sub-areas (its cities and unincorporated area), requires these main stages: 1) compiling and evaluating historical and recent data to ascertain demographic characteristics and trends in the study area and to obtain a population base from which the forecasts may be launched; 2) making assumptions about the future and adjusting the data or rates in the forecasting models (calibrating the models) to incorporate predicted rates or trends; and 3) reconciling, or controlling the sum of the sub-area forecasts to the Countywide forecast.

We first develop population projections, then we make adjustments to the projections to produce the forecasts. Population projections are developed by extending historical and current demographic and housing trends into the future. Forecasting population requires that assumptions be made about the future and adjusting the projection models to account for circumstances that perhaps skewed past trends or that with almost certainty will affect future change. Such circumstances in the past could be a building moratorium or the opening of a new group quarters facility. Events affecting future change would be, for example, planned future housing development that is higher than usual, a foreseen change in an area's physical ability to accommodate growth (buildable land available is approaching capacity or improvements to infrastructure that are underway), anticipated changes in the economy (the location of a new employer, the closing of an industry, or the upswing or downturn of the economy in general), or an expected change in the local population and household composition (age, ethnicity, average household size).

Two different types of primary demographic models were utilized to develop the population forecasts for Lane County and its sub-areas. For Lane County, Eugene, Springfield, and the Eugene-Springfield UGB, a cohort-component model was used. For each of ten smaller city areas and the non-UGB unincorporated area, a housing unit model was relied upon. The cohort-component model best predicts population over the long-term for areas with larger populations. The housing unit model is better suited for smaller populations and incorporates recent annual data that account for more variability in population growth over the forecasting period. The forecasting models are described in more detail below.

Equivalent types of datasets were compiled for most of the geographic parts in the study area. Some data, such as those from the 2007 American Community Survey (ACS), are only available for geographic areas whose minimum population is 65,000. This means for our study area, ACS data were only available for the County as a whole and for Eugene.

COHORT-COMPONENT MODEL

A demographic projection model called the cohort-component model was used to forecast the population residing in Lane County and in its larger sub-areas. Separate cohort-component models were developed for the County, Eugene, Springfield, and the Eugene-Springfield UGB. These forecasts are 2000-based projections. However, adjustments were made to the model to incorporate into the forecasts the 2001-2008 PRC certified population estimates and capture trends from the most recent data available.

The cohort-component model predicts future populations as outcomes of the life events that occur over time. These events are comprised of **births, deaths**, and **migrations**. Thus, an area's population grows when births outnumber deaths and when more people move into the area than leave it. These events occur more often in certain age groups, or **cohorts**, than in others. For example, people tend to move around the most when they are in their 20s, or the elderly have lower chances than people in their 40s to survive over the next five years. Applying appropriate age- and gender-specific rates of birth, death and migration to the existing population cohorts of the County produce its future population.

The cohort-component method of forecasting population depends on the availability of accurate data on the age and gender composition of an area's population. The most precise information about population age structure in an area is usually provided by the most recent U.S. Census of Population. Rates of life events are applied to the known population cohorts and are usually derived from data such as those provided by the U.S. Census and the Oregon Center for Health Statistics. These rates are then modified to account for the most recent trends as well as for future ones. Examples of such trends that may affect the future population of an area include the recent tendency among women of childbearing ages to delay having their first child, or a predisposition of young men (ages 20 to 29) to be more mobile than women in the same age cohort. A set of assumptions must be developed to address likely changes in the initial rates of life events and are based on judgment about how the trends might evolve in the study area. The existing population structure mostly determines the future population composition of the area, but it may change slightly depending on age-specific migration rates predicted for the future. Trends detected in historical and recent data, such as housing, land use, employment, and school enrollment data help to determine these future migration rates.

The population and housing data came from the 1990 and 2000 Censuses of Population and Housing and PRC's 2001-2008 annual population estimates; additional housing information and building permit and land use data were obtained from the Lane Council of Governments; the Oregon Center for Health Statistics provided information on fertility and mortality; the Oregon Department of Education furnished school enrollment data; and labor force and employment data are from the Oregon Employment Department.

The 1990 and 2000 population and housing data from the Census were available at the census-block level of geography by age group and gender. The census blocks were allocated into jurisdictional boundaries defined in 2008 using Geographic Information Systems (GIS). The 1990 population data were then organized into five-year age cohorts, such as 0 to 4 years, 5 to 9 years, and so on. Each of these cohorts was then "survived", or aged into the next cohort to the year 2000. "Surviving" the cohorts is accomplished by

applying age- and sex-specific survival rates. These rates represent the proportion of population in each younger cohort that would survive during a given time period (such as the five years between 1990 and 1995) to become the next older cohort. This process is repeated for each five-year age group and five-year time interval between 2000 and 2035. Forecasting a known population (the 2000 population) and its age distribution enables appropriate adjustments to be made to the model so that the forecasted population becomes aligned with the actual population and ensures the accuracy of the model's projections.

During each five-year interval, a certain number of live births occur to the women in childbearing ages. To calculate the number of newly born residents of the County and its larger sub-areas, age-specific fertility rates were applied to the numbers of women in childbearing cohorts (under age 20, 20 to 24, and so on up to 45-49 years). Fertility rates indicate how many children women in a given age group are likely to give birth to during each five-year period. Once born, children become subject to survival rates and are "moved", or "aged", through the system like all the other cohorts.

The most difficult part is to estimate the in- and out-migration of an area. Since little reliable data are available to study in- and out-migration, it's best to use net migration rates, which is the balance between in- and out-migration. Net migration can be calculated if the population is known at the beginning and the end of a previous time period, as well as the number of births and deaths that occurred during the same time. Net migration is positive when more people move into the area than leave it; it is negative if the opposite is true. Net migration rates used in the cohort-component model can be interpreted as the number of people who are added to (or subtracted from) a given cohort due to migration over a given period of time (in this case, five years) per each 100 persons. The initial net migration rates for the cohort-component model were derived from the 1990 and 2000 population cohorts for the census blocks that are located within the County and larger jurisdictional boundaries (as defined in 2008), as well as from births and deaths that occurred in the same area during 1990-2000. The rates were adjusted so that the "forecasted" population for the year 2000 from the Census 1990 fit the actual population obtained from the 2000 Census. The net migration rates used to forecast the population in

the County and in its larger sub-areas from 2000 to 2035 were further modified to reflect the most likely future migration patterns. Demographic trends identified in post-2000 data from PRC's annual population estimates and the U.S. Census Bureau's ACS data had some bearing on the adjustments made to the model in the initial, 2000-2010, forecast period. In addition, migration patterns are greatly influenced by the local economy and by housing growth in the area, both current and assumed. When making the final adjustments to the net migration rates, consideration also was given to plan for future development in the region.

The development of the forecasts of population residing in Eugene, Springfield, and the Eugene-Springfield UGB utilized the same methodology as the countywide forecasting described in the section above. A unique set of demographic data were used for each of the cities and trends specific to each of them were considered when making adjustments to their cohort component models.

HOUSING UNIT METHOD AND MODEL

A Housing Unit model was created to prepare the forecasts for each of ten smaller city areas in Lane County and for the non-UGB unincorporated area. This method requires that a current housing inventory for each area be compiled and that past and recent rates of change in each inventory be known. Other housing and population data are needed as the components of the housing unit model besides housing units are occupancy rates, the average number of persons per household (PPH), and group quarters population. In this method, the number of housing units in an area is first projected or forecast, and then assumptions about housing occupancy and average household size are made to forecast household population. Persons residing in group quarters, (such as in college dormitories, prisons, and nursing homes) are also projected and then added to the household population to obtain the total population forecast. An area's total population is calculated in the housing unit method by multiplying the number of housing units forecasted by the occupancy rate and PPH and then adding to that product, the group quarters population. This process is carried out for five-year intervals throughout the forecast period.

Data used in the housing unit models are from the 1990 and 2000 Census of Population and Housing, and from recent and historical building permit and taxlot data that were obtained from the Census Bureau and the Lane Council of Governments. Other housing data and group quarters population data were collected from the local jurisdictions themselves by PRC's Population Estimates Program (we send a housing and population questionnaire to Oregon's cities and counties and request that they complete and return the form to us each year). In a few cases, data were not available from cities. In this situation, adjustments were made to account for recent changes estimated to have occurred in the city's housing unit inventory detected from the county-wide land use data obtained from Lane Council of Governments.

Population and housing data from 1990 and 2000 Censuses were compiled for each geographic part in the study area. An allocation of data was made to the 2008 jurisdictional boundaries using the same GIS methods as described previously in the cohort-component model section. Housing inventories were created from the 1990 and 2000 census data. The inventories were updated to 2008 with the recent housing data from Lane Council of Governments' GIS Division and PRC. Housing growth trends were detected from the Census data, the tax lot data, and PRC's housing data.

The number of housing units is projected based on past housing growth trends. Housing growth rates were calculated using the housing inventories and the amount of annual or periodic change they experienced. The housing trends were extrapolated into the future and applied to the 2008 housing inventory to predict the numbers of housing units in the future. Adjustments were made to the models to accelerate or curb growth based on current conditions compared to the past, or plans for future change. For example, in the case of the city of Lowell, the building moratorium skewed historic growth trends; and policies, plans, and actions made by city officials and staff are promoting housing and population growth. (See Appendix 4 for considerations given to individual cities and the unincorporated area for adjusting the forecast models). In cities where future growth is expected to be very different than in the past, adjustments were made to the housing unit model by calculating a weighted average from annual or periodic growth rates, giving more bearing to the years

believed to have more influence on what likely will occur in the future. This was the case for Lowell, Coburg, and Veneta.

Adjustments were made to the model to account for known planned future housing. The numbers of housing units scheduled to be constructed and completed during the forecast period were accounted for in the model by adding in planned housing units in the 5-year time period that construction is planned to be completed.

The 1990 and 2000 Census data are also used to calculate average household sizes (PPH) and housing occupancy rates. The most recent year for which data on occupancy and PPH are available is the 2007 ACS for Lane County.

Occupancy rates for the County's sub-areas were predicted for 2010-2035 based on the most recent Census data (2000), and adjusted according to past occupancy trends detected from the 1990 and 2000 data and investigation of the housing market. In addition, population and housing composition, and the rural or urban classification of cities were considered to predict changes the occupancy rates will undergo in the future. Some minor adjustments were made to the occupancy rates for some cities based on a relationship to the predicted County rates.

The 2008 PPHs were estimated based on past trends in the 1990, 2000 and 2007 data. The 2008 PPHs were assumed for the future using the rationale that the increase of the Hispanic and older-age populations would balance out any changes in PPH (the PPH for Hispanics is higher than the average, and the PPH for persons ages 65 years and older is lower). However, after reconciliation of the sum of the sub-area forecasts to equal the County forecast (discussed later on page 51), the PPHs were slightly adjusted to exactly coincide with the final forecasted populations and households.

Demographic factors that influence the PPH include age and racial composition of population, fertility rates, and changes in school enrollment. Additional data that are recent

and available at the sub-county level, such as births by race and ethnicity, and school enrollments, along with historical trends, are used to predict future PPH.

The number of persons residing in group quarters is a component of population that is added to the number of persons residing in households to arrive at the total population.

The group quarters population for Lane County was projected based on the 2000 age distribution of group quarters population and the forecasted age distributions. The county total group quarters population was adjusted to equal the sum of group quarters population in the cities and unincorporated area. After the population residing in housing units was forecasted for each city and for the unincorporated area, the group quarters population was projected for the same areas. The prediction of future group quarters populations was based on historic and recent trends of the share of the total population that reside in group quarters facilities in each sub-area. The projected group quarters populations were then added to the forecasted housing unit populations to obtain total population forecasts.

BIRTHS

Births for each year from 1989 to 2007 were assigned to current city area boundaries using a combination of individual birth records obtained through a confidential data sharing agreement with the Oregon Center for Health Statistics and data published by zip code allocated to cities. Annual births from 2008 to 2035 were forecast as part of the cohort-component model by applying the fertility rates described earlier in the discussion of the cohort-component model to the forecast female population by age group.

RECONCILIATION OF THE FORECASTS

For our study, we developed separate population forecasts for each of the County's sub-areas. For consistency, the sum of the parts must equal the whole, which means here that the sum of the individual forecasts of the County's sub-areas should add to the County-level forecast. The County-wide forecast under the most-likely forecast scenario served as the control total to which the sum of the individual forecasts for the cities and the

unincorporated area were reconciled. Some minor adjustments were made to the sub-area forecasts so that when added together, the result is the same as the forecast for the County.

As mentioned previously, the sum of the individual forecasts for Eugene, Springfield, and the unincorporated area in the Eugene-Springfield UGB were controlled to the Eugene-Springfield UGB forecast. Additionally, the sum of the forecasts for Lane County's ten smaller city areas and the unincorporated area (both in and out of the Eugene-Springfield UGB in Lane County) were adjusted to equal the forecast for the County minus the sum of forecasts for Eugene and Springfield for each five-year interval in the forecast period. The adjustment produced minor changes in the original forecast numbers for the smaller cities. In some cases the numbers were slightly adjusted up and in other cases they were adjusted down depending on the shares of the County's forecast population each city represented throughout the period.

The adjustments were made to the sub-area forecasts using control factors that were calculated based on the relationship between the control total and the sum of the parts. The actual difference between the control forecast and the sum of the forecasts for the parts was proportionately distributed to each of the individual sub-area forecasts by multiplying each individual sub-area forecast by the control factor.

Please note that in some instances, fluctuations in the forecast growth rates are at least partially attributed to the reconciliation of the cities the sub-areas to the County, or the control process.

SUPPORTING DATA AND PROJECTIONS PRODUCED FROM OTHER DEMOGRAPHIC MODELS

In addition to evaluating demographic trends detected from the data we used in our forecasting models, we reviewed other data and information to obtain a better understanding of the dynamics of population change specific to our study area. This supporting information helps us to make better, or more realistic, assumptions about future population growth and helps us to use better judgment when making adjustments to our

demographic models. Most of the supporting data and information were available either at the County level of geography, or for other large geographic areas. Still the information is valuable for forecasting the County and sub-area populations. The sources include labor force data and economic profiles from the Oregon Employment Department, school enrollment data for school districts in Lane County from the Oregon Department of Education, and demographic and socioeconomic data from the 2007 ACS. Also, preliminary revised population projections for 2000 to 2040 from the Oregon Office of Economic Analysis (OEA), and employment projections from the Oregon Employment Department were used to gauge our county-wide results and for comparison.

Also, to help make our forecasts more accurate, we developed additional sets of population projections from demographic models other than the primary models employed in this study. Secondary sets of projections were produced to serve as an evaluation tool to verify that the numbers forecast from the primary models are reasonable. The additional projections were used to detect and evaluate, and adjust if necessary, any inconsistencies that those primary forecasts may have had.

A **population trends model** was developed for each of Lane County's cities. This model is used for projecting total population size for County sub-areas. It provides projections, by five years intervals, from 2005 to 2035.

The population trends model is based on a ratio method. The basic idea of the ratio method is that local city populations are under the same influences of change as the surrounding county population. In particular, we assume here that the influences of population change (fertility, mortality, and migration) are similar in Lane County's cities and unincorporated area, and that there is a link between population changes in Lane County and those in its cities and unincorporated area. In this model, we note that the proportion of Lane County's population that resides in each of the 12 cities has changed over time, however slight that may be.

For the County projection in this model, we relied on a preliminary revised 2000-2040 population forecast for Lane County prepared by Oregon's Office of Economic Analysis (OEA). OEA's forecast assumes that annual population growth rate for the county increases from its recent level of about 0.9 percent (for the 2000-2005 period) to reach 1.0 percent during 2010-2015, and then diminish back down to 0.9 percent by 2020, then continuously decline to reach 0.7 percent by 2035. The pattern of change seen in OEA's preliminary revised forecast is similar to the forecast produced by our county-wide cohort-component model.

We developed a simple **economic model** to produce an additional population forecast for Lane County. The model projects net-migration based on an assumed relationship between population change and economic patterns. We used employment projections for Lane County (Oregon Economic Region 5) developed by Oregon Employment Department as a basis for building our economic model. However, the future number of jobs, or number of workers, is available for only part of our forecast period. The employment projections are prepared for one ten-year period, 2006-2016, but they were still useful to compare to our forecasts for 2010 and 2015, and to determine if the two sets of projections are within a reasonable range of one another.

The employment projections provide a predicted demand for workers to fill future jobs. The forecast from our cohort-component model provides the supply of workers available to fill those jobs. From this supply we are able to separate the workers already residing in the County from the workers that will be added to the County population from migration.

The supply of workers already existing in the County was extracted by applying recent labor force participation rates to the forecast 'survived' population for ages 15-64 (or the forecast population ages 15-64 minus the net-migrants ages 15-64). Most in-migrants ages 15-64 are assumed to move to Lane County because of new jobs, so we assume that their labor force participation rate is almost 100 percent.

The difference between the projected needed number of workers (the projected number of jobs from the employment projections) and the forecast number of existing workers (the 'survived' population ages 15-64 from the cohort-component model) is the number of net in-migrants. We compare this number to the number of net in-migrants ages 15-64 in the cohort-component model to see if they are in a reasonable range.

We also can compare the total number of net-migrants, which includes all age groups. Additional workers needed to fill future jobs, or net-migrants (as mentioned above), are each assumed to live in a household and to bring their families when they move to Lane County. Thus, the number of net-migrants is then multiplied by the predicted PPH for 2015. The resulting number is the estimated number of net-migrants of all ages, or total net-in migration. This number is compared to the number of net-migrants in the cohort-component model for the County.

Additional housing unit models were developed for all geographic sub-areas in this study, not only for the smaller city areas and non-UGB unincorporated area. For areas where a cohort-component model was created to produce its population forecast, the forecast results generated from the two models were checked and compared.

GENERAL COMMENTS ABOUT POPULATION FORECASTS

The longer the time-span of the forecast, the more likely it is that conditions change, and thus will increase the uncertainty in rates and assumptions. It is crucial to have recent data that would allow testing, or calibrating, the assumptions used in the forecasting models. The study area's historical population helps to calibrate and adjust original migration rates and growth rates in the forecast models so that a better fit between actual and predicted number of persons can be achieved. In the long-run, however, the local economy and conditions affecting populations are likely to change in ways not currently anticipated.

All population forecasts are based on a combination of a beginning population; various known, estimated, and predicted rates; and the forecasters' judgment about future trends. The forecasts may err through imprecise data or unexpected shifts in demographic trends.

Generally, forecasts for larger geographical areas, such as the entire county are more reliable than those for small areas, such as for a small city with fewer than 1,000 persons. These forecasts may be used as a guide to population growth over the next few years. But changes in local areas will surely affect populations in some cities and actual populations will deviate from those shown here. The differences between the forecast and actual populations will vary in magnitude and perhaps direction.

The historical, recent, and predicted demographic rates and other statistics affecting population change in our study area (Lane County and each of its geographic sub-areas) are summarized and shown in Appendix 5. Also included in the summary tables are the population forecasts so that they may be viewed alongside their supporting information.

In the forecast tables accompanying this report, the original calculations for the population forecasts use decimal fractions. Because the fractions are rounded to show whole numbers, the numbers may not add exactly to the totals.

APPENDIX 1

Detailed Population Forecasts for
Lane County, Eugene, Springfield, and the Eugene-Springfield UGB
Three Forecast Scenarios

MEDIUM Growth Scenario, Populations for Lane County, Eugene, Springfield, and the Eugene-Springfield UGB									
	Historical ----------→			Forecast ---------->					
AREA	1990*	2000*	2008	2010	2015	2020	2025	2030	2035
LANE CO.	282,912	322,959	345,880	349,505	366,830	384,930	403,178	420,481	435,615
EUGENE	114,994	139,010	154,620	156,844	166,609	176,124	185,422	194,314	202,565
SPRINGFIELD	45,356	53,622	58,005	58,891	62,276	66,577	70,691	74,814	78,413
EUGENE-SPRINGFIELD UGB	190,385	222,264	242,156	244,806	257,191	269,380	281,836	293,391	303,887

*Population for 1990 and 2000 is allocated to 2008 boundaries.

Avg. Annual Change in #	Historical ----------→		MEDIUM Forecast---------->							
AREA	1990-00	2000-08	2008-10	2010-15	2015-20	2020-25	2025-30	2030-35	2008-2035	2010-2030
LANE CO.	4,005	2,865	1,814	3,465	3,620	3,650	3,461	3,027	3,324	3,549
EUGENE	2,402	1,951	1,112	1,953	1,903	1,860	1,778	1,650	1,776	1,874
SPRINGFIELD	827	548	443	677	860	823	825	720	756	796
EUGENE-SPRINGFIELD UGB	3,188	2,411	1,325	2,477	2,438	2,491	2,311	2,099	2,286	2,429

Avg. Annual Growth Rate	Historical ----------→		MEDIUM Forecast ---------->							
AREA	1990-00	2000-08	2008-10	2010-15	2015-20	2020-25	2025-30	2030-35	2008-2035	2010-2030
LANE CO.	1.3%	0.8%	0.5%	1.0%	1.0%	0.9%	0.8%	0.7%	0.9%	0.9%
EUGENE	1.9%	1.3%	0.7%	1.2%	1.1%	1.0%	0.9%	0.8%	1.0%	1.1%
SPRINGFIELD	1.7%	1.0%	0.8%	1.1%	1.3%	1.2%	1.1%	0.9%	1.1%	1.2%
EUGENE-SPRINGFIELD UGB	1.6%	1.0%	0.5%	1.0%	0.9%	0.9%	0.8%	0.7%	0.8%	0.9%

LOW Growth Scenario, Populations for Lane County, Eugene, Springfield, and the Eugene-Springfield UGB									
	Historical ----------→			Forecast ---------->					
AREA	**1990***	**2000***	**2008**	**2010**	**2015**	**2020**	**2025**	**2030**	**2035**
LANE CO.	282,912	322,959	345,878	348,904	364,368	379,838	394,724	407,374	417,712
EUGENE	114,994	139,010	154,620	156,545	165,707	174,117	182,464	189,533	195,821
SPRINGFIELD	45,356	53,622	58,005	58,811	62,102	65,961	69,561	72,844	75,725
EUGENE-SPRINGFIELD UGB	190,385	222,264	242,156	244,413	255,598	266,129	276,109	284,487	291,353

*Population for 1990 and 2000 is allocated to 2008 boundaries;

Avg. Annual Change in #	Historical ----------→		LOW Forecast ---------->							
AREA	**1990-00**	**2000-08**	**2008-10**	**2010-15**	**2015-20**	**2020-25**	**2025-30**	**2030-35**	**2008-2035**	**2010-2030**
LANE CO.	4,005	2,865	1,513	3,093	3,094	2,977	2,530	2,068	2,661	2,924
EUGENE	2,402	1,951	963	1,832	1,682	1,669	1,414	1,258	1,526	1,649
SPRINGFIELD	827	548	403	658	772	720	657	576	656	702
EUGENE-SPRINGFIELD UGB	3,188	2,411	1,129	2,237	2,106	1,996	1,676	1,373	1,822	2,004

Avg. Annual Growth Rate	Historical ----------→		LOW Forecast ---------->							
AREA	**1990-00**	**2000-08**	**2008-10**	**2010-15**	**2015-20**	**2020-25**	**2025-30**	**2030-35**	**2008-2035**	**2010-2030**
LANE CO.	1.3%	0.8%	0.4%	0.9%	0.8%	0.8%	0.6%	0.5%	0.7%	0.8%
EUGENE	1.9%	1.3%	0.6%	1.1%	1.0%	0.9%	0.8%	0.7%	0.9%	1.0%
SPRINGFIELD	1.7%	1.0%	0.7%	1.1%	1.2%	1.1%	0.9%	0.8%	1.0%	1.1%
EUGENE-SPRINGFIELD UGB	1.6%	1.0%	0.5%	0.9%	0.8%	0.7%	0.6%	0.5%	0.7%	0.8%

HIGH Growth Scenario, Populations for Lane County, Eugene, Springfield, and the Eugene-Springfield UGB									
	Historical ----------→			Forecast ---------->					
AREA	1990*	2000*	2008	2010	2015	2020	2025	2030	2035
LANE CO.	282,912	322,959	345,878	350,853	369,836	389,856	411,194	432,380	453,352
EUGENE	114,994	139,010	154,620	157,506	168,037	178,325	189,006	199,390	209,284
SPRINGFIELD	45,356	53,622	58,005	59,081	63,308	68,046	72,728	77,308	81,747
EUGENE-SPRINGFIELD UGB	190,385	222,264	242,156	245,620	258,812	273,050	287,119	301,210	315,364

*Population for 1990 and 2000 is allocated to 2008 boundaries.

Avg. Annual Change in #	Historical ----------→		HIGH Forecast ---------->							
AREA	1990-00	2000-08	2008-10	2010-15	2015-20	2020-25	2025-30	2030-35	2008-2035	2010-2030
LANE CO.	4,005	2,865	2,487	3,797	4,004	4,268	4,237	4,194	3,981	4,076
EUGENE	2,402	1,951	1,443	2,106	2,058	2,136	2,077	1,979	2,025	2,094
SPRINGFIELD	827	548	538	845	948	936	916	888	879	911
EUGENE-SPRINGFIELD UGB	3,188	2,411	1,732	2,638	2,848	2,814	2,818	2,831	2,711	2,780

Avg. Annual Growth Rate	Historical ----------→		HIGH Forecast ---------->							
AREA	1990-00	2000-08	2008-10	2010-15	2015-20	2020-25	2025-30	2030-35	2008-2035	2010-2030
LANE CO.	1.3%	0.8%	0.7%	1.1%	1.1%	1.1%	1.0%	1.0%	1.0%	1.1%
EUGENE	1.9%	1.3%	0.9%	1.3%	1.2%	1.2%	1.1%	1.0%	1.1%	1.2%
SPRINGFIELD	1.7%	1.0%	0.9%	1.4%	1.5%	1.3%	1.2%	1.1%	1.3%	1.4%
EUGENE-SPRINGFIELD UGB	1.6%	1.0%	0.7%	1.1%	1.1%	1.0%	1.0%	0.9%	1.0%	1.0%

APPENDIX 2

Detailed Population Forecasts for
Lane County's Ten Smaller City Areas and Non-UGB Unincorporated Area

AREA	Historical ----------→			Forecast ---------->					
	1990	2000	2008	2010	2015	2020	2025	2030	2035
Coburg	763	969	1,075	1,092	1,293	1,567	1,914	2,322	2,659
Cottage Grove	7,772	8,867	9,828	9,957	10,616	11,424	12,261	12,856	13,542
Creswell	2,616	3,851	5,321	5,647	6,802	8,263	9,758	11,060	12,172
Dunes City	1,081	1,241	1,360	1,457	1,542	1,640	1,726	1,777	1,823
Florence	6,143	8,643	10,767	11,212	12,355	13,747	15,035	16,323	17,434
Junction City	4,257	5,476	6,375	6,567	9,343	10,799	12,067	13,136	13,887
Lowell	785	880	1,015	1,043	1,228	1,459	1,714	2,022	2,345
Oakridge	3,140	3,251	3,764	3,859	4,290	4,672	4,866	5,061	5,280
Veneta	2,519	2,762	4,840	4,976	5,902	7,251	8,727	9,847	10,505
Westfir	291	293	352	359	370	384	412	426	448
Non-UGB Unincorporated Area	63,160	64,462	59,026	58,531	55,900	54,344	52,861	52,261	51,634

Avg. Annual Change in #	Historical ----------→		Forecast ---------->							
AREA	1990-00	2000-08	2008-10	2010-15	2015-20	2020-25	2025-30	2030-35	2008-2035	2010-2030
Coburg	21	13	9	40	55	69	82	67	59	62
Cottage Grove	110	116	65	132	162	168	119	137	138	145
Creswell	124	178	163	231	292	299	260	222	254	271
Dunes City	16	14	49	17	20	17	10	9	17	16
Florence	250	257	222	229	278	258	257	222	247	256
Junction City	122	109	96	555	291	254	214	150	278	328
Lowell	10	16	14	37	46	51	62	65	49	49
Oakridge	11	62	48	86	76	39	39	44	56	60
Veneta	24	252	68	185	270	295	224	132	210	244
Westfir	0	7	4	2	3	6	3	4	4	3
Non_UGB Unincorporated Area	130	-659	-248	-526	-311	-297	-120	-125	-274	-314

Avg. Annual Growth Rate	Historical ----------→		Forecast ---------->							
AREA	**1990-00**	**2000-08**	**2008-10**	**2010-15**	**2015-20**	**2020-25**	**2025-30**	**2030-35**	**2008-2035**	**2010-2030**
Coburg	2.4%	1.3%	0.8%	3.4%	3.9%	4.1%	3.9%	2.7%	3.4%	3.8%
Cottage Grove	1.3%	1.3%	0.7%	1.3%	1.5%	1.4%	1.0%	1.0%	1.2%	1.3%
Creswell	3.9%	4.0%	3.0%	3.8%	4.0%	3.4%	2.5%	1.9%	3.1%	3.4%
Dunes City	1.4%	1.1%	3.5%	1.1%	1.2%	1.0%	0.6%	0.5%	1.1%	1.0%
Florence	3.5%	2.7%	2.0%	2.0%	2.2%	1.8%	1.7%	1.3%	1.8%	1.9%
Junction City	2.6%	1.9%	1.5%	7.3%	2.9%	2.2%	1.7%	1.1%	2.9%	3.5%
Lowell	1.1%	1.7%	1.4%	3.3%	3.5%	3.3%	3.4%	3.0%	3.2%	3.4%
Oakridge	0.3%	1.8%	1.3%	2.1%	1.7%	0.8%	0.8%	0.9%	1.3%	1.4%
Veneta	0.9%	7.0%	1.4%	3.5%	4.2%	3.8%	2.4%	1.3%	2.9%	3.5%
Westfir	0.1%	2.2%	1.0%	0.6%	0.7%	1.4%	0.7%	1.0%	0.9%	0.9%
Non-UGB Unincorporated Area	0.2%	-1.1%	-0.4%	-0.9%	-0.6%	-0.6%	-0.2%	-0.2%	-0.5%	-0.6%

APPENDIX 3

Assumed Demographic Rates for
Lane County, the Cities of Eugene and Springfield, and the Eugene-Springfield UGB
Three Growth Scenarios

Life Expectancy in Three Growth Scenarios, for Lane County, Two Largest Cities, Eugene-Springfield UGB, 1970-2035.

Year	Lane County			Eugene City			Springfield City			Eugene-Springfield UGB		
	High	**Med**	**Low**	**High**	**Med**	**Low**	**High**	**Med**	**Low**	**High**	**Med**	**Low**
Females												
1970	76.20	76.20	76.20	76.37	76.37	76.37	73.11	73.11	73.11	72.37	72.37	72.37
1980	78.77	78.77	78.77	78.94	78.94	78.94	75.57	75.57	75.57	74.81	74.81	74.81
1990	79.67	79.67	79.67	79.85	79.85	79.85	76.44	76.44	76.44	75.67	75.67	75.67
2000	80.22	80.22	80.22	80.40	80.40	80.40	76.79	76.79	76.79	79.41	79.41	79.41
2005	80.62	80.62	80.62	80.80	80.80	80.80	77.19	77.19	77.19	79.81	79.81	79.81
2010	81.41	81.13	81.03	81.59	81.30	81.21	78.10	77.83	77.74	77.31	77.05	76.96
2015	81.41	81.13	81.03	81.59	81.30	81.21	78.10	77.83	77.74	77.31	77.05	76.96
2020	82.98	82.14	81.85	83.17	82.32	82.03	79.61	78.80	78.52	78.81	78.01	77.73
2025	82.98	82.14	81.85	83.17	82.32	82.03	79.61	78.80	78.52	78.81	78.01	77.73
2030	84.56	83.15	82.66	84.74	83.33	82.85	81.13	79.77	79.31	80.31	78.97	78.51
2035	85.22	83.57	83.01	85.40	83.75	83.19	81.76	80.18	79.64	80.93	79.37	78.83
Males												
1970	68.43	68.43	68.43	68.61	68.61	68.61	65.12	65.12	65.12	64.34	64.34	64.34
1980	70.77	70.77	70.77	70.96	70.96	70.96	67.35	67.35	67.35	66.55	66.55	66.55
1990	73.21	73.21	73.21	73.40	73.40	73.40	69.67	69.67	69.67	68.83	68.83	68.83
2000	74.85	74.85	74.85	75.05	75.05	75.05	71.03	71.03	71.03	73.95	73.95	73.95
2005	75.29	75.29	75.29	75.49	75.49	75.49	71.48	71.48	71.48	74.39	74.39	74.39
2010	76.33	75.98	75.68	76.52	76.18	75.88	72.64	72.31	72.02	71.77	71.44	71.16
2015	76.33	75.98	75.68	76.52	76.18	75.88	72.64	72.31	72.02	71.77	71.44	71.16
2020	78.40	77.37	76.46	78.61	77.57	76.66	74.61	73.63	72.77	73.72	72.75	71.89
2025	78.40	77.37	76.46	78.61	77.57	76.66	74.61	73.63	72.77	73.72	72.75	71.89
2030	80.48	78.76	77.24	80.69	78.96	77.45	76.59	74.95	73.51	75.67	74.05	72.63
2035	81.34	79.34	77.57	81.55	79.54	77.77	77.41	75.50	73.82	76.48	74.60	72.94

Total Fertility Rate in Three Growth Scenarios
For Lane County, Two Largest Cities, Eugene-Springfield UGB, 1990-2035

Year	Lane County			Eugene City			Springfield City			Eugene-Springfield UGB		
	High	Med	Low	High	Med	Low	High	Med	Low	High	Med	Low
Females												
1990	1.72	1.72	1.72	1.45	1.45	1.45	2.24	2.24	2.24	1.63	1.63	1.63
2000	1.68	1.68	1.68	1.43	1.43	1.43	2.13	2.13	2.13	1.61	1.61	1.61
2005	1.64	1.64	1.64	1.42	1.42	1.42	2.03	2.03	2.03	1.58	1.58	1.58
2010	1.57	1.57	1.57	1.39	1.39	1.39	1.94	1.94	1.94	1.53	1.53	1.53
2015	1.60	1.57	1.56	1.40	1.39	1.38	1.98	1.96	1.93	1.56	1.54	1.53
2020	1.62	1.57	1.55	1.41	1.39	1.38	2.02	1.98	1.92	1.58	1.55	1.52
2025	1.64	1.57	1.54	1.42	1.39	1.37	2.06	2.00	1.91	1.60	1.56	1.51
2030	1.66	1.57	1.53	1.43	1.39	1.36	2.10	2.02	1.90	1.62	1.57	1.50
2035	1.68	1.57	1.52	1.44	1.39	1.35	2.15	2.04	1.89	1.64	1.58	1.49

Migration in Three Growth Scenarios for
Lane County, Two Largest Cities, Eugene-Springfield UGB, 1990-2035

	Lane County			Eugene City			Springfield City			Eugene-Springfield UGB		
Year	**High**	**Med**	**Low**	**High**	**Med**	**Low**	**High**	**Med**	**Low**	**High**	**Med**	**Low**
1990s	30,262	30,262	30,262	17,200	17,200	17,200	3,600	3,600	3,600	21,700	21,700	21,700
2000s	21,000	20,000	19,500	12,600	12,100	11,750	1,680	1,580	1,530	14,300	13,650	13,300
2010s	34,000	32,000	30,000	16,800	15,700	15,000	5,300	4,400	4,400	20,500	18,600	17,600
2020s	44,000	39,500	37,000	19,500	17,400	17,000	6,200	5,800	5,600	25,000	22,000	20,750
2030-35	25,000	21,000	20,000	10,500	9,500	9,200	3,300	3,100	3,000	14,000	11,500	10,900

APPENDIX 4

Information Considered When Developing Forecasts for Lane County's Sub-Areas

Information Considered to Develop Housing and Population Forecasts

The information in the table below is obtained from submittals to PRC from city officials/staff. Included for some cities is information that we gleaned from planning documents and reports, and from feedback submitted from local residents. The information pertains to population and housing characteristics of Lane County's sub-areas, and to changes believed to occur in those areas in the future. **The table is a tool we used to develop the population forecasts and is in 'working' format.**

Population Composition	**Housing**	**Planned Housing Development/Est. Year Completion**	**Future Group Quarters Facilities**	**Future Employers**	**Infrastructure**	**Promotions (Promos) and Hindrances (Hinders) to Population Growth; Other notes**
Coburg						
Elderly and Hispanic population shares are stable	Occupancy rates stable		Development of residential substance abuse rehab. campus; completion after waste-water treatment facility completion.	Rehab. Facility will add ~100 jobs.	Planned development of wastewater treatment facility; 2011 est. completion date; I-5 interchange construction/improvements	**Promos:** Wastewater facility adds potential for commercial, industrial and residential growth; Has enough land in and outside city for residential dev, enough to accommodate at least 3,500 persons; wastewater facility can accommodate 4,000 persons; Coburg is adjacent to Springfield/Eugene; city employs 2,000 and in good economic times employs additional 1,000. **Hinders:** RV industry closed. **Notes:** New employees at Sacred Heart Med Center - 500 added soon; employer did add 2,500 in 2008 – Sacred Heart Med. Center 5 minutes from Coburg.
Document information **Coburg**	Building moratorium 2003-2006. ➢ Is preparing infrastructure for high growth, however. ➢ Much information from planning documents we have for Coburg is visionary and not hard data, and assume growth will mimic growth in Veneta. It is not known if growth in Coburg will mimic growth seen in Veneta. Veneta has had high growth rates in its history (1970's) and has demonstrated high growth from 2000-2008. Coburg doesn't have a history of high growth prior to or after the building moratorium except in 2002-2003 when approximately 35 mobile homes were added. However, because Coburg's proximity to the major work center (E/S) and because improvements to infrastructure are actually occurring, we think Coburg will increase at a much higher pace					

Population Composition	Housing	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population Growth; Other notes
Coburg, con't.	than it has in the past. ➢ Not as high as Veneta (even though closer in proximity to E/S) because historically not as high growth rates as Veneta (Veneta 5.9% during 1970s and Veneta had high growth during 2000s); Coburg in 1990s 2.4% AAGR. ➢ Transportation System plan for Coburg (1999) needs to be revised; had forecast for 2015 of only 950. ➢ Data since 2003, Crossroads forecasts show that growth is not nearly as high as thought in Coburg (2000-2008) – due to delay in sewer completion and economic downturn; so start with smaller base. ➢ CH2MHill Study of Nov. 2008 – table with label of Coburg's comprehensive plan 1,800 pop forecast for 2025; the 2005 adopted numbers are 3,300 in 2025; LCOG's numbers and city still supports them.					
Cottage Grove						
		320 developable lots currently platted in 2 subdivisions, developing at the same rate as 2 years ago.			Recently constructed a wastewater treatment facility designed to meet an annual 1.36% growth rate; water treatment facility recently expanded to meet a population projection of 13,400 by 2030; recent transportation system plan was adopted using 13,400 as the projected number	**Promos:** infrastructure in place
Additional Notes **Cottage Grove**	Much land for residential development and good proximity to Eugene/Springfield for work. Weighted average of historical and recent growth rates to compare to our forecast; fluctuations, but overall steady (1.2% average during forecast period). We also noted high average annual growth rate during 1970s.					

Population Composition	Housing	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population Growth; Other notes
Creswell						
Increase in young families, Latinos, retirees; higher shares of these population groups than County.	2000 ave. occupancy rate of 95.6% will continue	45 HU – 2010; 46 HU – 2011; 28 HU - 2012		*Flat in past; recent increased business activity – services and leisure; Planned added service/home sales jobs – 42 within 2 years.	High growth in 1960s due to improvements to I-5 Hwy and installation of municipal sewage & treatment system	**Promos:** Affordable housing and short commute to Eugene-Springfield; growing Latino community & Latino businesses; golf resort and associated housing draws retirees; airport; proximity to Eugene/Springfield; city wants to accommodate growth. **Notes**: Observed significantly higher pop AAGR than Safe Harbor (1.1% is SH); AAGRs vary in different master plans and studies: 2.5%-3.2%
Document Information-**Creswell**	Included in PAPA Creswell proposes a 2030 population of 8,509. Noteworthy factors: 1. Past projections have been below actualized population growth (1982 Comp Plan) 2. Past master plans have adopted annual growth rates for the same period (3.2% in the water plan, 2.6% transportation plan, 2.53% for wastewater and open space plans) that have been well below historic trends ranging from 3.2% to 4 %. 3. Historic trends demonstrate competitive advantages for economic growth in Creswell vis-à-vis other county municipalities.					
Dunes City						**Hinders: ***Dunes City has no public utililties;*no planned future housing or commercial development.
Eugene						
A large population base and an aging population cause						**Notes:** Eugene stated that they have no data that would support a change in past trends. Wants Safe Harbor forecast. See

Population Composition	Housing	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population Growth; Other notes
growth rates seen in **Eugene' con't.** the 1990s to decelerate in the future.						Appendix 6 for additional notes.
Florence						**Notes:** States they are 'fine' with data PRC sent; seem satisfied with updated PRC population estimate.
Document information - **Florence**	**Notes:** The city requests county rural comprehensive plan modifications to match their adopted 2030 population forecast of 17,200. The city supports an AAGR of 2% for the 2000 to 2030 period, making the forecast 17,200, as opposed to an AAGR of 3% for 2000 to 2025. Florence's request is *consistent* with PSU forecast. Florence recently improved their accounting of mobile homes and of group quarters facilities located within the city limits and is reflected in its population estimate for 2008; in addition the 2008 population estimate includes data that covers the population/housing change for the year before that was not previously reported (the relatively large increase in the certified 2008 population estimates from 2007 is greatly attributed to better accounting and because 2008 includes data representing 2 years growth).					
Junction City						
		*363 HU (6 subdiv, most SFR)– final approval for development in 2006; of those 293 still avail for development; *295 lot (mixed detached & attached; preliminary approval; is phased planned unit dev; *expects to receive	*Prison will house 1,800-2,000 ppl; const 2 phases with completion in 2012 (550 inmates) and 2014 (1,260 inmates); *State Hosp capacity =360 ppl; completion is 2015.	500 + 1,300 workers expected to be employed by prison and state hospital; Grain milling facility - ~100 family wage jobs; company just purchased 100 acres, no application for land improvement yet; recently annexed 80 acres	Expansion of water and sewer facilities and utility lines due to construction of prison and state hosp.	**Promos:** incr. jobs; expansion & improvement of water and sewer facilities; **Notes**: expects growth to be higher than adopted forecast; city is 1 of 3 sites being considered for location of bio-energy park (break ground in 6-09).

Population Composition	Housing	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population Growth; Other notes
Junction City, con't.		proposal for 307 MFR dev.		zoned industrial and trying to have site certified as 'shovel-ready' soon (Feb. 2009).		
Document information – **Junction City**	Included in PAPA. Junction City proposes a higher 2030 population (10,268) than the adopted forecast (9,800). Reasons for the expected growth are explained below: A proposed prison facility and mental hospital were not considered in the population forecasts. The prison and hospital are to be constructed in 2015 and will employ about 1,800 persons. A local business has also purchased 100 adjacent acres for 100 family wage jobs.					
Lowell						
New housing stock in last 4 years occupied by 2 types: *high-income empty nesters and *young families, young children.	2 types being built: *upscale SFR, and *affordable SFR and duplexes; *almost 10-yr building moratorium lifted in 2003; moratorium due to inadequate infrastructure; pursuing mixed use downtown (urban renewal)					**Promos:** high occupancy rates, waiting list for their only MFR structure; duplexes recently rented quickly after construction finished; **Hinders:** hsg growth restricted by current adopted pop growth of 2.2% AAGR. **Notes:** *very pro-growth; *support forecasts in Region 2050;
Document information – **Lowell**	Included in PAPA. The improvements that increase development potential are described below: 1. Water System Infrastructure: A new water system master plan was created in 1998 that more than doubled the water supply by 2001. The plan was again updated in 2006, and water system capacity was based on projected 3.3% growth. The water treatment capacity that doubled in 2001 is expected to double once more during the 2009-2010 phase and even more with a planned second phase for a later date. 2. Sewer System: A second phase of wastewater facility improvements is planned for 2010-2011, which will accommodate higher growth rates. Since new development must be connected to a sewer lines and sewers were at capacity, previous moratoria on development were only lifted in 2003.					

Population Composition	Housing	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population Growth; Other notes
Lowell, con't.	3. Restrictive changes: Lowell understated its development in 2003. Expected increases in land divisions and building permits. 4. Long range planning: Revised comprehensive plan to establish need and desire for more growth altered many development policies and goals. Lowell also rewrote their land development code to be more developer-friendly. A plan for a mixed-use downtown to accommodate more retail, business, and multi-family housing as well as urban renewal planning demonstrate new efforts and potential for attracting new development that will increase growth rates. • There is potential for growth and since the city is very pro-growth, I think it can be increased from recent rates – but not much more. • LCOG's forecast (adopted in 2005) which predicts 2.2% AAGR throughout the forecast period. Opponents to the proposal of high growth think 1,700 persons by 2030 (about 12 new homes per year) is reasonable (we have 1,587 in 2035). I was thinking 17-22 new homes per year would be reasonable (the city proposes 37!). • Improvements to Water infrastructure and sewer system (water supply doubled by 2001 and 2nd phase of sewer system compl in 2010-2011; *growth rates increased; further improvements will support continuation of the higher growth rates seen in past 4-5 yrs after some improvements made to water systems – not increase them further necessarily – need study.* • Johnson Gardner study: PRC agrees with finding that improved infrastructure and pro-growth policies will increase pop growth rates higher than exp in past. However, assumes that growth will be of same magnitude as seen in Veneta and Creswell. (*rsp: we have not conducted a comparison study, or developed a similarity index; study the timing and size of infrastructural improvements, growth policies and timing of adoption, timing of building moratoria, travel time to work, cities amenities, etc and relate it all to magnitude of pop growth and timing of pop growth.)* • In their infrastructure analysis: City is basing their 4+% AAGR on the 2006 growth rate (only 1 year). • Region 2050 and land capacity model: produces results from a vision (rsp:a chosen scenario that city would like to see occur: goal)has targeted population and employment rather than forecast population by choosing parameters or characteristics the city wants to have (amt of empl growth, amt of hsg dev; education chosen as major driver for growth in Lowell); doc says model provides est of amt of development that can be accommodated by buildable lands inventory(housing and commercial/industrial accommodation); calculates development capacity and checks if land is sufficient to accommodate target employment and residential land use; correlates population growth to residential development; land capacity analysis model and is used by cities for buildable lands analyses (rsp: not sure how come up with target population – what is input besides land capacity?). *(rsp: didn't all studies abandon Region 2050 except Lowell?)* • Winterbrook report pop "proj for lane county and it cities": study provides rationale/defense of high growth rates which we all agree will be higher than historic rates; but doesn't indicate how high the rates will increase or at what magnitude they will increase. • EcoNW: supports 2.2% or lower; says no evidence of higher growth; says costly to upgrade water capacity and Lowell has little funds. • Urban renewal plan drafted and adopted in around 2005; est 20 yrs to complete (revitalize downtown and dev mixed-use, improve infrastructure, attact business and residents; make more accessible (to lake and Lowell state park). NOT FINAL.					

Population Composition	Housing	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population Growth; Other notes
Lowell, con't.	• Lowell Committee Meeting Report, 2005: In general it encourages pop, hsg, economic, transp growth while preserving community identies and natural resources and the environ. • They want to Promote growth to keep school open (one of many big reasons); part of pilot educational program. ➢ Final adj: 3.3% AAGR 2010-2035; 4 yr. wtd ave (2004-05, 2005-06, 2006-07, and 2007-08 growth rates) – growth wouldn't have peaked in 2006-07 if growth attributed only to pent up demand after bldg moratorium lifted in 2003; also most cities in Oregon saw a decrease in housing growth from 2007-08. ➢ Final adjustments: no justification to assume even higher growth rates - policy changes, expansion and improvements to infrastructure and other pro-growth efforts warrant keeping the rates high as seen in the past few years; visionary information is not enough to increase rates even further; assuming an average of rates seen after bldg moratoria lifted is more reasonable than assuming the rate seen only in one recent year, especially since an ave ann rate that high (4.1%) hasn't been seen in previous decades. Comparing to growth in Creswell or Veneta, Creswell had experienced consistently high rates in the past and Veneta had seen them during the 1970s when the AAGR was 5.9%, and rates after building moratoria have not surpassed that rate of growth.					
Oakridge						
	Accounted for 300 home sites are under construction (3 subdivisions); should be completed within 5 years.					**Manufacturing firms are "committed" to locating to Oakridge – will boost pop growth.**
Document information - **Oakridge**	Included in PAPA The city expects higher growth rates because: 1. There are about 300 home sites under construction in two major and one minor subdivision, which should be built within five years. 2. Additional jobs are expected given the various manufacturing firms committed to moving to Oakridge.					

Population Composition	Housing	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population Growth; Other notes
	In contrast, Oakridge believes the 2050 plan overstated the population increase, which shows an overly ambitious 2045 population of 13,000. There are hindrances related to their growth given the proximity to Willamette National Forest.					
Springfield						
Hispanic population increasing; PPH increase is partly offset by aging population.			Increase in GQ: homeless shelters and for seniors.		Has funding for growth and expansion of infrastructure.	**Notes:** Migration rate slightly higher than Lane County and Eugene. Wants safe harbor forecast. See Appendix 6.
Veneta						
Increased school enrollments and of Hispanic pop; more young families.		3 active developments: 25 HU-affordable SFR/2010; 24 HU – SFR/2012; 530 HU- SFR and MFR/2017; *abt. to open: 20-25 HU –affordable senior MFR; building moratorium	none	Recently completed new business park	Has schedule for improvements	**Promos:** *is a regional commercial hub (Fern Ridge area); *reaching a population density that will support add'l commercial development w/in city. **Notes:** doesn't think lack of adequate infrastructure is presenting a barrier to growth (based on water/sewer master plan's 9-10K pop. forecast for 2030). Resident submitted letter that states that there was a building moratorium in the past, there is a lack of water to sustain growth, the city has a high tax rate, the commuter hwy. to Eugene is deadly, and there are geologic hindrances.
Document information for **Veneta**	Included in PAPA. Veneta has been reluctant to accept the COG population projections given their past infrastructural investments and significant remaining capacity within their limits. The city has, as a result, had to delay essential planning activities. Veneta is requesting a 2030 population forecast of 9,000. Veneta points to the imprecision of forecasting as indicative of potential inaccuracies. The 5 year trend projects Veneta's population at over 11,000 and a 15 year trend at just over 7,000, making the average forecast approximately 9,000. The city requires a higher projection to make the necessary infrastructural investments to accommodate future growth that is expected by Veneta to come. Issues to consider in Veneta: 1. Analysis shows enough land within the city/UGB for an additional 2,000 residential units, creating a population of over 10,000 even at					

Population Composition	Housing	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population Growth; Other notes
Veneta, con't.	current densities. Lack of available land in Eugene is expected to translate to greater development in surrounding communities like Veneta (Request for County Adoption-Veneta, pp. 9-10). 2. Private developers have made significant investments in Veneta that rely on expected growth for returns on investment. 3. Building moratoria in early 2000s. Currently updating water and sewer master plans based on pop of 9-10K pop; detailed improvement plans and schedules for adequate infrastructure to support that population, and zoning to accommodate more. Used wtd average and took into account building moratorium; approaching close to capacity of buildable land toward end of forecast period; and growth will peak, then will decline toward end of forecast period.					
Westfir						
		Talk and potential of developing a former mill site, but housing development may not actually occur.				**Notes:** Big growth from 2000-2010 due to correction to their 2000 Census data: accepted by PRC and incorporated into PRC population estimates.
Non-UGB Unincorporated AreaArea						
Substantial declines in average number of persons per household due to aging population and only modest housing/population increases.	Of housing permits, roughly half the housing units are replacement units/demolished units.	Assumptions to accommodate Measure 49: *250 applications with an average of 3 hsg units per application = 750 SFRs; *65% of the housing units would be built by 2035 (about 490				**Notes:** As UGBs expand, unincorporated area shrinks.

Population Composition	Housing	Planned Housing Development/Est. Year Completion	Future Group Quarters Facilities	Future Employers	Infrastructure	Promotions (Promos) and Hindrances (Hinders) to Population Growth; Other notes
Non-UGB Unincorporated Area, con't.		units) with construction starting off slow, peaking, then slowing again in 2035. Of those units, just over 1,000 persons were added to the unincorporated area; overall, the affect on the forecasts is not all that great.				

APPENDIX 5

Supporting Data and Forecast Summary Tables

Supporting Data and Forecast Summary Tables

These tables hold a summary of supporting data that were used to develop the population forecasts. They include recent historic data (including populations) that are known or were estimated. The data are grouped by geographic area. There is a table for Lane County and one for each of its city areas, the non-UGB unincorporated area, and the Eugene-Springfield UGB.

Population and housing data and rates for 1990 and 2000 are from decennial censuses;
1990-2005 birth data and 2000-2008 enrollment data are from administrative records;
All numbers for years 2010-2030 are predicted, with the exception of cases in which known 2008 data is placed in 2010 cells.

Abbreviated column headings key:
Pop = population; **#Ave Ann Pop Growth** = number average annual population growth; **%Ave Ann Pop Growth** = percent average annual population growth; **%Pop 65+** = percentage population ages 65 and over; **% Pop Hispanic** = percentage population that are Hispanic; **Hseholds** = households; **Hsg Units** = housing units; **Occpncy** = occupancy; **PPH** = average persons per household; **GQ pop** = group quarters population; **Schl Enrl** = school enrollment.

Lane Co.	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	282,912			13.1%	2.4%	110,799	116,676			95.0%	2.49	7,489	3,876	
2000	322,977	4,007	1.32%	13.3%	4.6%	130,453	138,954	2,228	1.75%	93.9%	2.42	7,418	3,703	48,524
2010	349,505	2,653	0.79%	14.4%	5.9%	143,043	153,090	1,414	0.97%	93.4%	2.37	10,704	3,661	46,686
2015	366,830	3,465	0.97%	17.1%		152,475	163,332	2,048	1.30%	93.4%	2.32	12,664		
2020	384,930	3,620	0.96%	20.1%		162,052	173,734	2,080	1.23%	93.3%	2.29	13,284		
2025	403,178	3,650	0.93%	22.3%		171,558	184,106	2,074	1.16%	93.2%	2.27	13,868		
2030	420,481	3,461	0.84%	23.4%		180,696	194,081	1,995	1.06%	93.1%	2.25	14,653		
2035	435,615	3,027	0.71%	23.8%		188,617	202,764	1,737	0.88%	93.0%	2.23	15,470		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Demographic data for 2008 placed in '2010' cell. Birth data in the 2010 cell represents the approximated annual birth average for 2005-2007.

Coburg	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	763			18.7%	2.4%	293	305			96.1%	2.41	57	9	18,502
2000	969	21	2.39%	10.3%	3.0%	367	387	8	2.38%	94.8%	2.64	0	8	17,825
2010	1,092	12	1.19%			409	434	5	1.15%	94.3%	2.67	0	9	
2015	1,293	40	3.38%			487	517	17	3.50%	94.3%	2.63	13		
2020	1,567	55	3.85%			594	630	23	3.95%	94.3%	2.59	27		
2025	1,914	69	4.00%			726	770	28	4.01%	94.3%	2.60	30		
2030	2,322	82	3.87%			881	934	33	3.86%	94.3%	2.60	33		
2035	2,659	67	2.71%			1,015	1,077	29	2.85%	94.3%	2.58	35		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell; Coburg is located within the relatively large Eugene School District.

* Birth data estimates for 2005 are placed in '2010' cell.

Cottage Grove	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	7,772			16.0%	2.0%	2,942	3,071			95.8%	2.61	106	151	
2000	8,867	110	1.32%	16.0%	4.9%	3,427	3,602	53	1.59%	95.2%	2.54	152	116	3,008
2010	9,957	109	1.16%			3,832	4,033	43	1.13%	95.0%	2.51	322	119	2,853
2015	10,616	132	1.28%			4,138	4,357	65	1.54%	95.0%	2.49	333		
2020	11,424	162	1.47%			4,501	4,742	77	1.69%	94.9%	2.46	348		
2025	12,261	168	1.42%			4,855	5,120	76	1.53%	94.8%	2.45	384		
2030	12,856	119	0.95%			5,113	5,397	55	1.06%	94.7%	2.43	413		
2035	13,542	137	1.04%			5,411	5,720	64	1.16%	94.6%	2.42	438		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in '2010' cell.

Creswell	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	2,616			13.6%	4.5%	953	1,004			95.0%	2.68	59	64	
2000	3,851	124	3.87%	11.0%	7.0%	1,368	1,445	44	3.64%	94.6%	2.77	58	50	1,230
2010	5,647	180	3.83%			1,997	2,133	69	3.89%	93.6%	2.80	57	68	1,268
2015	6,802	231	3.72%			2,423	2,584	90	3.84%	93.8%	2.78	66		
2020	8,263	292	3.89%			2,958	3,150	113	3.97%	93.9%	2.77	77		
2025	9,758	299	3.33%			3,556	3,791	128	3.70%	93.8%	2.72	92		
2030	11,060	260	2.50%			4,084	4,358	113	2.79%	93.7%	2.68	106		
2035	12,172	222	1.92%			4,526	4,834	95	2.08%	93.6%	2.66	114		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in ‘2010’ cell.

Dunes City	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	1,081			24.4%	0.8%	466	559			83.4%	2.30	7	8	
2000	1,241	16	1.38%	27.3%	1.2%	558	705	15	2.32%	79.1%	2.22	0	6	1,698
2010	1,457	22	1.60%			705	890	19	2.33%	79.2%	2.07	0	8	1,367
2015	1,542	17	1.13%			751	947	11	1.24%	79.3%	2.05	0		
2020	1,640	20	1.23%			803	1,011	13	1.31%	79.4%	2.04	0		
2025	1,726	17	1.02%			845	1,064	11	1.02%	79.4%	2.03	8		
2030	1,777	10	0.58%			871	1,096	6	0.59%	79.5%	2.02	16		
2035	1,823	9	0.51%			898	1,130	7	0.61%	79.5%	2.01	18		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in ‘2010’ cell.

Eugene	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	112,669			12.7%	2.7%	46,274	47,991			96.4%	2.30	6,267	1,481	
2000	137,893	2,522	2.02%	12.1%	5.0%	58,110	61,444	1,345	2.47%	94.6%	2.27	6,086	1,554	23,588
2010	156,844	1,895	1.29%	12.1%	6.5%	65,448	69,676	823	1.26%	93.9%	2.26	8,794	1,417	23,843
2015	166,609	1,953	1.21%	14.5%		71,164	75,790	1,223	1.68%	93.9%	2.22	8,858		
2020	176,124	1,903	1.11%	17.3%		75,923	81,244	1,091	1.39%	93.5%	2.20	9,151		
2025	185,422	1,860	1.03%	19.0%		81,227	86,956	1,142	1.36%	93.4%	2.17	9,510		
2030	194,314	1,778	0.94%	20.2%		85,810	92,026	1,014	1.13%	93.2%	2.15	10,083		
2035	202,565	1,650	0.83%	20.8%		89,053	95,629	721	0.77%	93.1%	2.15	10,722		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in ‘2010’ cell.

Florence	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	6,143			29.4%	2.5%	2,736	3,262			83.9%	2.22	73	74	
2000	8,643	250	3.41%	38.3%	2.4%	4,241	4,967	171	4.21%	85.4%	2.02	56	61	1,698
2010	11,212	257	2.60%			5,648	6,562	159	2.78%	86.1%	1.93	295	67	1,367
2015	12,355	229	1.94%			6,287	7,292	146	2.11%	86.2%	1.91	324		
2020	13,747	278	2.14%			7,053	8,170	176	2.27%	86.3%	1.90	363		
2025	15,035	258	1.79%			7,716	8,936	153	1.79%	86.3%	1.89	425		
2030	16,323	257	1.64%			8,379	9,703	153	1.65%	86.4%	1.89	491		
2035	17,434	222	1.32%			8,992	10,415	142	1.42%	86.3%	1.88	531		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in ‘2010’ cell.

Junction City	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	4,257			18.8%	2.0%	1,714	1,756			97.6%	2.43	96	82	
2000	5,476	122	2.52%	14.9%	8.3%	2,115	2,228	47	2.38%	94.9%	2.52	137	80	2,038
2010	6,567	109	1.82%			2,535	2,686	46	1.87%	94.4%	2.54	125	72	1,682
2015	9,343	555	7.05%			2,913	3,083	79	2.76%	94.5%	2.54	1,939		
2020	10,799	291	2.90%			3,418	3,612	106	3.17%	94.6%	2.53	2,157		
2025	12,067	254	2.22%			3,845	4,065	91	2.37%	94.6%	2.57	2,183		
2030	13,136	214	1.70%			4,272	4,518	91	2.11%	94.5%	2.56	2,205		
2035	13,887	150	1.11%			4,591	4,860	68	1.46%	94.5%	2.54	2,222		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in ‘2010’ cell.

Lowell	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	785			8.3%	3.3%	271	288			94.1%	2.90	0	9	
2000	880	10	1.14%	8.2%	4.6%	315	349	6	1.92%	90.3%	2.79	0	8	424
2010	1,043	16	1.70%			403	430	8	2.09%	93.8%	2.59	0	9	285
2015	1,228	37	3.26%			481	512	16	3.49%	94.0%	2.55	0		
2020	1,459	46	3.45%			577	613	20	3.60%	94.1%	2.53	0		
2025	1,714	51	3.22%			678	720	21	3.22%	94.1%	2.53	0		
2030	2,022	62	3.30%			800	850	26	3.32%	94.1%	2.53	0		
2035	2,345	65	2.96%			933	992	28	3.09%	94.1%	2.51	0		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in ‘2010’ cell.

Oakridge	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	3,140			17.6%	4.6%	1,281	1,405			91.2%	2.45	3	51	
2000	3,251	11	0.35%	20.2%	5.0%	1,389	1,575	17	1.14%	88.2%	2.34	0	23	896
2010	3,859	61	1.71%			1,650	1,850	27	1.60%	89.2%	2.33	12	30	602
2015	4,290	86	2.12%			1,836	2,056	41	2.11%	89.3%	2.33	13		
2020	4,672	76	1.71%			2,001	2,237	36	1.69%	89.5%	2.33	13		
2025	4,866	39	0.82%			2,086	2,331	19	0.83%	89.5%	2.33	14		
2030	5,061	39	0.78%			2,170	2,426	19	0.79%	89.5%	2.32	15		
2035	5,280	44	0.85%			2,264	2,530	21	0.84%	89.5%	2.33	16		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in ‘2010’ cell.

Springfield	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	44,683			10.8%	2.9%	17,447	18,121			96.3%	2.54	345	906	
2000	52,864	818	1.68%	10.3%	6.9%	20,514	21,500	338	1.71%	95.4%	2.55	635	856	11,062
2010	58,891	603	1.08%	10.2%		22,917	24,094	259	1.14%	95.1%	2.54	726	831	11,122
2015	62,276	677	1.12%	12.0%		24,484	25,708	323	1.30%	95.2%	2.51	758		
2020	66,577	860	1.34%	14.3%		26,304	27,685	396	1.48%	95.0%	2.50	784		
2025	70,691	823	1.20%	16.7%		28,151	29,582	379	1.33%	95.2%	2.48	848		
2030	74,814	825	1.13%	18.5%		30,216	31,809	445	1.45%	95.0%	2.45	911		
2035	78,413	720	0.94%	19.6%		31,953	33,750	388	1.18%	94.7%	2.42	986		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in ‘2010’ cell.

Veneta	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	2,519			10.6%	2.0%	904	932			97.0%	2.79	0	57	
2000	2,762	24	0.92%	7.5%	4.2%	966	1,020	9	0.90%	94.7%	2.86	0	43	1,924
2010	4,976	221	5.89%			1,702	1,772	75	5.52%	96.0%	2.90	37	51	1,601
2015	5,902	185	3.41%			2,053	2,140	74	3.77%	95.9%	2.85	41		
2020	7,251	270	4.12%			2,552	2,662	104	4.37%	95.8%	2.82	45		
2025	8,727	295	3.70%			3,116	3,255	119	4.02%	95.7%	2.78	53		
2030	9,847	224	2.41%			3,558	3,720	93	2.67%	95.7%	2.75	60		
2035	10,505	132	1.30%			3,834	4,018	60	1.54%	95.4%	2.72	65		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in '2010' cell.

Westfir	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	291			15.1%	2.5%	103	112			91.6%	2.84	0	4	
2000	293	0	0.07%	13.4%	1.1%	105	113	0	0.09%	92.6%	2.80	0	4	896
2010	359	7	2.01%			124	130	2	1.36%	95.3%	2.90	0	5	602
2015	370	2	0.64%			132	137	1	1.09%	96.3%	2.81	0		
2020	384	3	0.74%			137	142	1	0.76%	96.4%	2.80	0		
2025	412	6	1.40%			147	151	2	1.27%	97.3%	2.80	0		
2030	426	3	0.67%			153	157	1	0.69%	97.4%	2.79	0		
2035	448	4	1.01%			160	164	1	0.91%	97.4%	2.80	0		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in '2010' cell.

Uninc. (out of UGBs)	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	63,018					21,804	23,749			91.8%	2.87	477	645	
2000	64,479	146	0.23%			24,335	26,280	253	1.01%	92.6%	2.64	294	551	2,656
2010	58,531	-595	-0.97%			23,607	25,565	-71	-0.28%	92.3%	2.47	336	502	2,063
2015	55,900	-526	-0.92%			23,338	25,285	-56	-0.22%	92.3%	2.38	319		
2020	54,344	-311	-0.56%			24,227	26,237	191	0.74%	92.3%	2.23	319		
2025	52,861	-297	-0.55%			24,275	26,296	12	0.04%	92.3%	2.16	321		
2030	52,261	-120	-0.23%			24,663	26,707	82	0.31%	92.3%	2.11	320		
2035	51,634	-125	-0.24%			24,584	26,607	-20	-0.08%	92.4%	2.09	323		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in ‘2010’ cell.

E-S UGB	Pop	# Ave Ann Pop Growth	% Ave Ann Pop Growth	% Pop 65+	% Pop Hispanic	Hseholds	Hsg Units	# Ave Ann Hsg Growth	% Ave Ann Hsg Growth	Occpncy Rate	PPH	GQ pop	Births	Schl Enrl*
1990	190,527					77,331	80,233			96.4%	2.38	6,611	3,032	
2000	222,264	3,174	1.54%			91,268	96,283	1,605	1.82%	94.8%	2.36	6,721	2,753	29,518
2010	244,806	2,254	0.97%			100,428	106,607	1,032	1.02%	94.2%	2.34	9,520	2,561	28,663
2015	257,191	2,477	0.99%			107,636	114,425	1,564	1.42%	94.1%	2.30	9,616		
2020	269,380	2,438	0.93%			113,231	120,528	1,221	1.04%	93.9%	2.29	9,935		
2025	281,836	2,491	0.90%			119,711	127,606	1,416	1.14%	93.8%	2.27	10,358		
2030	293,391	2,311	0.80%			125,753	134,216	1,322	1.01%	93.7%	2.25	10,994		
2035	303,887	2,099	0.70%			131,409	140,417	1,240	0.90%	93.6%	2.22	11,708		

*Total public school enrolled in school district(s) in which area is located; 2008 enrollment number is placed in '2010' cell.

* Birth data estimates for 2005 are placed in ‘2010’ cell.

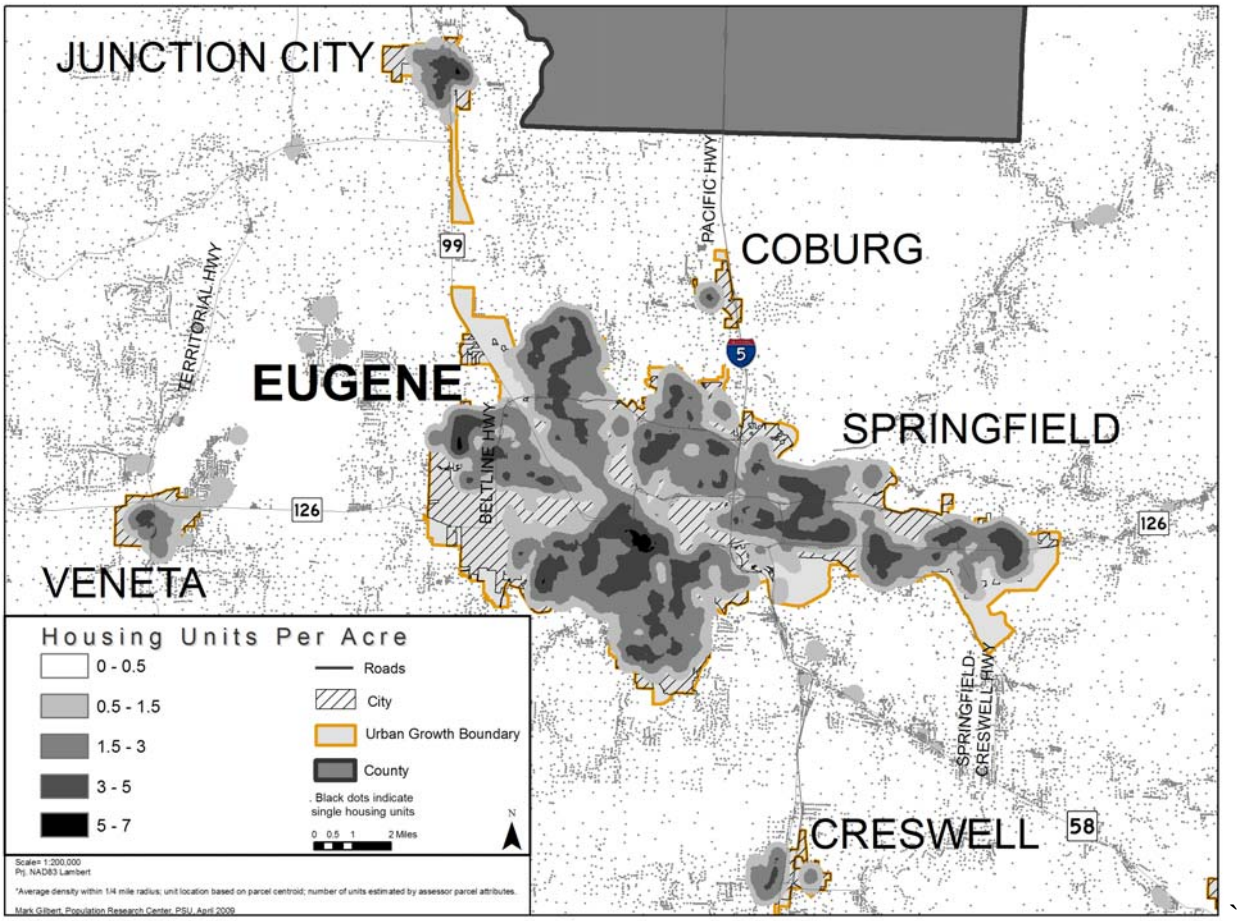
APPENDIX 6

Maps of Housing Unit Density in Lane County and its Sub-areas

Housing Density Maps (2008)
Lane County Cities & Urban Growth Boundary Areas

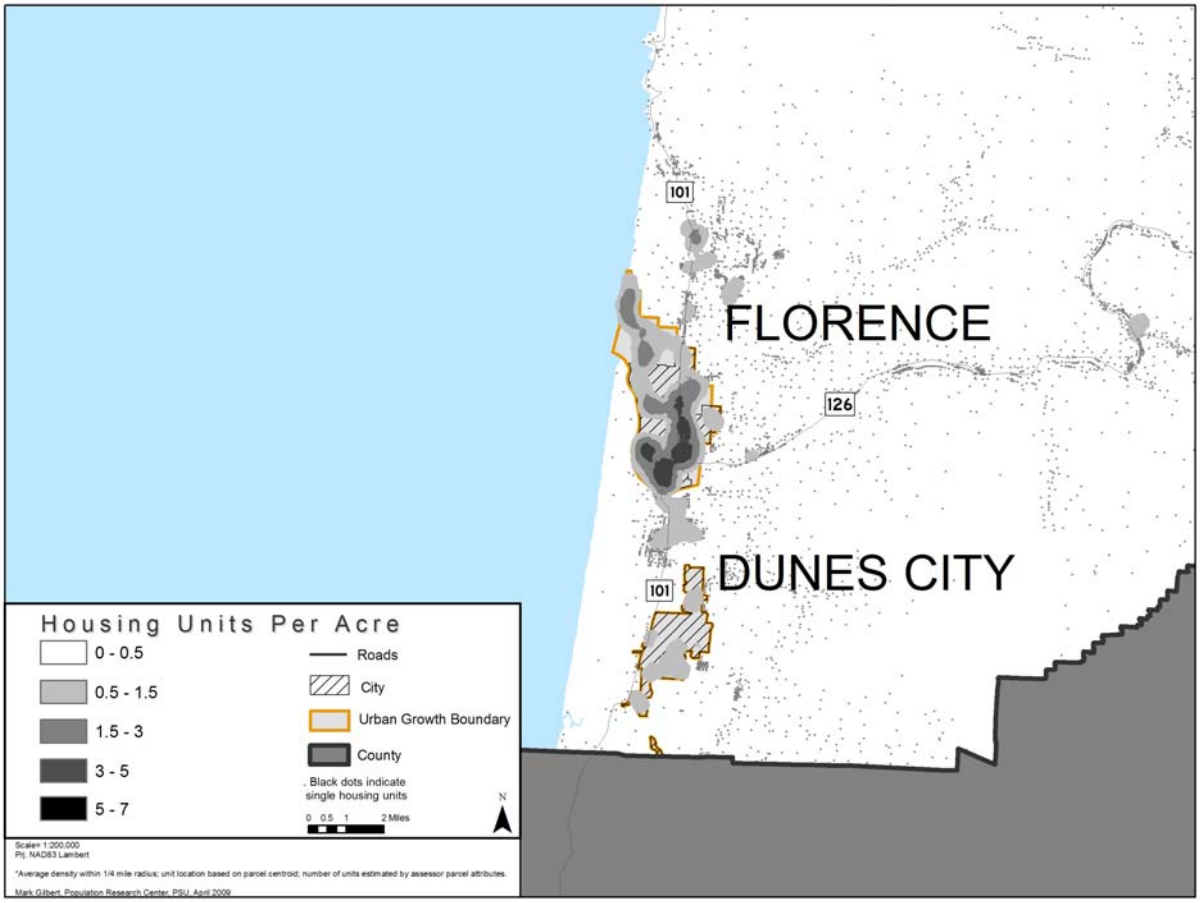
The following maps show the density distribution of existing housing in and around the cities of Lane County. The first map, at a larger scale than the others, depicts the populous Eugene-Springfield area. The subsequent maps each illustrate densities in smaller communities. Urban Growth Boundaries (brown lines) are graphically drawn beneath city boundaries (hatched black lines), and the urban growth areas are filled-in light gray. The density layer, which shows housing density in units per acre, has been graphically drawn on top of the urban growth area layer. Locations with the lightest densities (locations where densities are less than 0.5 units per acre, on average) have no color and are see-through. Legends use the same classes and shades from map to map. Classes are separated by break values. The first class is 0 to 0.5 units per acre (no color, see-through), the second class is 0.5 to 1.5 units per acre (light gray), the third class is 1.5 to 3 units per acre (medium gray), and so on. Individual housing units in rural locations outside the urban areas are represented with black dots.

Eugene-Springfield and surrounding cities



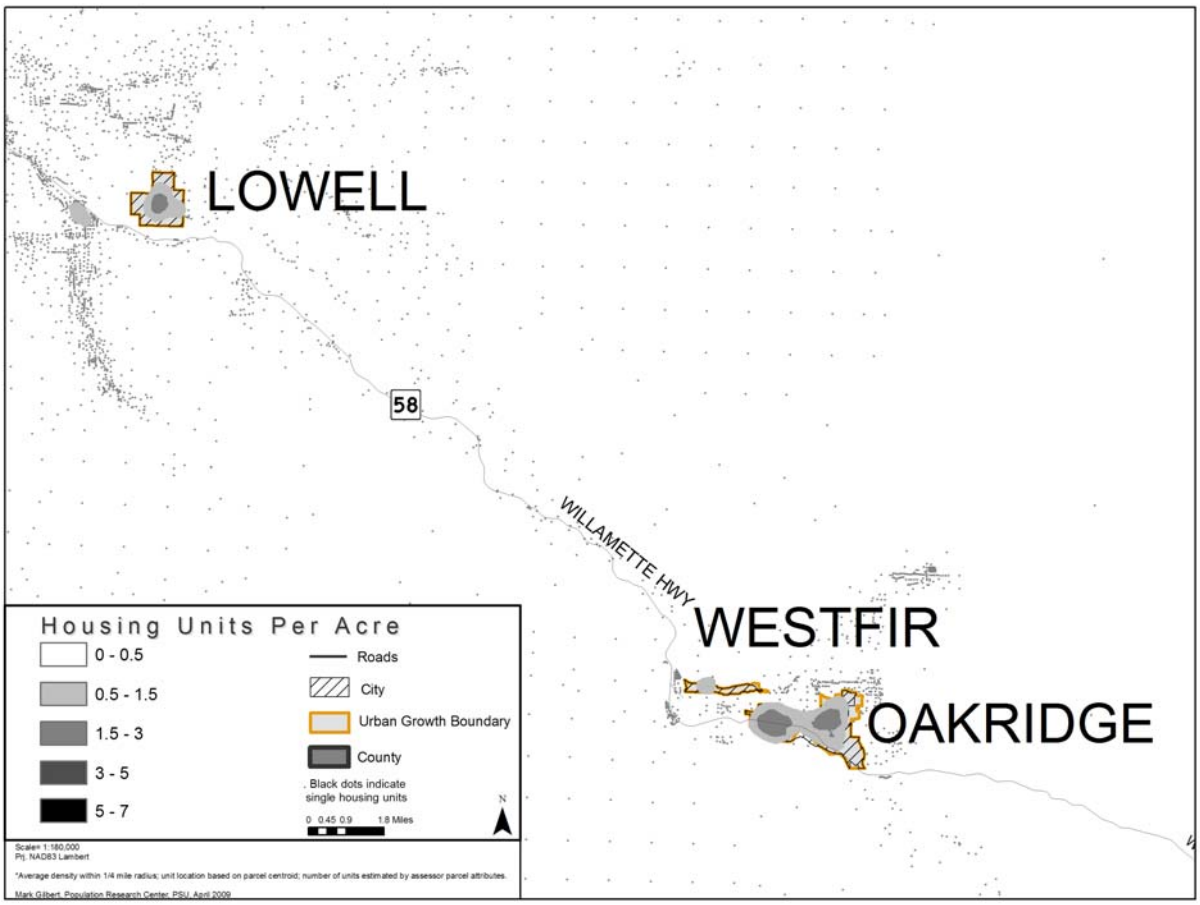
The densest locations in the area range from 5 to 7 units per acre on average (black). Territory within the city and inside the UGB remains undeveloped and/or non-residential (white or very light gray).Most of urban density occurs within the Eugene UGB in downtown Eugene as well as to the North, with significant population in Springfield as well. Junction City has central density as high as 3 to 5 housing units per acre as well.

Coastal Cities



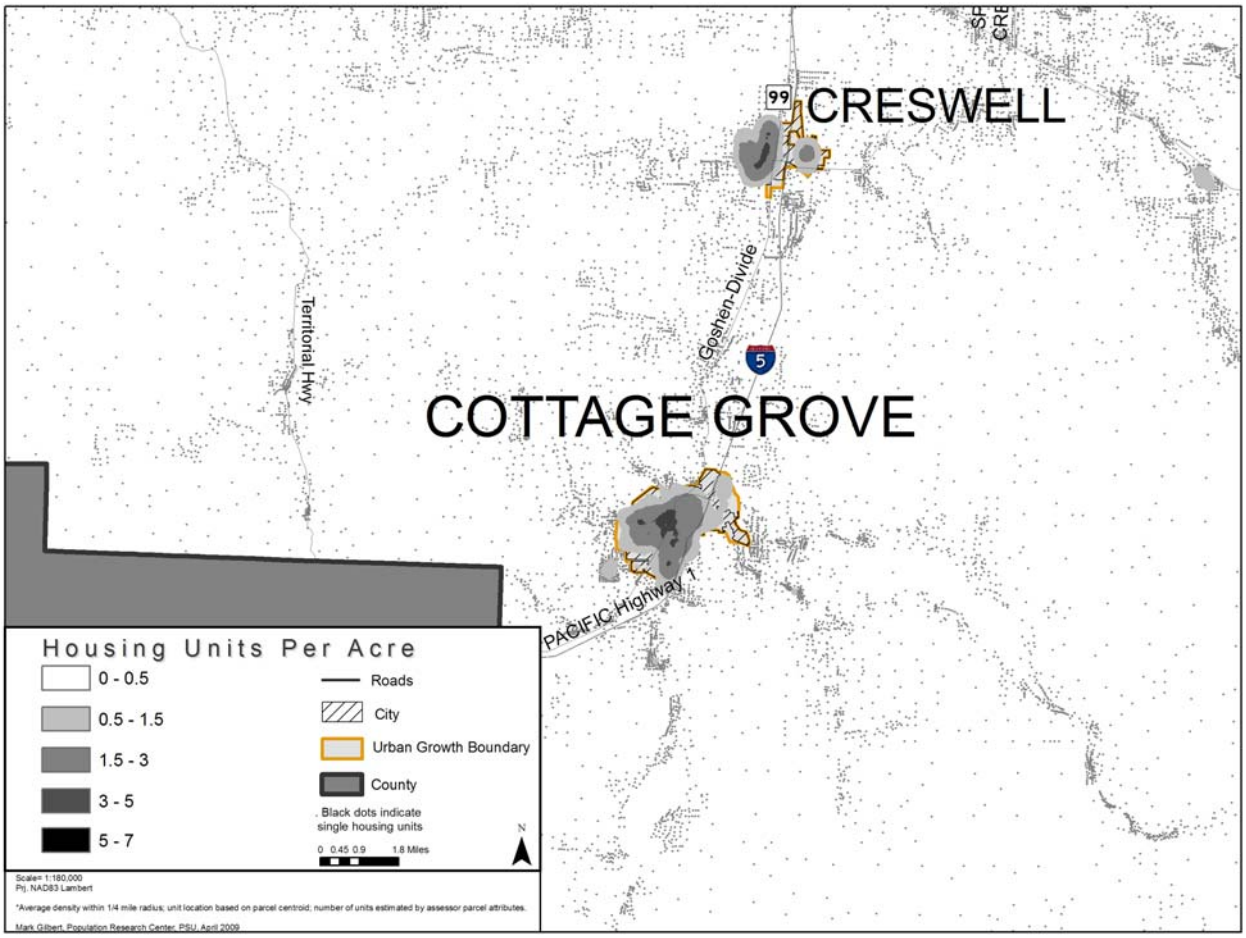
Florence and Dunes City are on the coast, at the west end of Lane County. The densest category on the coast is 3-5 housing units per acre, located in downtown Florence. Both cities have a substantial amount of undeveloped land within their city and UGB limits.

Lowell, Oakridge, and Westfir



Lowell, Oakridge, and Westfir are small communities with low densities. The highest density in this area is in central Lowell, which has between 1.5 and 3 housing units per acre.

Cottage Grove and Creswell



Cottage Grove has housing densities up to 3 to 5 units per acre near the center of the city. Creswell has a small area of similar housing densities in its western area.

APPENDIX 7

Data Sources and Description

Data Sources and Description

This population forecast report is based on data obtained from several sources. Much of the data were aggregated to the County or city level of geography by PRC staff. The data sources include:

- Decennial Census. The decennial census is the only source of data collected for small areas across the nation. We used 1990 and 2000 census data to obtain the population, by age and sex, residing in the County, its cities, and unincorporated area. We compared the changes from 1990 to 2000 to develop an initial estimate of the age-sex profile for net migrants in the cohort-component models. Female population ages 15-44 were used with birth data to calculate fertility rates. In addition, data for population by race/ethnicity, and housing were obtained from the two censuses.

- American Community Survey. This are data from a U.S. Census Bureau survey that are available for area with population of 20,000 or more. The American Community Survey asks the same or similar questions as the 1990 and 2000 censuses. We used the 1990 and 2000 Censuses and 2005-2007 American Community Survey data to develop estimates of housing and population change, including estimates of net migration for Lane County.

- Annual Population Estimates. Annual population estimates for cities and counties of Oregon are prepared by the Population Research Center at Portland State University as part of its Population Estimates Program. Data on State income tax returns, births, deaths, Medicare and school enrollment, and information about changes in housing stock and group quarters population are utilized in developing the population estimates. We used population estimates of Lane County and its cities and unincorporated area from 2000 to 2008 in this study to help to approximate growth trends throughout the County.

- Group Quarters and Annexation Data. Data for the population residing in group quarters facilities and for the numbers of persons living on properties annexed into

cities from the County post-2000 were available from PRC's Population Estimates Program. The most recent data used are from 2008.

- Area Boundary Files. Lane Council of Governments and the Oregon Geospatial Enterprise provided the boundary files for cities and UGBs within our study area. The boundaries are those that were current in 2008. These files are used for mapping and for aggregating demographic and other data unique to each city and other geographic parts in our study area.

- Building Permit Data. Building permit data were obtained from two different sources: PRC's Population Estimates Program annual questionnaires, U.S. Census Bureau Residential Construction Division. Building permit data were used, along with taxlot data, to estimate the number of housing units constructed after the 2000 Census and create a current housing inventory for each geographic part in our study area.

- Land Use Data. Taxlot data were from Lane Council of Governments GIS Division and the city of Springfield. Zoning data are from Lane Council of Governments' GIS Division. Taxlot data were used to create current housing unit inventories for the geographic parts in our study area. Taxlot and zoning data were both used to identify housing units and to obtain an overall assessment of the availability of buildable lands.

- Birth and Death Data. Information on births and deaths reported for the Lane County area were obtained from the Oregon Center for Health Statistics for years 1990 to 2005 or 2007. The data were used for two purposes. One use was for calculating overall fertility and mortality rates for the County. These rates were used in the demographic models. The second use was to note the number of births in order to examine birth trends and the correspondence between births and population change.

- School Enrollment Data. These data were obtained from the Oregon Department of Education for school districts in Lane County for years 1997-2008. Changes in the levels of school enrollment suggest changes in population and households, such as increasing or decreasing net migration or average household size.

- Local Employment Dynamics Data. These data for 2002-2004 provide background information about commuting patterns of workers. The percentage of workers that reside in Lane County and have jobs in the County was evaluated. Where within the County these workers have jobs was also identified. An area's availability of employment or draw of workers, influences population and housing changes. These data were evaluated to detect changes in commuting patterns.

- Oregon Labor Force Data and Employment Projections. Labor force data from the Oregon Employment Department for 2000-2008 were evaluated to determine trends and their relation to population change. The employment projections, also from the Employment Department, were available for the economic region in which Lane County is located (Region 5) are available for 2006 to 2016. We then related and compared our population projections to the employment projections. We developed a simple economic model to forecast countywide net migration based on the projected demand for additional workers in the employment projections. The projected net migration was compared to the net migration forecasted in our model.

- Regional Economic Profiles and Reports. Background and current economic information for Lane County and Economic Region 5 were obtained from the Oregon Employment Department. The information was used to provide us with an understanding of historical and recent economic trends and the general economic climate in our study area. Ultimately, the information enabled us to make more rational assumptions when developing Lane County's future population.

- Other Background Information. Lane County Rural Comprehensive Plan (versions dated during 1998-2005), amendments to the Comprehensive Plan, Eugene-Springfield Metro Plan (2004), Comprehensive Plans for the Cities of Coburg (2005), Cottage Grove (2004), Junction City (2002), Lowell (2005), Veneta (diagram, 2006), Population Forecasts prepared (LCOG: 2004 and 2007) and Region 2050 - Regional Growth Management Strategy (2006), Lane County Transportation System Plan (2004), and other planning reports and documents were examined to obtain background

information. Additional information that city officials and staff thought might have bearing on the population forecasts were collected from most cities in Lane County.

APPENDIX 8

Additional Information:
Responses to Inquiries
from the Cities of Eugene, Springfield, and Lowell

PSU responses to Springfield questions and comments received via email from Lane County 3/2/09

1. We need to see the information, the data, the methodology and the assumptions PSU used to arrive at the published numbers.
Do these figures represent trends that have occurred since the last projections were prepared by OEA?
-- PSU: Our forecasts incorporate the trends that have occurred since the last projections were prepared by OEA. Our population forecasts were based on historical and recent trends in fertility, mortality, and migration. Our 2010 population forecast for Springfield fully integrates the cohort component model and the housing unit method. That is, we used recent years' data on officially released numbers for building permits, population estimates, deaths and births. We estimated migration from these numbers and historic trends.
In our medium growth scenario model, we assume that the total fertility rate from 2008 to 2035 will remain at the average level seen during 2000-2005. In Springfield, the trend for women to postpone childbearing until they reach older ages and to have fewer children is offset by the net in-migration of Latino population who are associated with higher fertility rates than other ethnic groups. The total fertility rate in Springfield is anticipated to remain higher than in Eugene and higher than the rate for Lane County, and to increase slightly during the forecast period.

Mortality is assumed to continue the historical trend of slightly declining rates. We used extrapolated trends in life expectancy at birth by age group (which is a very common method in projecting populations) from 1970 to 2035. For migration, please see our response below to your 4th inquiry in Question 1.

Are they reflective of state or national trends?
--PSU: In general, yes. National and state trends of overall declining (slightly declining but beginning to stabilize) fertility and household size, and the effect that net migration of various sub-population groups (e.g. Latinos, elderly, young families, persons with lower level of educational attainment) has on those and other demographic characteristics are considered and incorporated into our forecasts. However, please note that there is not any one precise future trend that can be used for all forecasts in all geographic areas.

Do they take into account local initiatives with respect to jobs/housing, and redevelopment or commitments to infrastructure planning and construction?

--PSU: For larger cities, the cohort component method is as good as (if not better than) those methods that integrate infrastructure planning and residential construction. Our model takes such factors into consideration in a different way. Or, we indirectly take these factors into model as did by OEA. For example, if there is planned residential construction in an area that we believe will change the demographic dynamics in an area (due to the size, type or value of the planned housing units, the size of the subdivision), we would divert from historical and recent trends in our assumptions, and adjust our model up or down accordingly.

Regarding local initiatives, it depends how close the initiatives are in the process of seeing residential construction come to fruition, and if there is a diversion from local initiatives taken in

the past. It is more difficult to predict and quantify future change when there are no tangible plans underway for residential construction to actually occur. In other words, for example, while changes in land use zoning, or the city applying for a grant to make improvements to water/sewer systems are likely to contribute to population growth, it is possible that residential construction will not occur, or will occur not as quickly or widely as hoped. The forecaster therefore has to judge the amount and timing of the population growth due local initiative.

In summary, we usually take a conservative approach in the medium growth scenario, but, yes, local initiatives can serve as supporting reason to adjust the demographic models up or down, however slight. Our assumptions about net in-migration appear to be consistent with the economic development strategy as outlined in the EcoNW document included in the email inquiry to PSU (see below).

If this downward projection is related to the recent turn in the economy, what assumptions are used to allocate a recent, albeit significant, effect on a 20-year projection? Are there any state agency policies incorporated into these assumptions?

> --PSU: Our preliminary results for Springfield or Lane County is not a 'downward projection'. The population increases throughout the forecast period even though growth rates may not be as high as previously expected (based on the 2004 OEA forecast).We took the effect of economy recession into consideration in the 2010s. We assumed the economic recession would not affect births and deaths very much, yet we did assume it would affect migration. We assumed the migration in the 2010s will be smaller than in the 1990s, but we assumed that it would resume to the level of the 1990s in 2020s as the economy recovers. After net in-migration rebounds, we assume it to increase to levels even higher than levels seen during 1990s. In Oregon and in Lane County, during weak economic times net in-migration slows down quite a bit. Conversely, during strong economic periods, net in-migration increases to higher levels.

Will you give us an example of the state policies to which you are referring? We don't generally take into account government policies unless there is a remarkable change from the past or unless they are an important piece in determining population or housing growth in a particular area.

Given PSU's acceptance of preliminary work currently underway by the OEA (see next paragraph) are there any pending policies (climate change, carbon emissions, alternative energy, transportation, etc.) that have been built into these assumptions?

> --PSU: There are no pending policies that will greatly affect population growth that we are aware of. If there is a major policy change that will have a dramatic affect on the change in population, it is not accounted for in our forecasts. Generally, our assumptions assume that the policies in effect now will be the policies in effect in the future. We are not sure if OEA forecasting models take into account pending policies.

As you know Springfield and Eugene have initiated a Metro Plan amendment to adopt separate population forecasts in compliance with HB3337. Both cities opted to pursue the safe harbor population forecast process and methodology as provided in ORS 195.034. This statute/requires/cities to use the population forecast prepared by the Office

of Economic Analysis. The notice of proposed amendment we provided to DLCD when the cities first initiated this action includes population figures of 221,515 for Eugene and 82,616 for Springfield (304,131 for the UGB) precisely because the OEA forecast for Lane County is 430,454 and applying the safe harbor formula results in these figures for the two cities. PSU proposes that the Lane County figure should be revised to 417,671 and that the Eugene Springfield UGB should be 292,701. I informed PSU of our pending action and asked why PSU was changing the OEA figures for Lane County, Eugene and Springfield. It was explained to me in an email that the senior demographer at OEA was revising the published 2004 work; that PSU had seen this preliminary work; and because it closely resembled the work PSU was preparing for Lane County, PSU was confident in the analysis provided to Lane County. It was PSU's conclusion that our reliance on the most recently published figures was losing validity by way of this summary from Ms. Proehl: "In other words, the OEA population forecasts that your are referring to are outdated and are currently being revised." This may be the case, but any city in this state that is proceeding with a safe harbor population forecast must rely upon the most recent population forecast prepared by the Office of Economic Analysis. We cannot rely upon figures that are in the process of revision or figures that are similar to figures that are in the process of revision.

--PSU: It is the decision of the cities and the County to adopt the forecasts that they feel confident about. The previous forecasts developed by OEA did not foresee such a big economic downturn. Forecasts need to be revised regularly to account for unforeseen changes that occur and to incorporate recent trends and dynamics that occur after the initial forecast is prepared. Part of the forecasting process is revision. OEA revises their forecasts periodically, and as time and money permit.

It would not be 'best practice' for us to base a forecast on old data when new data are available.

2. The figure proposed by PSU for all of Lane County for the year 2030 is 12,783 less than the current OEA forecast for the same year, however, 11,430 of this population reduction comes from the Eugene-Springfield UGB and only 1,353 comes from all of the rest of Lane County, including all the other cities. Once again, we need to see the analysis and assumptions that supports the conclusion that Eugene and Springfield would absorb 90% of this reduction even though 30% of the county population lives in the other cities and rural Lane County. It is curious to us that the small cities would be relatively immune to forces that substantially influence the growth of Eugene and Springfield. Are jobs more plentiful and housing choice more attractive in small cities during times of reduced growth or economic difficulty?

--PSU: We believe that some small cities will gain more growth than Eugene and Springfield. This conclusion is reached by evaluating the historical trends of cities in Lane County. For example, Cottage Grove and Veneta experienced very high growth in recent years (3% and higher), while Eugene and Springfield had a lower and stable growth in the same period (less than 2%), especially for Springfield (less than 1%). Also, as we indicated during the first coordination meeting, the forthcoming OEA forecast for Lane County in 2030 will be less than

the one released in 2004. Accordingly, the forecasts for Eugene and Springfield as percentages of the county total will be lower as well.

3. Although we appreciate receiving work PSU performed for Marion County, that is of no relevance in Lane County; the two are different places so interchangeability is not an acceptable response. Even if PSU has applied all the same sideboards and analysis for Lane County that were applied to Lane County, the work product itself has to be different and that is what we'd like to see.

--PSU: The cohort-component model is commonly used to forecast population at the county or state level of geography. It is much more reliable than other forecasting methods. The Lane County report includes a description of how the cohort-component model works and the data it utilizes to produce population forecasts – for any area. The only difference between the cohort-component model used for Lane County and the cohort-component models used for Lane County, Eugene and Springfield is in the assumptions made for future change in fertility, mortality and migration. The adjustments made to the model depend on the assumptions made for the future.

4. One of the PSU representatives said that three ranges of population forecasts had been prepared (low, mid, high) and what had been distributed to the cities and county represented the mid-range forecast. He further stated that if the high range was closer to our projection that it would be OK for us to use that figure. We would like to see all forecasts prepared by PSU under this contract with Lane County. We appreciate the option of selecting a forecast that suits us, but we're not sure if that means for just our city or for the county as a whole. I ask this because the basis of the safe harbor calculation is reliance on the county total; selecting a preferred population for the city is not consistent with the safe harbor formula if the county total does not support the city figures.

--PSU: We will provide all forecasted numbers in the final report. According to the contract, PSU will provide three scenarios for Lane County as a whole, three scenarios for two cities of Eugene and Springfield, and three scenarios for one UGB (i.e., Eugene-Springfield UGB). All other ten cities will receive only one number that is under the medium scenario.

It is up to Lane County and its Cities to decide which growth scenario to use and to adjust, if necessary, the forecasts for the remaining areas accordingly (with our assistance if possible). We assume a medium growth scenario which is a more conservative path, and prepare low and high scenarios to provide a range of possibilities. The medium growth scenario, however, is presented as the most-likely growth scenario.

PSU Responses to Questions and Comments from the City of Eugene
From letter addressed to PRC dated 2/26/09

Items 1 and 2. Regarding data and methods: Our forecasts incorporate the demographic trends that have occurred since the last projections were prepared by OEA (2004). Our population forecasts were based on historical and recent trends in fertility, mortality, and migration. Our 2010 population forecast for Lane County and for Eugene fully integrates the cohort component model and the housing unit method. That is, we incorporated more recent data (data for approximately an additional 4 years) on officially released numbers for building permits, population estimates, deaths and births than were available when OEA's population forecast was prepared in 2004. Additional information used to estimate the 2008 population for Lane County (we adjusted the historical rates in our cohort-component models for Lane County, Eugene and Springfield to forecast to the certified 2008 population estimates; this procedure – forecasting to a 'known' population improves accuracy for the forecast) include data on driver license issuances, Medicare, employment and labor force, and state tax returns. These data indicate that population growth will occur at a slower average annual rate from 2000-2010 than data from earlier years.

In our medium growth scenario model, we assume that the total fertility rate from 2008 to 2035 will remain at the average level seen during 2000-2005, as fertility rates have begun to stabilize. Mortality is assumed to continue the historical trend of slightly declining rates. We used extrapolated trends in life expectancy at birth by age group (which is very common in population projections) from 1970 to 2035.

Regarding the difference between Eugene's 2004 UTA population and our 2010 population forecast: We assumed that population growth in the city occurred at faster rates than the area outside city limits. This is a common trend that Oregon, other states, and Lane County have seen occur for many years.

The share that the UTA represents of Lane County's population throughout the forecast period declines, but at a much slower pace than the decline experienced from 1990-2000. Both Eugene and Springfield's share of county population undergo an increase from 2010-2035. The share in the EUGENE-SPRINGFIELD UGB will increase in 2010, but will remain fairly stable during the rest of the forecast period.

Item 3. Regarding in-migration: We estimated migration from historic trends as well as taking the impact of the economic recession we are currently experiencing. We assumed the economic recession would not affect births and deaths very much, yet we did assume it would affect migration. We assumed that net in-migration in the few years immediately preceding and following 2010 will be slightly lower than in the 1990s, but that it would resume to, or would be higher than the level of the 1990s beginning in 2015. Most counties and cities in Oregon have seen decelerated growth rates in the past year or two. Recent economic events coupled with the recession in the early 2000s support the assumption that the net in-migration levels for the current decade are closer to lower levels approaching those that were experienced in the 1980s rather than the higher rates experienced in the 1990s.

Item 4. Regarding lower growth rates than in past trends: The rate at which a population increases is partly attributed to its size. A larger population base requires larger numbers than a smaller population base does with the same growth rate. Our forecast for Lane County in 2010 is higher than OEA's 2004 forecast for 2010, so we start with a higher base. In addition, the 2004 OEA forecast for Lane County appears to have assumed that average annual growth rates would continually increase from 2000 to 2020, then decrease. Recent data show that increasing rates is unlikely to have occurred during 2000-2008. The current economic climate supports the notion that this trend will not be the case for the 2000-2010 forecast period. As a result of recent demographic changes, we are more conservative about the County's change in future growth rates (our rates do not fluctuate as much as in the OEA forecast). That said, our average annual growth rate from 2010-2035 is only one-tenth of one percent less than the rate in the 2004 OEA forecast for the same time period.

PSU Comments to the City of Lowell Officials and Staff
Regarding Methodology
Excerpts from email 2/9/09

We are able to assume that a drastic change in population trends will occur only if there is evidence to support it. Unless we inadvertently missed something, the information that you provided does not indicate that housing and population growth will necessarily undergo a change as seen in Veneta and Creswell. According to our information, both Veneta and Creswell have historically experienced higher growth than Lowell. Five-year average annual growth rates in Creswell has been at least 3.8% since 1960; in Veneta, growth rates were about the same before the building moratoria as the rates it currently is experiencing (average annual of 5.9%). We acknowledge that population increased in Lowell, after its building moratorium was lifted, at rates not seen in the city previously. However, the rates have fluctuated between 1.1% and 4.2% since 2003, with an average annual rate of 2.7%.

We noted the improvements to the water and sewer systems by 2010-2011, and assumed new housing development would follow. Average annual growth during 2010-2025 is assumed to occur at rates similar to those seen in the most recent 5 years. In the next 5-year time period (2025-2030), the average annual rate is based on a weighted average of recent and historical growth rates, with the higher weight bearing on the average of the last 5 years. We rationalize the continuation of the current higher growth rates by the proactive stance that Lowell administrators and planners have taken about increasing the city's population. Despite infrastructure improvement planning and the development of growth strategies, we do not see evidence of an average annual 2010-2035 growth rate in Lowell of over 4.0%, as seen in other studies. In addition, we cannot defend a rate as high as 3.8% per year for the next 25-26 years. Growth rates fluctuate, and since Lowell has not experienced growth of that magnitude historically, or in recent years although planning policy has changed, it is not likely that Lowell's population will increase at rates that average as high as 3.8%.

We do not have issue with the Land Capacity Model. We, however, view the results as the number of persons the land could possibly, or likely, support and accommodate. The availability of buildable land does not necessarily equate with population growth. We're typically utilized the Land Use model as a gauge to control our population projections - to see if there is enough land capacity, or enough buildable land (under current zoning and densities) to support enough housing for our projected population. Because there is a supply, it does not mean there will be a demand. The Land Capacity Model is particularly useful in urban or fast-growing areas where limits must be considered. It seems we are having a difference of opinion regarding the utilization of population forecasting methods.

We did not have to adjust the 2000-2008 population estimates to account for any previously misreported information. The number of added (new) housing units captured by our population estimates from 2000-2008 is 68; the number of housing units added during the same time period in the data you most recently sent is 67.

The larger the base population and the shorter the forecast period, the more accurate the forecast.

Small populations are harder to forecast because a small unforeseen change in population growth can drastically alter the forecast. We recommend that the population forecast be revised on a regular basis to incorporate any unexpected change that occurs.

PSU Comments to a resident of the City of Lowell
Regarding Methodology
Excerpts from email 4/3/09

The 4-year average used in developing Lowell's forecast was weighted in order to assign more importance, or relevance, to housing unit and population growth in 2005, 2006, and 2007 than in 2008. The reason not much weight was given to 2008 is because it is not all that reflective of the long-term housing growth dynamics we believe will occur in Lowell (or in most of Oregon's cities). In 2007, the rate of housing unit and population growth began to decelerate in most of the cities throughout Oregon due to the slowing economy. Lowell's rate increased. In 2008, Lowell's rate declined, as the rates in other cities in Oregon continued to decline. We believe that the economic downturn is temporary and not indicative of change over the long-term (over 30 or 35 years) so not much weight was given to the rate in 2008.

A 4-yr average yields an average annual growth rate of 3.1 percent. Because we used a weighted average and gave less weight to the lower rate in 2008 than 2005, 2006, and 2007, the AAGR is higher at 3.3 percent.

While we have not conducted an in-depth study on the affects of pro-growth policy on population growth or timing of that population growth, we do know that it has a positive affect. We believe that the pro-growth policy and actions in Lowell contributed to the higher than historical growth rates seen after the building moratorium was lifted and that the increase in housing units was not a short-lived housing boom. We used our judgment to account for these beliefs and made the appropriate adjustments to our forecast model.

We revised Lowell's preliminary forecast upward because we intended it to originally have an AAGR of about 3.3 percent, and it did not get adjusted until after the preliminary forecasts were released. We considered information given to us by all parties after the preliminary forecasts were made public, but did not change our weights and rationale.