Population Forecasts
for
Marion County, its Cities and Unincorporated Area
2010-2030

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

September 2008

Revision 1, Appendix 3 replaced

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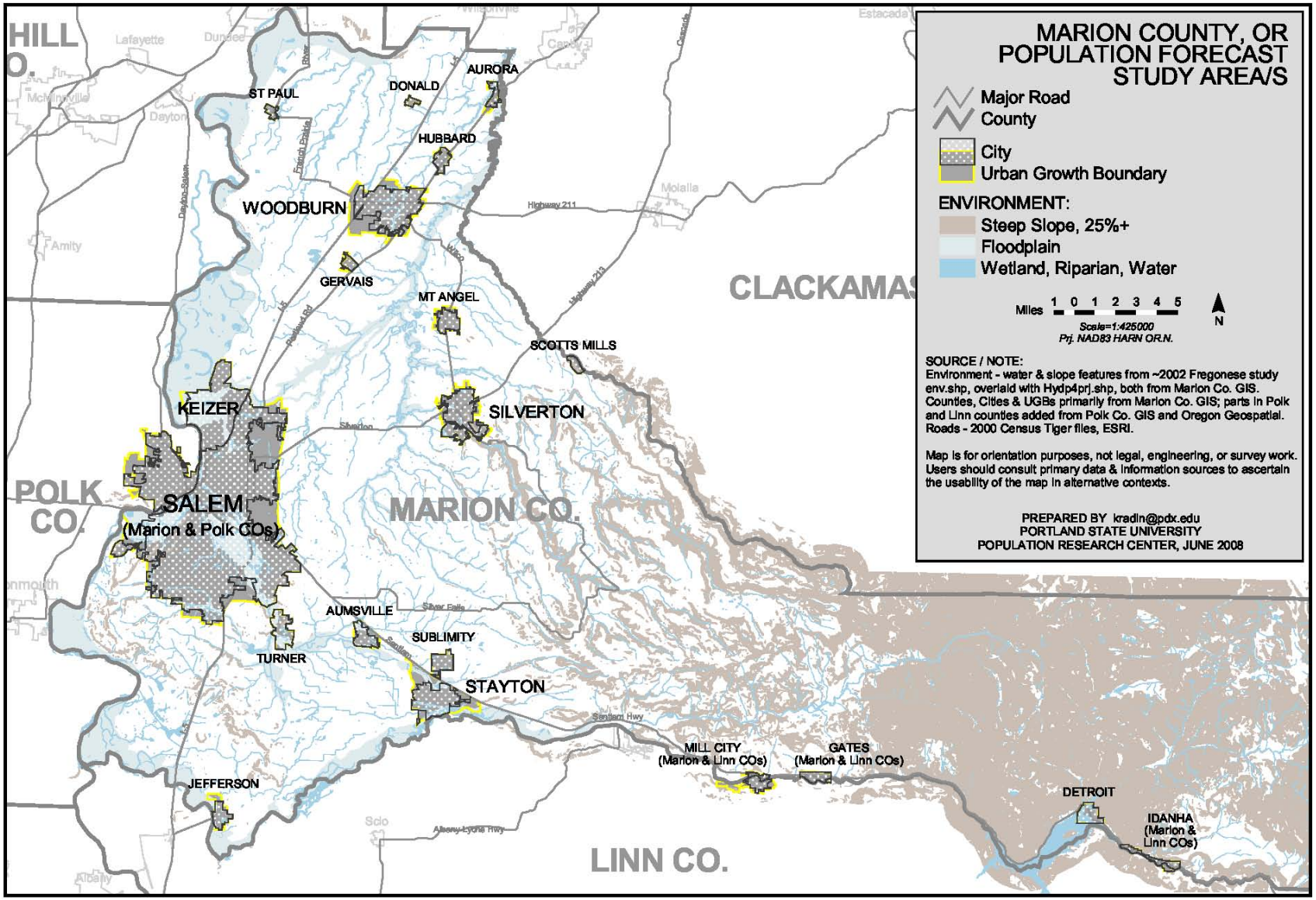
STUDY AREA


MARION COUNTY, OR
POPULATION FORECAST
STUDY AREA/S
Major Road
County
City
Urban Growth Boundary
ENVIRONMENT:
Steep Slope, 25%+
Floodplain
Wetland, Riparian, Water
Miles 1 0 1 2 3 4 5
N
Scale=1:425000
Prj. NAD83 HARN OR.N.
SOURCE / NOTE:
Environment - water & slope features from ~2002 Fregonese study env.shp, overlaid with Hydp4prj.shp, both from Marion Co. GIS.
Counties, Cities & UGBs primarily from Marion Co. GIS; parts in Polk and Linn counties added from Polk Co. GIS and Oregon Geospatial.
Roads - 2000 Census Tiger files, ESRI.
Map is for orientation purposes, not legal, engineering, or survey work. Users should consult primary data & information sources to ascertain the usability of the map in alternative contexts.
PREPARED BY kradin@pdx.edu
PORTLAND STATE UNIVERSITY
POPULATION RESEARCH CENTER, JUNE 2008
HILL CO.
POLK CO.
MARION CO.
CLACKAMAS
LINN CO.
ST PAUL
DONALD
AURORA
HUBBARD
WOODBURN
GERVAIS
MT ANGEL
SCOTTS MILLS
SILVERTON
KEIZER
SALEM
(Marion & Polk COs)
AUMSVILLE
SUBLIMITY
TURNER
STAYTON
JEFFERSON
MILL CITY
(Marion & Linn COs)
GATES
(Marion & Linn COs)
DETROIT
IDANHA
(Marion & Linn COs)

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INTRODUCTION

Marion County officials commissioned Portland State University's Population Research Center (PRC) to produce long-term population forecasts for the County, its 20 cities and unincorporated area, and the Salem-Keizer urban growth boundary area (Salem-Keizer UGB). The forecast horizon extends 23 years from 2007 to 2030, and the forecasts are produced in 5-year intervals with the first interval ending in the year 2010. 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 2007 certified population estimates for the city and county populations. Portions of four cities and the Salem-Keizer UGB are located across the county line and are in the adjacent Polk or Linn Counties. Forecasts were prepared for each of these geographic areas and combined with the corresponding forecasts for the Marion County portions to obtain forecasts for the cities and the Salem-Keizer UGB in their entirety.

In 2007, Marion County's population was 311,070 and 66 percent resided in one of the County's five most populous cities: Keizer, Salem, Silverton, Stayton, and Woodburn. For these cities, for the county-wide forecast, and for the Salem-Keizer 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 fifteen remaining cities in Marion County each had a 2007 population estimate of less than 4,000 persons. Population forecasts for these smaller cities were based on a most-likely, or medium growth, scenario.

Data used to develop the forecasts include vital statistics; population, land use, building permit, and employment data; and school enrollments for districts within Marion 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

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. Consideration was given to factors described in the data that influence Marion County's population dynamics, namely the population's ethnic and age composition, the number of annual births that occur, employment patterns, and public school enrollment in the county's school districts. A description of recent demographic trends throughout the County and a summary of 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 its sub-areas each suggest that there will be continuing increases in population, but at slightly decreasing 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, however the share that the sum of the biggest five cities represent of the county's population, and the share that the remaining cities capture do not fluctuate drastically throughout the forecast period.

In the most-likely growth scenario for the population forecasts, we assume that the currently sluggish local economy will not undergo a downturn such as was seen in the early 2000s. Housing construction will remain active and undergo some increase, and the net in-migration of families with children, the elderly, and Hispanics is predicted to continue during 2007-2030.

Caveats Regarding the Report

The body of this report covers a demographic analysis for Marion County and the geographic parts that lie only within Marion County with some exception. For the cities whose areas cross county boundaries and the Salem-Keizer UGB, some information is included for each of the areas as a whole, and the methods used to produce the forecasts for areas that include other counties (Linn or Polk) are explained.

In order to minimize skewing of demographic trends within our study area, 1990 and 2000 Census data were aggregated to correspond to 2007 jurisdictional boundaries obtained from the Marion County 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, however, that some populations in our tables for 1990 and 2000 slightly differ from 1990 and 2000 Census published populations. The difference is due to the data reallocation process to conform to the 2007 boundaries. Because the 2000 and 2007 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.

Demographic trends in this report are described for 2000-2007. But because the population forecasts are produced in 5-year intervals, the historical numbers that the detailed forecast tables display are for years 2000 and 2005, rather than 2000 and 2007. Certified 2007 population estimates for Marion County and its cities are shown on page 6 of this report. The 2005 populations reported in the detailed forecast tables for the County, cities, and unincorporated area are PRC's annual population estimates certified in 2005. How the demographic data and trends for 2005-2007 are incorporated into the forecasts are described in the methods section of this report.

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 Marion 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 reveal better 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 Marion County and the number of births that will occur annually to parents who reside in Marion County. The population forecasts become less certain over longer periods of time.

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 most-likely forecast and that we will want to update them as conditions evolve. Instead of deciding which outcome will occur over the next twenty-three years, 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 long-range planning needs of Marion County and to 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 2010 to 2030 in 5-year intervals. Expected future populations that result from the most-likely demographic trends throughout Marion County are presented in this report for all cities in the County. Additional forecasts that are based on lower and higher growth scenarios are included for the County and for several of the larger geographic areas in the study.

For the sake of organization of this report and discussion of demographic characteristics, trends and forecasts, Marion County and its sub-areas are grouped into 2 categories: 1) urbanized areas and cities with a 2007 population estimate of more than 7,000; and 2) areas and cities that are not as urbanized and have a 2007 estimate of less than 4,000 persons, with the exception of the County unincorporated area. Although a part of the unincorporated area is located within the UGBs of Marion County's larger, more urbanized cities and has a collective population estimate of over 80,000, it is grouped with the smaller, less urbanized cities in this report - more than half of the unincorporated area's population resides outside of any UGBs. Marion County, its five most populous cities, and the Salem-Keizer UGB area are sometimes discussed within one group; and the remaining fifteen cities and unincorporated area in Marion County are discussed in another group. By the end of the forecast period, however, these groupings may not still pertain. The 2007 population estimates and the grouping of the study area's jurisdictions are shown in the table below.

Table 1. Populations in Marion County

Area		2007 Population Estimate
	Marion County	311,070
Marion County's Five Most Populous Cities	Salem (Marion County part)*	129,830
	Keizer	35,435
	Woodburn	22,875
	Silverton	9,205
	Stayton	7,765
	Salem-Keizer UGB**	194,792
Marion County's 15 Less Populous Cities	Mt. Angel	3,755
	Aumsville	3,300
	Hubbard	3,095
	Jefferson	2,590
	Sublimity	2,255
	Gervais	2,250
	Turner	1,690
	Donald	995
	Aurora	955
	Gates (Marion Co. part)*	460
	St. Paul	410
	Mill City (Marion Co. part)*	330
	Scotts Mills	300
	Detroit	265
	Idanha (Marion Co. part)*	145
	Unincorporated Area	83,165

*Located in more than one county; see table below for total city population and percentage in Marion County.

** Population estimate for Salem-Keizer UGB is for 2005; the estimate for the UGB area was not produced by PRC's Population Estimates Program as were the other estimates in the table and is not available for 2007; the UGB estimate was developed for this study.

Four of Marion County's cities cross the county line and are partially located in neighboring Linn County, or Polk County. The table below shows the four split cites and the shares that lie in each county based on the 2007 population estimates. Also included is the Salem-Keizer UGB which crosses into Polk County. Analysis of the population trends and forecast results for these cities are presented in the sections that correspond to their size.

Table 2. Populations of Split Cities and the Salem-Keizer UGB

Split Cities by County Location	2007 Population Estimate	Share in Marion County
Gates	505	
in Marion County	**460**	**91.1%**
in Linn County	45	8.9%
Idanha	230	
in Marion County	**145**	**63.0%**
in Linn County	85	37.0%
Mill City	1,620	
in Marion County	**330**	**20.4%**
in Linn County	1,292	79.8%
Salem	152,290	
in Marion County	**129,830**	**85.3%**
in Polk County	22,460	14.7%
Salem-Keizer UGB*	217,284	
in Marion County*	194,792	89.6%
in Polk County*	22,491	10.4%

* Population estimates for Salem-Keizer UGB are for 2005; the estimates for the UGB area were not produced by PRC's Population Estimates Program as were the other estimates in the table and are not available for 2007; the UGB estimates were developed for this study.

This report covers the following topics:

Demographic Trends in Marion County and its Cities and Unincorporated Area. A description of recent demographic trends and factors that influence population changes in the County, including 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 Marion County study area are 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 five most populous cities.

Population Growth Assumptions for the Smaller Areas and the Unincorporated Area. A description of the assumptions used in population forecasts for Marion County's fifteen less populous cities, and for the unincorporated area.

The Most-Likely, and Low and High Forecasts (County-wide and Larger City Results). A summary of the forecast results and the predicted population changes for the County, Keizer, Salem, Silverton, Stayton, and Woodburn.

Population Forecasts for the County's Fifteen Smaller Cities and Unincorporated Area. A summary of the forecast results and the predicted population changes in Marion County's fifteen less populous cities and the 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 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 Marion County, the five larger cities, and the Salem-Keizer UGB.

Appendix 2. Tables with detailed forecasts and historical populations in 5-year intervals for Marion County's fifteen smaller cities and the unincorporated area.

Appendix 3. Tables presenting a compilation of demographic data and rates for Marion County and its sub-areas; and the rates and data assumed for the forecast populations.

Appendix 4. Map of housing density within Marion County (2007).

Appendix 5. Estimates of the housing unit capacity of vacant taxlots zoned residential (2007).

Appendix 6. Data sources and data use are described.

DEMOGRAPHIC TRENDS AFFECTING MARION COUNTY POPULATIONS
Marion County, and its Cities and Unincorporated Area

POPULATION

Different growth patterns occur in different parts of the County. Each of the 20 cities and the 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 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.

The total population in Marion County in 2007 is estimated to be 311,070. It is assumed to have growth rates similar to those for the State of Oregon – an average of about 1.2 percent per year since 2000. At this rate, an average of 3,650 persons per year has been added to Marion County's population from 2000 to 2007. The share of Oregon's population residing in Marion County - 8.3 percent - didn't change much during the period. Additionally, the share of the County's population that each city represents did not change much during this time period, either.

Since at least 2000, over two-thirds of Marion County's population has resided in one of its five most populous cities: Keizer, Salem, Silverton, Stayton, and Woodburn. The 2007 population for these cities ranges from about 7,700 to almost 130,000. Salem and Keizer share an urban growth boundary which extends across the county line and into Polk County. The population in 2007 residing within the Marion County portion of the Salem-Keizer UGB, represented 89-90 percent of the entire Salem-Keizer UGB population. Salem, which is partially located in Polk County, is the area's largest city. Salem's total population in 2007 is estimated to be 152,290, of which 129,830 persons (or 85 percent) resided in Marion County.

In 2007, the fifteen smaller cities collectively were home to 22,795 persons in Marion County (7 percent of County population). This population experienced an average annual increase of 2.3 percent from 2000-2007.

The population in the unincorporated area was 83,165 in 2007, an increase of almost 3,500 persons since 2000 with an average growth rate of less than one percent per year. The unincorporated area represented about 27 percent of the County population in 2007 and about 42 percent of its population resided within the Salem UGB.

Most cities saw a change in their percentage of County population, if any, of only one-tenth of one percent except Woodburn and Silverton. The share of each city increased by three-tenths of one percent. Salem is the only city that experienced a decline in its share of Marion County's population, but by only -0.1 percent. The unincorporated area is estimated to have seen the greatest change with a decline in its share of county population by about one percentage point during 2000-2007. Any slight shifting in the shares that the cities may have experienced is spread amongst most cities throughout Marion County. A rural to urban shift of population has been a common occurrence throughout Oregon and in the country in the past many years.

The Table 3 below displays recent population for Marion County and its cities, and unincorporated area. Also shown are the shares that cities represent of the county population and average annual change from 2000-2007.

Of the 5 largest cities, Silverton experienced highest average annual growth rates from 2000-2007 (3.0 percent). The average growth rates for the other 4 cities range between 1.1 and 1.7 percent per year during the same period.

Half of Marion County's smaller cities experienced average annual growth rates higher than the County. Aurora, Donald, Hubbard, and Turner are estimated to have increased at the highest pace – each saw an average annual rate of 3.0 percent or more from 2000 to 2007.

Table 3. Marion County Populations by Jurisdiction

Five Largest Cities	Population		Share of County Population		# Ave. Annual Change	% Ave. Annual Change
	2000*	2007	2000	2007		
Marion County	284,834	311,070			3,618	1.3%
Keizer	32,203	35,435	11.3%	11.4%	446	1.4%
Salem (Marion Co.)	119,040	129,830	41.8%	41.7%	1,488	1.3%
Silverton	7,414	9,205	2.6%	3.0%	247	3.3%
Stayton	6,816	7,765	2.4%	2.5%	131	1.9%
Woodburn	20,100	22,875	7.1%	7.4%	383	1.9%
Fifteen Smaller Cities and Unincorporated Area	**Population**		**Share of County Population**		**# Ave. Annual Change**	**% Ave. Annual Change**
	2000*	**2007**	**2000**	**2007**		
Aumsville	3,003	3,300	1.1%	1.1%	41	1.4%
Aurora	655	955	0.2%	0.3%	41	6.3%
Detroit	262	265	0.1%	0.1%	0	0.2%
Donald	625	995	0.2%	0.3%	51	8.2%
Gates (Marion Co)	429	460	0.2%	0.1%	4	1.0%
Gervais	2,009	2,250	0.7%	0.7%	33	1.7%
Hubbard	2,483	3,095	0.9%	1.0%	84	3.4%
Idanha (Marion Co.)	147	145	0.1%	0.0%	0	-0.2%
Jefferson	2,487	2,590	0.9%	0.8%	14	0.6%
Mill City (Marion Co)	312	330	0.1%	0.1%	2	0.8%
Mt. Angel	3,121	3,755	1.1%	1.2%	87	2.8%
Scotts Mills	312	300	0.1%	0.1%	-2	-0.5%
St. Paul	354	410	0.1%	0.1%	8	2.2%
Sublimity	2,148	2,255	0.8%	0.7%	15	0.7%
Turner	1,199	1,690	0.4%	0.5%	68	5.6%
Unincorporated	79,719	83,165	28.0%	26.7%	475	0.6%

*Population for 2000 in other report tables is allocated to 2007 boundaries; 2000 population may differ from Census 2000 published population (see caveat explanation on page 3).

The number of persons in each age group (0-17, 18-64, and 65 and older) residing in Marion County increased from 2000 to 2007. 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 27.4 to 26.2 percent and from 12.4 to 11.5 percent, respectively. The share of persons ages 18-64 increased from 60.2 to 62.3 percent during the same time period.

In 2007, the share that persons ages 0-17 represented in Marion County was higher than the State by 4 percentage points, and for the share of persons ages 18-64 and 65 and older, slightly lower.

The most recent age-group data available for Marion County's cities are from the 2000 Census. In 2000, the cities with the highest shares of residents 65 years and older were Sublimity, Turner, Gates, Woodburn and Mt. Angel. The share of elderly in each of these cities was 18 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 Gervais, Aumsville, Hubbard, Jefferson, Donald, Silverton, Stayton, Woodburn, and Mt. Angel. In 2000, persons ages 0-17 captured 30 percent or more of the total population in each of these cities.

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 2000-2007 show an increase in the number of school-age children residing in Marion County (13.1 percent, or an average annual increase of 1.8 percent). The biggest increase (24.3 percent) is seen in the number of students enrolled in grades 9-12. Cities located in Marion County school districts that experienced overall increases in enrollments during the same period are: Aurora, Donald, and Hubbard in North Marion School District; Gervais in Gervais School District; Woodburn in Woodburn School District; and Salem and Keizer in the Salem-Keizer School District.

Cities where the percentage of working age population (ages 18-64) was significantly higher (by at least one percentage point) than the share they represented in the County in 2000 are: Donald, Salem, Detroit, and Aurora.

RACE AND ETHNICITY

In 2000, white non-Hispanics accounted for 76.5 percent of the County's population and ethnic minorities for 23.5 percent. Hispanics represented the largest share of the ethnic minority population (approximately 72.8 percent), followed by persons who identified themselves as of more than one race (10.1 percent) and as Asian/Pacific Islanders (8.8 percent). Blacks and Native Americans represented about 5 percent, and 3 percent of the County's ethnic minority population, respectively. Of the total County population, Hispanics represented 17.1 percent.

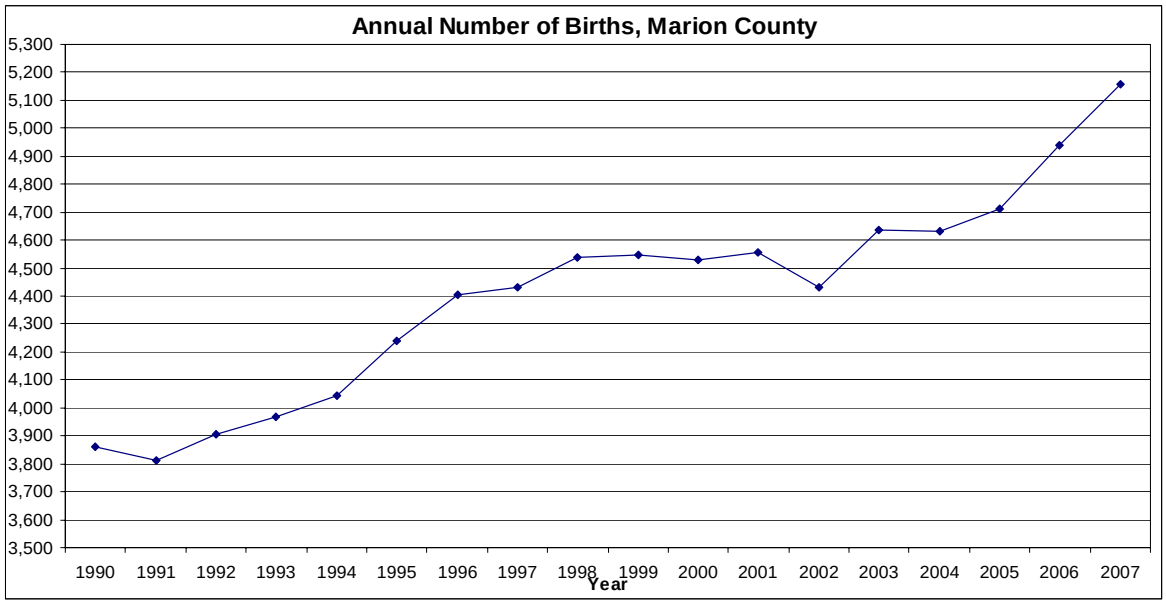
In 2000, of the five largest cities in Marion County, Woodburn and Salem had the highest number and percent of Hispanic population. According to post-2000 data from the Census Bureau's American Community Survey (ACS), the population share of white non-Hispanics in Marion County and in the City of Salem (the only two areas in the region 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 17.1 percent to 21.4 percent from 2000-2006; in Salem their share increased from 14.6 percent to 17.3 percent. This trend was also seen during the 1990s.

BIRTHS AND FERTILITY

Since 2000, there have been between 4,400 and 5,100 births in Marion County annually (see Figure 1). The number of births has almost continually increased every year since 2000 (and at least since 1990, see Figure 1). This trend is different than seen in the State. The number of annual births to mothers residing in Marion County increased 4,527 from 2000 to 5,156 in 2007, or by 14 percent, which is a much higher rate than occurred statewide (8 percent) during the same time period. Natural increase (births minus deaths)

rather than net migration (persons moving in minus persons moving out) accounts for most of the added population in Marion County. The opposite is true for Oregon.

Figure 1. Marion County Births



In 2006 (2006 is the most recent year for which we have birth data for cities), the largest number of births occurred in the five most populous cities. Collectively, they captured 67 percent of County births, which is about the same as in 2000. Woodburn and Salem each experienced almost 150 more births in 2006 than in 2000. There were 10 more births in Stayton in 2006, but fewer births in Keizer and Silverton.

Of the fifteen smaller cities, four saw fewer births in 2006 than in 2000. They are: Gervais, Jefferson, St. Paul, and Scotts Mills. Hubbard experienced the largest increase during the same period - there were 13 more births in 2006 than in 2000. A bigger change was seen in the unincorporated area, where during the period, the number of births increased by 155.

The Table 4 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. A city with an increase in births between two years could easily show a decrease for a different two year period.

Table 4. Births, 2000-2006

Area	2000	2006	2000-2006	
			# Change	% Change
Marion County	4,527	4,938	411	9.1%
Keizer	504	485	-19	-3.8%
Salem (Marion Co.)	1,869	2,015	146	7.8%
Silverton	130	124	-6	-4.6%
Stayton	119	129	10	8.4%
Woodburn	413	547	134	32.4%
Aumsville	45	50	5	11.1%
Aurora	10	10	0	0.0%
Detroit	2	2	0	0.0%
Donald	1	5	4	400.0%
Gates (Marion Co.)	2	7	5	250.0%
Gervais	76	49	-27	-35.5%
Hubbard	45	58	13	28.9%
Idanha (Marion Co.)	0	1	1	-
Jefferson	51	39	-12	-23.5%
Mill City (Marion Co.)	5	5	0	0.0%
Mt. Angel	46	46	0	0.0%
Scotts Mills	7	4	-3	-42.9%
St. Paul	6	2	-4	-66.7%
Sublimity	15	23	8	53.3%
Turner	21	22	1	4.8%
Unincorporated Area	1,161	1,316	155	13.4%

The shares of County births in the cities coincide fairly well with the shares of population, with the exception of Woodburn, Keizer and Salem. The share of County births that Woodburn captures in 2006 is almost four percentage points higher that its share of the County's population; and Keizer and Salem's shares of County births is slightly lower than their shares of population. This means that either the fertility rate, or the percentage of households that are families, or both, is higher in Woodburn than the County; and

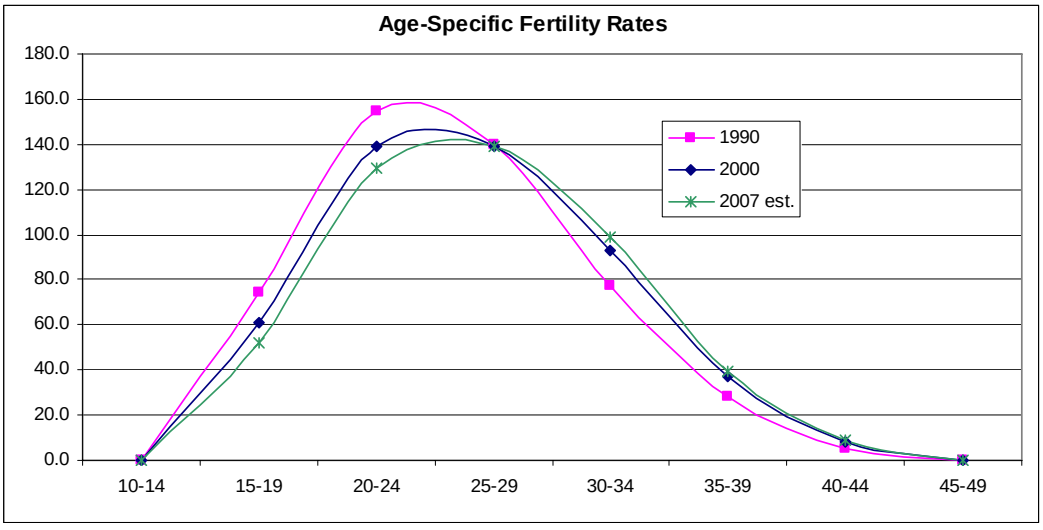
conversely for Keizer and Salem, that the fertility rate, or percentage of family households, or both, is lower.

Marion County Fertility

The total fertility rate in the County was 2.37 in 2000, meaning that the average woman would bear 2.37 children by the end of her child-bearing years. This rate is considerably higher than the State average which was 1.98 children per woman in 2000, but slightly lower than the 1990 County rate (2.40). The trend of declining fertility rates over the past 2 decades, which has occurred with less magnitude in Marion County than the State, is assumed to have continued, and the total fertility rate in Marion County is estimated to have dropped slightly further to 2.34 by 2007. 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. This trend, however, has been milder in Marion County than in the other areas in the Oregon.

Figure 2. Marion County Fertility



In 2006, 56 percent of all births in Marion County were to white non-Hispanics, 39 percent were to Hispanics, and 5 percent were to either blacks, Asians/Pacific Islanders, Native Americans, or to women of another race/ethnicity. 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, has increased very slightly during the same period.

Table 5. Percentage of Marion County Births by Race/Hispanic Origin of Mother

Year	White, non-Hispanic	Hispanic	Other Race/Ethnicity
2000	63.0%	32.0%	5.0%
2006	55.5%	39.1%	5.3%

The total fertility rate of Hispanic women in Marion County was 3.66 in 2000, which is a decrease from 4.48 in 1990; the rate estimated for 2007 is 3.51. The Hispanic total fertility rate has decreased overtime and is slowly approaching the rate for white non-Hispanics. Also, the shift in the fertility rates by age group as seen for all women was also experienced by Hispanic women residing in the County.

HOUSING AND HOUSEHOLDS

The rates of increase in the number of housing units in Marion County and its cities and unincorporated area are similar to the growth rates of their corresponding populations. The growth rates for housing may slightly differ than the rates for population because the numbers of 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 almost the same.

Since 2000, an average of about 1,350 new units has been added to Marion County's housing stock annually. Almost 66 percent of housing in Marion County is single-family

dwellings, but overall, almost 80 percent of new housing construction in the County during 2000-2007 was single-family dwellings (see Table 6). Multi-family housing units accounted for less than 20 percent of new housing in most of Marion County's cities, but represented one-third or more of the added units in Aumsville, Keizer, Mt. Angel, and Sublimity. Multi-family units represented at least one-third of the existing housing inventory in Salem, Stayton, Keizer, and Mt. Angel in 2007. Since 2000, the County experienced a decrease of 230 mobile homes. Half the cities have experienced a loss, which brings the share of housing in the County that mobile homes represent down to less than 10 percent.

Table 6. Housing Units Added By Geographic Area

Area	**New Units Added 2000-2007**	**Percent Single-family Units***
Marion County	10,305	79.1%
Keizer	1,310	71.1%
Salem (Marion Co.)	3,428	83.5%
Silverton	639	82.9%
Stayton	331	86.5%
Woodburn	1,019	82.7%
Aumsville	137	63.9%
Aurora	134	100.0%
Detroit	11	100.0%
Donald	143	84.3%
Gates (Marion Co)	10	100.0%
Gervais	106	95.1%
Hubbard	193	88.4%
Idanha (Marion Co.)	2	49.0%
Jefferson	188	95.0%
Mill City (Marion Co)	9	66.0%
Mt. Angel	150	52.6%
Scotts Mills	10	100.0%
St. Paul	27	100.0%
Sublimity	166	49.0%
Turner	211	82.4%
Unincorporated Area	2,081	71.1%

*includes condos and row houses.

Housing Occupancy

We estimate Marion County's 2007 occupancy rate to be about 94 percent, which is higher than the rate for Oregon (about 91 percent). ACS data show that the County rate has not fluctuated much since 2000, but is about 2 percentage points lower than in 1990. Cities situated in the Santiam Pass area (Idanha, Detroit, Gates, and Mill City) have the lowest occupancy rates because of the presence of vacation homes and seasonal housing. Approximately eighty percent of the housing units in each of these cities has year-round occupancy, except Detroit, where only 30 percent of housing units are homes to full-time residents. The cities with the highest occupancy rates – about 96 percent - are Scotts Mills, Aurora, and St. Paul.

Average Household Size

In 2007, 96.4 percent of Marion 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 Marion County is around 2.7 and is higher than it is statewide (2.5). The PPH has not changed much in Marion County since 2000, but is slightly higher than it was in 1990 (2.6). The highest PPH in the County is in Gervais, where an average of 4.4 persons per household reside. Other cities with a PPH of 3.0 or greater are: Woodburn, Jefferson, Hubbard, Donald and Aumsville. The smallest average household size, 2.2 PPH, is in Detroit.

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 Marion County, its unincorporated area, and most of its cities. However, in some of the County's cities, such as Gervais, Jefferson, Hubbard, and Donald, the PPH in MFRs is highest; in Aumsville, it's higher in mobile homes than in other housing types.

Group Quarters

In 2007, 3.6 percent of Marion County's population, or 11,050 persons, resided in group quarters facilities such as nursing homes, college dormitories, or prisons. The number has not changed much from 2000 or even 1990, but the percentage of the total population has decreased. From 2000 to 2007, the percentage decreased very slightly, but it experienced a greater decline from 1990 to 2000 when it dropped 2.5 percentage points. The Salem-Keizer UGB and County unincorporated area is home to about 96 percent of the County's group quarters population.

ANNEXATIONS

During 2000 to 2007, housing units with a total of 463 persons were annexed out of the unincorporated area and into the cities listed in Table 7 below. Five of Marion County's cities experienced at least one annexation. The highest number of persons added from annexation was in Silverton, followed by Salem. The table also shows the year in which the annexations were recorded by PRC.

Table 7. Annexations in Marion County

Area	Annexed Population	Year(s) Recorded
Aurora	30	2006, 2007
Mill City (Marion Co.)	3	2006
Salem (Marion Co.)	170	2002, 2004, 2006, 2007
Silverton	197	2002, 2003, 2004, 2006, 2007
Woodburn	63	2001
Total (Annexed from Unincorporated Area)	463	

MIGRATION

Thirty-nine percent of Marion County's population increase from 2000 to 2007 was accounted for by net-migration (movers in minus movers out). An average of 1,425 more persons moved into Marion County than moved out annually during this period. Migration rates are estimated to be highest among children and young adults, and higher for Hispanics than for white non-Hispanics in Marion County. However, rates are estimated to be lower post-2000 than were seen during the 1990s.

In 2006 (the most recent year for which we have these data), 22 percent of Marion County's population moved within the previous 12 months. Of the movers, 62 percent stayed within the County. Of those who moved into Marion County from somewhere else, 57 percent came from another county within Oregon, 39 percent came from out of state, and 4 percent moved from another country.

EMPLOYMENT

The unemployment rate in Marion County has been higher than the rate for Oregon by at least one percentage point for the last several years. Despite having a higher unemployment rate, however, the County's population and housing growth rates have maintained the levels as those experienced statewide. In 2007, the annual unemployment rate for Salem Metropolitan Statistical Area (Marion and Polk Counties combined) was 7.4 percent. The rate for Marion County alone is estimated to be higher because Polk County

generally has a lower annual rate due to its population having higher levels of educational attainment, which corresponds to lower unemployment rates.

In 2000 (the most recent year for which we have data for cities), the lowest unemployment rates were in the cities of Aurora, St. Paul, and Silverton – each were at least two percentage points lower than the County rate. These cities are amongst those with the highest annual average population growth rates in the County from 2000 to 2007. The areas with unemployment rates higher than the County rate by at least 2 percentage points in 2000 are Scotts Mills, Idanha, Stayton, Detroit, and some areas not within city limits. These areas had the highest unemployment rates in the County. The lowest rate of population increases were in Scotts Mills, Idanha, and Detroit.

According to 2002-2004 data on commuting patterns from the Census Bureau (Local Employment dynamics data, or LED), about 65 percent of workers residing in Marion County are employed in jobs located in Marion County. At least 65 percent of workers residing in most cities in Marion County do not leave the County to work, either. Cities with the smallest percentage of resident-workers whose jobs are in the County - less than 50 percent - are St. Paul, Aurora, Gervais, Hubbard, and Woodburn. Most people who live and work in Marion County are employed in Salem.

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

An area's demographic characteristics affect the rate at which the population changes over time. These characteristics include the age and gender structure, propensity to have children, and race/ethnicity. 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.

Assumptions for three growth scenarios (low, medium, and high) were developed for Marion County's population forecast and for the forecasts of its five largest cities – Salem, Keizer, Woodburn, Silverton, and Stayton. The different scenarios are based on predictions of county-wide and local demographic trends in Marion County and how robust the economy will be during the next twenty-three years. The population forecasts produced for Marion County's fifteen smaller cities and the unincorporated area are based on a medium, or most likely, growth scenario. All forecasts utilize city boundaries and UGB areas as defined in 2007.

A listing of the demographic rates assumed for future change for Marion County and all of its cities and unincorporated area is included in Appendix 3.

SPECIFIC ASSUMPTIONS FOR THE THREE GROWTH SCENARIOS

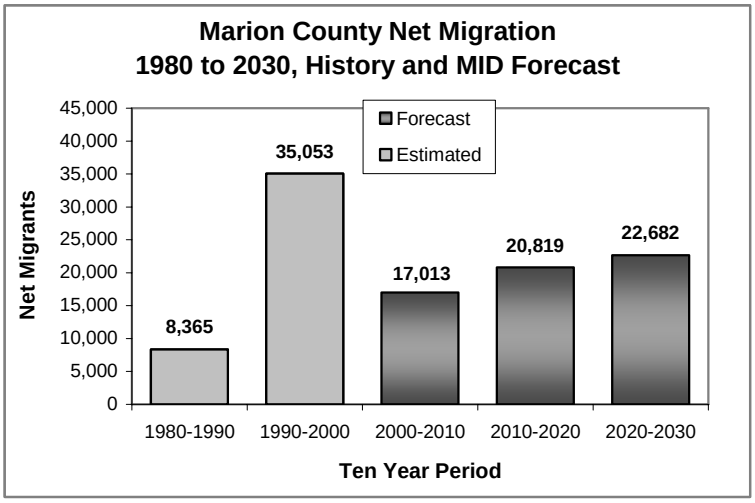
All three growth scenarios for Marion County and its five largest cities (and the Salem-Keizer UGB) assume that current mortality will not change much during the forecast period. Except for Woodburn, fertility rates will decrease slightly in the beginning of the forecast period from 2005 to 2010, but then remain stable over time. In Woodburn, the fertility rates are predicted to gradually decrease from 2005 to 2030.

Migration rates, a more difficult demographic factor to estimate than the other factors, are assumed to be a main factor affecting population changes in Marion County and the five cities. Although recent population growth in the County is attributed more to natural increase than to net migration (movers in minus movers out), migration has more bearing on changes in the rates of its population growth. Migration is more unpredictable and sensitive to changes in the economy. In each of the three growth scenarios for Marion County and the five cities, net migration from 2005 to 2030 is predicted to differ slightly. Additionally, the pace of in-migration of Hispanics loses momentum as time passes through the forecast period.

The differences between the scenarios' assumptions represent varying magnitudes of either a faltering or a booming economy. Figure 3 below shows, net migration added about 8,000 residents, (four percent) during the 1980s, and about 35,000 (12 percent) during the 1990s. The 1980s were marked by Oregon's most severe economic downturn since the Great Depression, while the 1990s were more prosperous, with strong job growth. Since 2000, Marion County's growth due to net migration has been greater than in the 1980s, but less than in the 1990s. In the current decade so far, the County has experienced a recession, with stagnant employment levels between 2000 and 2003, and four consecutive years of job growth ranging between 2.0 and 2.5 percent annually between 2003 and 2007.

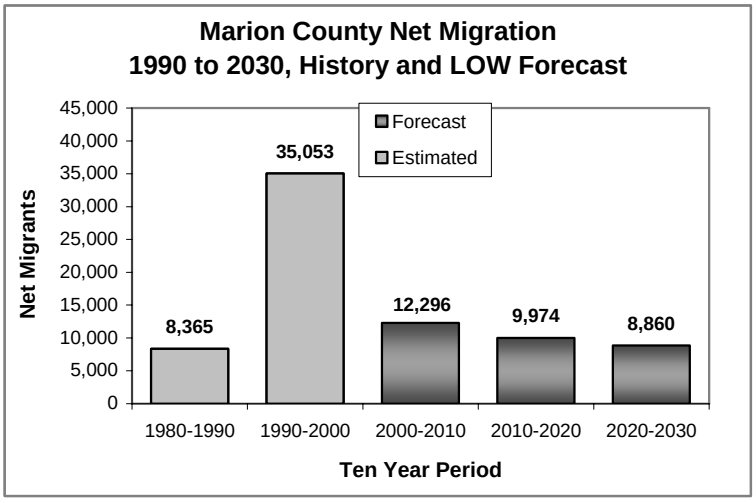
While no forecast can predict the exact timing of economic cycles, the **medium growth scenario** assumes that there will be both downturns and upswings as there have been in the past, and that net migration will continue to contribute a moderate amount of population to the County over the long run. Net-migration will increase slightly throughout the forecast period, but will average less than in the 1990s. Overall population growth attributable to both net migration and natural increase in the **medium growth** ranges between 0.9 and 1.5 percent. See net-migration assumed for the medium growth forecast in Figure 3 below.

Figure 3. Medium Growth Assumption for Net Migration



The demographic trends as seen during the 1980s are assumed to have more bearing on future populations in the **low growth scenario**. In this situation, a continued downturn in the economy is implied and a lower net in-migration of persons than in the medium growth scenario is predicted. See Figure 4 below for the net-migration assumed for the low growth forecast.

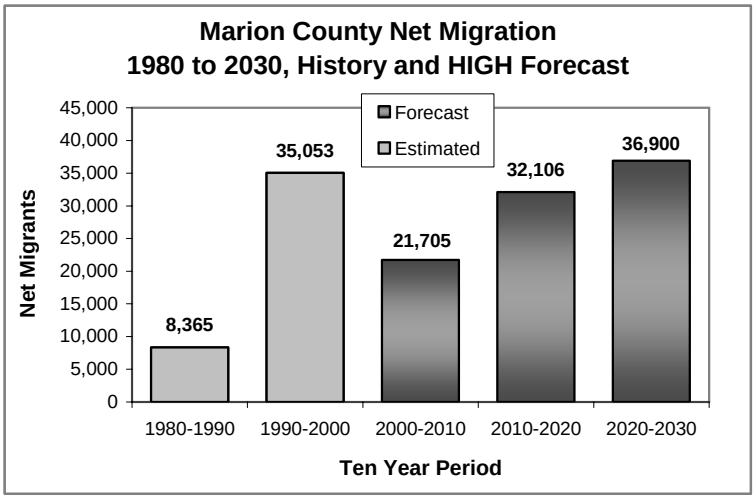
Figure 4. Low Growth Assumption for Net-Migration



Under the **high growth assumption**, 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 Marion County and levels of net

in-migration are closer to levels seen during the 1990s. The assumption for net-migration under the high growth scenario is shown in Figure 5 below.

Figure 5. High Growth Assumption for Net-Migration



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, Salem, and the Salem-Keizer UGB each are about 1.5 percent lower and higher in 2010 than the medium growth forecast assumes. By the end of the forecast horizon, the differences are closer to 8 percent.

The lower growth population forecast for Keizer deviates slightly more than those mentioned above. At the beginning of the period (2010), Keizer's low growth forecast is 2 percent lower than its medium growth forecast, and by 2030 the difference is about 12 percent lower. This forecast acknowledges Keizer's land use limitation by curbing net migration during the forecast period. Keizer's higher growth forecast assumes the same amount of divergence from the medium growth forecast as in the high growth forecast for the County – about 1.5 percent higher in 2010 and 8 percent higher in 2030.

The opposite case is true for Woodburn's alternate growth forecasts. Its higher growth forecast is 2 percent higher than its forecast for medium growth in 2010 and 12 percent higher by 2030. Net in-migration accelerates throughout the forecast period as the potential for growth in Woodburn is accounted for. Woodburn's low growth forecast assumes the same magnitude of divergence from the medium growth forecast as the County's low growth does – the difference is about 1.5 percent lower in 2010 and 8 percent lower by 2030.

The forecasts developed for Silverton and Stayton under the alternate growth scenarios capture similar magnitudes of difference from their medium growth forecasts, but they vary more widely than the alternate forecasts for the larger cities due to their smaller size and potential for more extreme growth rates. Silverton and Stayton's lower and higher growth forecasts each divert 2-3 percent in 2010 and 11-12 percent by 2030.

DEMOGRAPHIC ASSUMPTIONS FOR MARION COUNTY'S FIFTEEN SMALLER CITIES

As mentioned above, the population forecasts produced for Marion County's fifteen smaller cities and the 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 PPH.

The housing growth trends from 1990 to 2007 were assumed to have bearing on how housing growth rates will change during the forecast period. Housing growth rates are not predicted to be as high as during the 1990s, but will be closer to those experienced recently.

Housing occupancy is not expected to change significantly during the forecast period. The rates for all cities are predicted to either remain fairly stable or undergo a slight increase.

The PPH is predicted not to change much throughout the forecast period. The larger average household size that corresponds to an increase in the Hispanic population is assumed to be offset by a smaller PPH associated with an increase in the elderly population.

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 the forecasts produced by the housing units method, the number of persons residing in group housing is assumed to remain fairly stable during the forecast period. Since 1990, there has not been much change and this situation is expected to continue throughout the forecast period.

POPULATION FORECASTS FOR MARION COUNTY AND ITS CITIES, AND UNINCORPORATED AREA

Under a most-likely population growth scenario, one which will extend similar demographic trends to those currently occurring in Marion County, county-wide population and populations in all of its cities and unincorporated area are expected to increase from 2007 to 2030. The rates of increase in most of the County's cities and unincorporated area will lessen as time progresses through the forecast period. Marion County will undergo an increase of around 99,350 persons from 311,070 in 2007 so that by 2030 its population will reach almost 410,500.

Collectively, the County's five largest cities will increase by 69,300 persons from 2007 to 2030 and will increase from 205,110 to almost 275,000. The average annual growth rate of the sum of these cities is predicted to be 1.2 percent. The share that these cities together will represent of the County population will rise by one percentage point during the period, increasing from 66 percent in 2007 to 67 percent in 2030.

Marion County's fifteen smaller cities will experience population increases so that by 2030, the sum of their populations will capture about 9 percent of the County-wide population which represents an increase of two percentage points from 2007. The number of persons added to these smaller cities combined is predicted to be almost 16,000 during the forecast period, with an average rate of increase of 2.3 percent per year.

Population growth in unincorporated Marion County is foreseen to be at a slower rate than in the cities. About 14,500 more persons will be residing in the unincorporated area in 2030 than in 2007 and the population will increase at an average annual rate of less than one percent. The share of County population in the unincorporated area is presumed to decline from 27 percent to 24 percent during the 23-year forecast period.

Figure 6 below shows historical and forecast populations for Marion County, each of the combined city areas, and the 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 Marion County

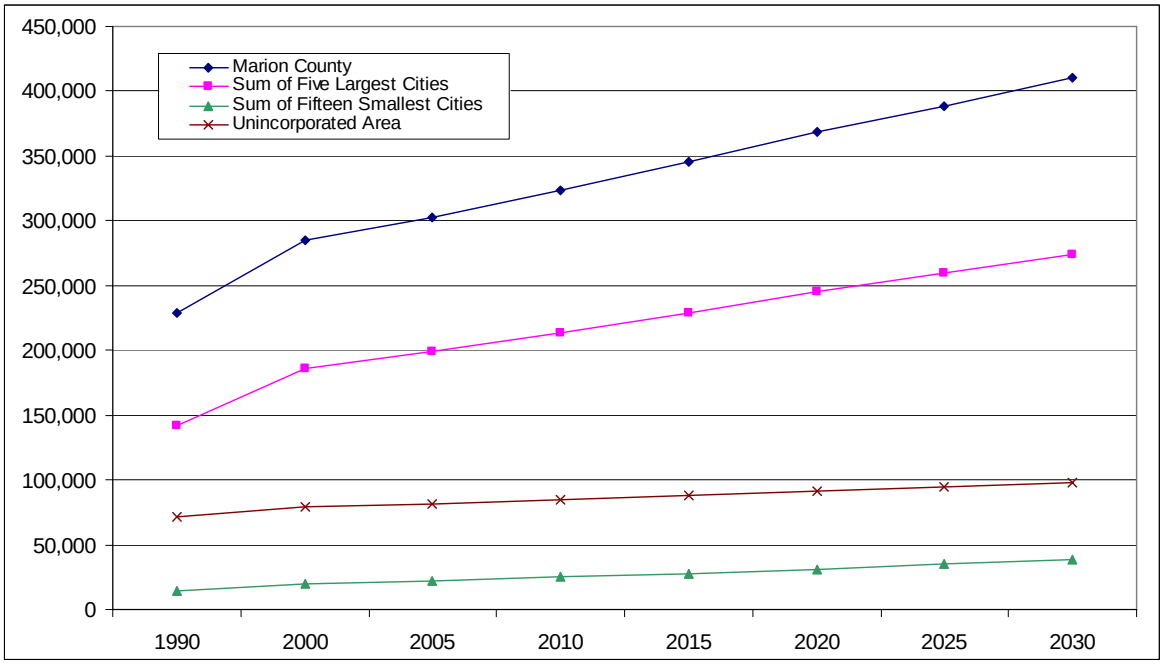
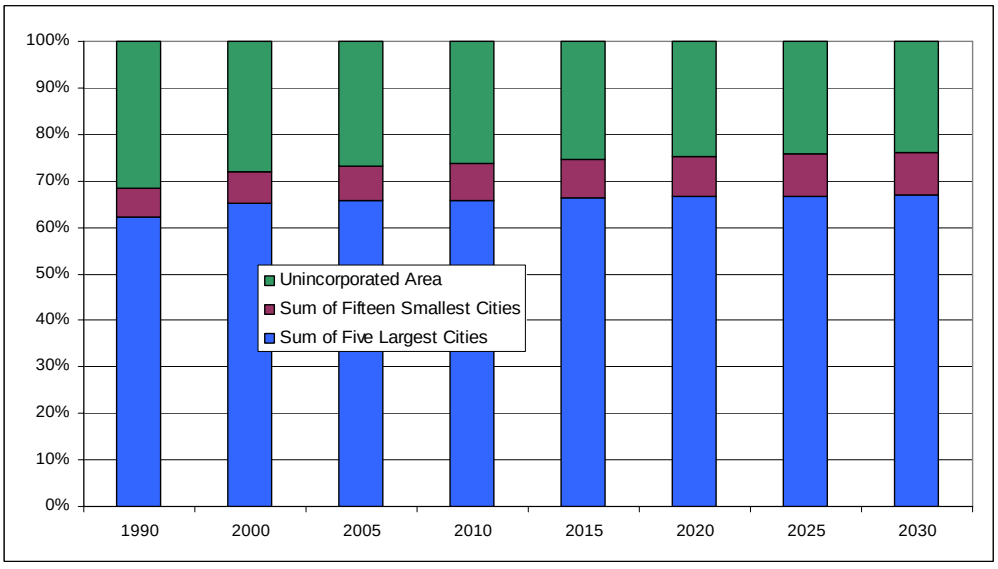


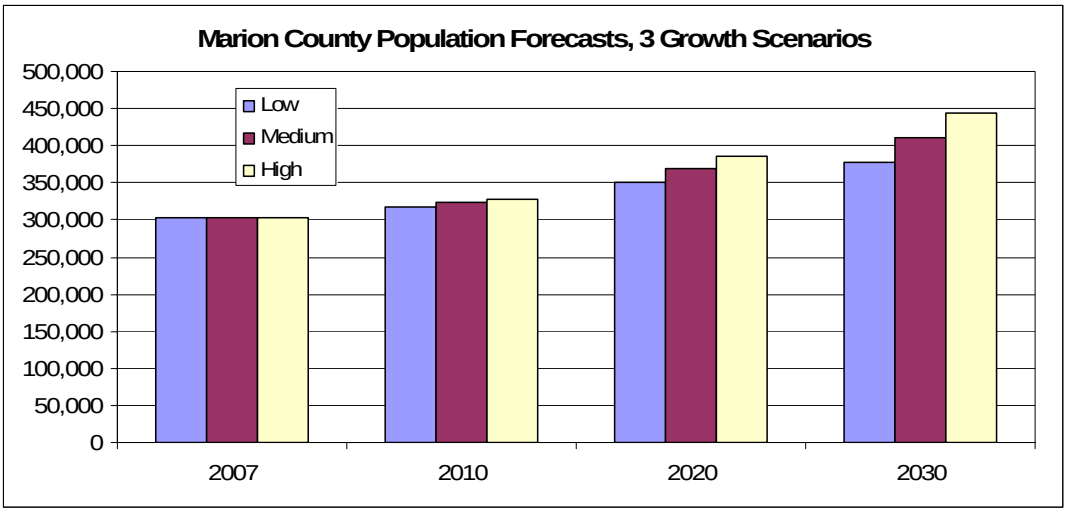
Figure 7. Historical and Forecast Shares of Population, Larger Cities, Smaller Cities, and Unincorporated Area



POPULATION FORECASTS FOR MARION COUNTY AND ITS FIVE MOST POPULOUS CITIES

Under the three different assumptions for population growth considered for the County-wide forecasts and the forecasts for the County's five largest cities, 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. The rates of population increase will lessen overtime. The differences in population change under the three growth scenarios become more pronounced after a few years for each geographic area. In 2010, there are relatively smaller differences between the three set forecasts for the County and the five cities. By 2030, the differences are greatest (see Figure 8 below for the Marion County forecasts).

Figure 8. Current and Projected Population: Three Growth Scenarios



In the medium growth scenario, from 2007 to 2030, the rates of increase in population for Marion County and its five largest cities range from 28 to 63 percent; in the low growth scenario, the range is 17-50 percent; and in the high growth scenario, it is 38-82 percent. In all three scenarios Woodburn, Stayton, and Silverton are anticipated to undergo population increases at the fastest pace, which is faster than 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 3, 4 and 5. More detailed forecast results are included in Appendix 1.

Medium Growth (most-likely) Scenario

In the most-likely growth scenario, populations throughout Marion County are forecasted to continue to increase during 2007-2030, 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 410,400 is anticipated to be seen by 2030, an increase of over 99,300, or by 32 percent from 2007.

Population in all of the County's five largest cities is expected to continue to increase throughout the forecast period. Woodburn's population is predicted to increase by the highest percentage - 63 percent - adding 14,350 persons by 2030. Salem and Keizer's population is expected to increase by 28-33 percent from 2007-2030. About 36,000 additional persons in Salem, and 11,500 in Keizer are forecast to be residing in these cities by 2030. Stayton will see an increase of 3,600 persons, and Silverton by 3,850, during the same time period. Stayton's population will increase by 46 percent, and Silverton's by 52 percent.

Increases in the numbers of persons in Marion County and in the largest cities are projected be similar in the beginning of the forecast period and at the end, except for Silverton. In Silverton, during 2020-2030, around 400 fewer persons will be added than in the beginning of the period.

Table 8. Medium Growth Population Forecasts

Medium Growth Scenario	2007 (est)	2010	2020	2030	2007-2030 Change		Average Annual Change	
					Number	Percent	Number	Percent
Marion County	311,070	323,266	368,364	410,431	99,361	31.9%	4,320	1.2%
Keizer	35,435	36,892	42,129	46,955	11,520	32.5%	501	1.2%
Salem (Marion Co.)	129,830	133,568	150,798	165,824	35,994	27.7%	1,565	1.1%
Silverton	9,205	9,552	11,507	13,052	3,847	41.8%	167	1.5%
Stayton	7,765	8,171	9,777	11,359	3,594	46.3%	156	1.7%
Woodburn	22,875	24,866	31,243	37,216	14,341	62.7%	624	2.1%

Low Growth Scenario

Under the low growth assumption, Marion County's population is predicted to increase by 21 percent, with around 66,100 more persons in 2030 than in 2007. Woodburn will add to its population at the highest rate, around 50 percent, or by 11,400 persons. Eighteen percent (23,750 persons) and 17 percent (6,050 persons), respectively, will be added to the population in Salem and Keizer. Stayton and Silverton will see smaller increases in number. Each will add between 2,250 to 2,500 persons with a total period change between 27-30 percent.

In this forecast scenario, Woodburn, Stayton, Keizer will add about the same number of persons in 2030 as in 2010; but the County, Salem, and Silverton will see fewer persons added.

Table 9. Low Growth Population Forecasts

Low Growth Scenario	2007 (est)	2010	2020	2030	2007-2030 Change		Average Annual Change	
					Number	Percent	Number	Percent
Marion County	311,070	318,204	350,538	377,165	66,095	21.2%	2,874	0.8%
Keizer	35,435	36,067	39,096	41,491	6,056	17.1%	263	0.7%
Salem (Marion Co.)	129,830	131,615	143,548	152,562	22,732	17.5%	988	0.7%
Silverton	9,205	9,274	10,745	11,723	2,518	27.4%	109	1.1%
Stayton	7,765	8,000	9,100	10,053	2,288	29.5%	99	1.1%
Woodburn	22,875	24,504	29,780	34,272	11,397	49.8%	496	1.8%

High Growth Scenario

In the high growth scenario, 133,300 more persons are predicted to reside in Marion County in 2030 than in 2007. This gain in population over the 23-year period represents a 43 percent increase, with an average of about 1.6 percent per year. All five cities will experience average annual growth rates of at least 1.4 percent. Woodburn, increasing at fastest pace, will add to its population at an average rate of 2.6 percent yearly. Its population is expected to increase by 82 percent during the forecast period, adding 18,850 persons. Salem will add 49,750 persons and Keizer, 15,350. Stayton and Silverton will have population levels increase by 64 percent and 58 percent, respectively.

Yearly increases of population will be higher at the end of the forecast horizon than in the beginning except in Silverton. Under the high growth assumption, fewer persons in Silverton are foreseen to be added to its population in 2030 than in 2010.

Table 10 below displays population forecasts for Marion County and its five most populous cities. For more detailed results of the county-wide and larger city forecasts, and the forecast for the Salem-Keizer UGB, see Appendix 1.

Table 10. High Growth Population Forecasts

High Growth Scenario	2007 (est)	2010	2020	2030	2007-2030 Change		Average Annual Change	
					Number	Percent	Number	Percent
Marion County	311,070	328,305	386,667	444,381	133,311	42.9%	5,796	1.6%
Keizer	35,435	37,481	44,260	50,769	15,334	43.3%	667	1.6%
Salem (Marion Co.)	129,830	135,561	158,248	179,586	49,756	38.3%	2,163	1.4%
Silverton	9,205	9,845	12,313	14,502	5,297	57.5%	230	2.0%
Stayton	7,765	8,344	10,434	12,721	4,956	63.8%	215	2.1%
Woodburn	22,875	25,305	33,313	41,718	18,843	82.4%	819	2.6%

POPULATION FORECASTS FOR MARION COUNTY'S
FIFTEEN LESS POPULOUS CITIES

Under a medium growth scenario, eight of Marion County's fifteen smaller cities are expected to experience population increases of over 1,000 persons from 2007 to 2030. They are: Aumsville, Donald, Gervais, Hubbard, Jefferson, Mt. Angel, Sublimity, and Turner. Donald, Gervais and Turner will see their population double during the time period. The change that Jefferson and Scotts Mills will see from 2007 to 2030 is also very high and the number of their residents will increase by 98 and 94 percent, respectively. However, although predicted to be high in Scotts Mills, the rate of change translates to an addition of an average of only about 12 persons per year because of its small population size. Aurora and Detroit will see more moderate rates of change, and will increase by 40-45 percent.

Population in Gates, Idanha, and Mill City (Marion County parts) is foreseen to remain fairly stable. Each of these cities is predicted to add an average of only 1 to 2 persons per year to its population, and will experience an increase by less than 20 percent during the forecast period.

The unincorporated area in Marion County is anticipated to experience a population increase of 17 percent, or about 14,400 persons, during the forecast period. At this rate, an average of over 600 persons will be added annually. The population in the unincorporated area is expected to reach 97,600 by 2030. Of this population, approximately 46 percent is expected to be residing within the Salem UGB.

Table 11 below shows population forecasts for the fifteen smaller cities in 10-year intervals beginning in 2010. For more detailed results of the smaller city and unincorporated area forecasts, see Appendix 2.

Table 11. Population Forecasts for Marion County's Fifteen Smaller Cities and Unincorporated Area

Area	2007 (est)	2010	2020	2030	2007-2030 Change		Average Annual Change	
					Number	Percent	Number	Percent
Aumsville	3,300	3,448	4,238	5,063	1,763	53.4%	77	1.9%
Aurora	955	1,008	1,233	1,382	427	44.7%	19	1.6%
Detroit	265	265	340	371	106	40.0%	5	1.5%
Donald	995	1,083	1,359	2,034	1,039	104.4%	45	3.1%
Gates (Marion Co.)	460	465	479	487	27	5.9%	1	0.2%
Gervais	2,250	2,647	3,554	4,597	2,347	104.3%	102	3.1%
Hubbard	3,095	3,185	4,004	4,919	1,824	58.9%	79	2.0%
Idanha (Marion Co.)	145	150	160	170	25	17.4%	1	0.7%
Jefferson	2,590	3,162	4,085	5,121	2,531	97.7%	110	3.0%
Mill City (Marion Co.)	328	330	343	367	39	12.0%	2	0.5%
Mt. Angel	3,755	4,013	4,434	4,977	1,222	32.5%	53	1.2%
Scotts Mills	300	388	476	581	281	93.7%	12	2.9%
St. Paul	410	441	586	747	337	82.2%	15	2.6%
Sublimity	2,255	2,677	3,304	4,004	1,749	77.6%	76	2.5%
Turner	1,690	1,970	2,753	3,664	1,974	116.8%	86	3.4%
Unincorporated Area	83,165	84,985	91,565	97,541	14,376	17.3%	625	0.7%

METHODS AND DATA FOR POPULATION FORECASTS

Consistent boundaries for the geographic parts of the study area (such as those for cities, city parts, and parts of the Salem-Keizer UGB), those defined in 2007, 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.

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

Two different types of primary demographic models were utilized to develop the population forecasts for Marion County and its sub-areas. For Marion County, each of its five largest cities, and the Salem-Keizer UGB, a cohort-component model was used. For each of the smaller cities and the 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.

COHORT-COMPONENT MODEL

A demographic projection model called the cohort-component model was used to forecast population residing in Marion County and in its larger sub-areas. Separate cohort-component models were developed for the County and each of the five largest cities and the Salem-Keizer UGB. These forecasts are 2000-based projections. However, adjustments were made to the model to incorporate the 2001-2007 PRC certified population estimates and capture trends from the most recent data available when developing forecasts for 2010 to 2030.

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 relocations (**migrations**) into or out of the area. 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 5 years. Applying appropriate age- and gender-specific rates of birth, death and migration to the existing population cohorts of the County would produce its future population.

The cohort-component method of forecasting population depends on the availability of accurate data on the age and sex 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 24) 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 2001-2007 annual population estimates; additional housing information and building permit and land use data were obtained from the Marion County GIS Division; the Oregon Center for Health Statistics provided information on fertility and mortality; the Oregon Department of Education furnished school enrollment data.

The 1990 and 2000 population and housing data from the Census were available at the census-block level of geography by age group and sex. The census blocks were allocated into jurisdictional boundaries defined in 2007 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 by 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 10 years between 1990 and 2000) to become the next older cohort. This process is repeated for each five-year age group and ten-year time interval between 2000 and 2030. 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 ten-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 40 years and over). Fertility

rates indicate how many children women in a given age group are likely to give birth to during each ten-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, ten 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 2007), 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 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 2030 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 what local planners predict will happen in the region.

Population in the five-year time intervals of 2015 and 2025 were forecasted by interpolation between 2010 and 2020, and between 2020 and 2030. Annual average growth rates calculated for each ten-year period were used in this interpolation method.

The development of the forecasts of population residing in Keizer, Salem, Silverton, Stayton, Woodburn, and the unincorporated areas in the Salem-Keizer 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 the smaller cities in Marion County and for the 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 also needed as the components of the housing unit model are housing units, occupancy rates, household size, and group quarters population. The number of housing units in an area is first projected, 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. This process is carried out for 5-year intervals throughout the forecast period. An area's total population is calculated in the housing unit method by multiplying the number of housing units by the occupancy rate and PPH and then adding to that product, the group quarters population.

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 Marion County GIS Division. 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 Marion County GIS Division.

Population and housing data from 1990 and 2000 Censuses were compiled for each geographic part in the study area. The allocation of data was made to the 2007 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 2007 with the recent housing data from Marion County GIS Division and PRC. The number units added to the inventory each year were extracted from the taxlot data using the 'year built' information, and from PRC's housing data.

The number of housing units is projected based on housing growth trends. Housing growth rates were calculated using the housing inventories and the amount of annual change they experienced. The housing trends were extrapolated into the future and applied to the 2007 housing inventory to predict the numbers of housing units in the future.

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 2006 ACS for Marion County.

Occupancy rates were predicted based on past trends detected from the 1990, 2000, 2005 and 2006 data. City rates for 2006 were estimated using a ratio method that assumes changes in housing occupancy in Marion County are related to change in its sub-areas. Rather than assume rates that widely fluctuate, 2005 and 2007 occupancy rates are those calculated for 2006; the rates in 2010 are assumed to be the same as in 2005 and 2007. The occupancy rates for 2015-2030 rates are a weighted average of 1990 and 2000 occupancy rates which are held constant beginning in 2015.

The 2007 PPHs were estimated based on past trends in the 1990, 2000, 2005 and 2006 data. They were calculated based on 2005 and 2006 ACS data for Marion County and using a ratio method that incorporates and assumes historical relationships between the County and its sub-areas, and that the changes in the sub-areas' PPH are related to changes

in the County's PPH. The 2007 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 46), 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.

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 in the share of the countywide group quarters population captured by each sub-area. The projected group quarters populations were then added to the forecasted housing unit populations to obtain total population forecasts.

SPLIT CITIES AND OTHER GEOGRAPHIC PARTS

For each city in our study area with boundaries crossing the County line, more than one forecast was produced. One forecast was developed for the city's geographic part located only in Marion County, and another was prepared for the entire city, which includes the part both Marion County and the part in Polk or Linn County. For Salem, whose area is partially located in Polk County, cohort-component models were utilized to develop its two forecasts. For Mill City, Idanha, and Gates (each with parts located in Linn County), forecasts were produced from the housing unit method.

The cohort-component model was used to forecast the population in the entirety of the Salem-Keizer UGB. In addition, a housing unit model was created for its unincorporated area in Polk County and one was created for its unincorporated area in Marion County.

The forecast for the Salem-Keizer UGB as a whole was used as the control for the sum of the forecasts for each of its parts (the Salem UGB unincorporated area in each of Marion and Polk Counties plus the cities of Keizer and Salem).

BIRTHS

Births for each year from 1989 to 2006 were assigned to current city 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 2007 to 2030 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 COUNTY-WIDE FORECAST AND THE FORECASTS FOR THE CITIES, THE SALEM-KEIZER UGB,AND THE UNINCORPORATED AREA

For our study, we developed separate population forecasts for each of the County's sub-areas in our study. 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 to which the sum of the individual forecasts for the cities (or forecasts for the parts of the cities located in Marion County) and 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 Salem, Keizer, and the unincorporated areas in the Salem-Keizer UGB were controlled to the Salem-Keizer UGB forecast. Additionally, the sum of the forecasts for Marion County's smaller cities and the unincorporated area (both in and out of the Salem-Keizer UGB in Marion County) were adjusted to equal the forecast for the County minus the sum of forecasts for the five largest cities for each 5-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.

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 get 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 Marion County from Oregon Department of Education, and demographic and socioeconomic data from the 2004-2006 ACS. Also, 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 results and to compare with the county-wide forecasts we developed.

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 Marion County's cities. This model is used for projecting population size for County sub-areas. It provides projections, by five years intervals, from 2005 to 2030.

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 Marion County's cities and unincorporated area, and that there is a link between population changes in Marion County and those in its cities and unincorporated area. In this model, we note that the proportion of Marion County's population that resides in each of the 20 cities has changed over time.

For the County projection in this model, we relied on the 2000-2040 population forecast for Marion County prepared by Oregon's Office of Economic Analysis (OEA). OEA's forecast assumes that annual population growth for the county increases from its recent level of about 1.1 percent (for the 2000-2005 period) to reach and maintain 1.3 percent during 2010-2020, and then diminish back down to 1.1 percent by 2030. We updated OEA's forecast by incorporating PRC's 2005 population estimate, but the patterns of change remained the same, and are similar to those produced by our county-wide cohort-component model.

We developed a simple **economic model** to produce an additional population forecast for Marion County. The model projects net-migration based on an assumed relationship between population change and economic patterns. We used employment projections for Marion County 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 in 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 Marion 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 Marion 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, not only for the smaller cities and unincorporated area in this study. 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 numbers of persons can be achieved. In the long-run, however, the local economy and conditions affecting populations is 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 500 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 (Marion County and each of its geographic sub-areas) are summarized and shown in Appendix 3. 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

Population Forecasts for Marion County and its Five Largest Cities

Three Forecast Scenarios

MEDIUM Growth Scenario, Populations for Marion County, its Five Largest Cities, and the Salem-Keizer UGB

	Historical----------→			Forecast---------->				
AREA	**1990**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
MARION CO	228,516	284,834	302,135	323,266	345,077	368,364	388,827	410,431
KEIZER	21,768	31,890	34,735	36,892	39,424	42,129	44,476	46,955
SALEM (MarCo)	95,667	119,373	126,525	133,568	142,491	150,798	158,157	165,824
SALEM	108,784	137,543	147,250	157,974	169,416	181,690	192,672	204,320
SILVERTON	5,932	7,610	8,230	9,552	10,484	11,507	12,255	13,052
STAYTON	5,029	6,829	7,505	8,171	8,938	9,777	10,538	11,359
WOODBURN	13,535	20,191	22,110	24,866	27,872	31,243	34,099	37,216
SALEM-KEIZER UGB	159,677	203,966	217,284	233,864	250,246	267,780	283,422	299,980

Ave. Annual Change in #	**Historical----------→**		**Forecast---------->					
AREA	**1990-00**	**2000-05**	**2005-10**	**2010-15**	**2015-20**	**2020-25**	**2025-30**	**2010-2030**
MARION CO	5,632	3,460	4,226	4,362	4,657	4,093	4,321	4,358
KEIZER	1,012	569	431	506	541	469	496	503
SALEM (MarCo)	2,371	1,430	1,409	1,785	1,661	1,472	1,533	1,613
SALEM	2,876	1,941	2,145	2,288	2,455	2,196	2,330	2,317
SILVERTON	168	124	264	186	205	150	159	175
STAYTON	180	135	133	153	168	152	164	159
WOODBURN	666	384	551	601	674	571	623	618
SALEM-KEIZER UGB	4,429	2,663	3,316	3,276	3,507	3,128	3,312	3,306

Ave. Annual Growth Rate	**Historical----------→**		**Forecast---------->					
AREA	**1990-00**	**2000-05**	**2005-10**	**2010-15**	**2015-20**	**2020-25**	**2025-30**	**2010-2030**
MARION CO	2.2%	1.2%	1.4%	1.3%	1.3%	1.1%	1.1%	1.2%
KEIZER	3.8%	1.7%	1.2%	1.3%	1.3%	1.1%	1.1%	1.2%
SALEM (MarCo)	2.2%	1.2%	1.1%	1.3%	1.1%	1.0%	0.9%	1.1%
SALEM	2.3%	1.4%	1.4%	1.4%	1.4%	1.2%	1.2%	1.3%
SILVERTON	2.5%	1.6%	3.0%	1.9%	1.9%	1.3%	1.3%	1.6%
STAYTON	3.1%	1.9%	1.7%	1.8%	1.8%	1.5%	1.5%	1.6%
WOODBURN	4.0%	1.8%	2.3%	2.3%	2.3%	1.7%	1.7%	2.0%
SALEM-KEIZER UGB	2.4%	1.3%	1.5%	1.4%	1.4%	1.1%	1.1%	1.2%

LOW Growth Scenario, Populations for Marion County, its Five Largest Cities, and the Salem-Keizer UGB

	Historical----------→			Forecast---------->				
AREA	**1990**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
MARION CO	228,516	284,834	302,135	318,204	333,980	350,538	363,608	377,165
KEIZER	21,768	31,890	34,735	36,067	37,551	39,096	40,275	41,491
SALEM (MarCo)	95,667	119,373	126,525	131,615	137,452	143,548	147,986	152,562
SALEM	108,784	137,543	147,250	155,655	164,061	172,922	180,258	187,905
SILVERTON	5,932	7,610	8,230	9,274	9,982	10,745	11,223	11,723
STAYTON	5,029	6,829	7,505	8,000	8,532	9,100	9,564	10,053
WOODBURN	13,535	20,191	22,110	24,504	27,014	29,780	31,947	34,272
SALEM-KEIZER UGB	159,677	203,966	217,284	230,590	242,365	254,741	264,893	275,449

Ave. Annual Change in #	**Historical----------→**		**Forecast---------->					
AREA	**1990-00**	**2000-05**	**2005-10**	**2010-15**	**2015-20**	**2020-25**	**2025-30**	**2010-2030**
MARION CO	5,632	3,460	3,214	3,155	3,312	2,614	2,711	2,948
KEIZER	1,012	569	266	297	309	236	243	271
SALEM (MarCo)	2,371	1,430	1,018	1,167	1,219	888	915	1,047
SALEM	2,876	1,941	1,681	1,681	1,772	1,467	1,529	1,613
SILVERTON	168	124	209	142	152	96	100	122
STAYTON	180	135	99	106	113	93	98	103
WOODBURN	666	384	479	502	553	433	465	488
SALEM-KEIZER UGB	4,429	2,663	2,661	2,355	2,475	2,030	2,111	2,243

Ave. Annual Growth Rates	**Historical----------→**		**Forecast---------->					
AREA	**1990-00**	**2000-05**	**2005-10**	**2010-15**	**2015-20**	**2020-25**	**2025-30**	**2010-2030**
MARION CO	2.2%	1.2%	1.0%	1.0%	1.0%	0.7%	0.7%	0.8%
KEIZER	3.8%	1.7%	0.8%	0.8%	0.8%	0.6%	0.6%	0.7%
SALEM (MarCo)	2.2%	1.2%	0.8%	0.9%	0.9%	0.6%	0.6%	0.7%
SALEM	2.3%	1.4%	1.1%	1.1%	1.1%	0.8%	0.8%	0.9%
SILVERTON	2.5%	1.6%	2.4%	1.5%	1.5%	0.9%	0.9%	1.2%
STAYTON	3.1%	1.9%	1.3%	1.3%	1.3%	1.0%	1.0%	1.1%
WOODBURN	4.0%	1.8%	2.1%	1.9%	1.9%	1.4%	1.4%	1.7%
SALEM-KEIZER UGB	2.4%	1.3%	1.2%	1.0%	1.0%	0.8%	0.8%	0.9%

HIGH Growth Scenario, Populations for Marion County, its Five Largest Cities, and the Salem-Keizer UGB

	Historical----------→			Forecast---------->				
AREA	**1990**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
MARION CO	228,516	284,834	302,135	328,305	356,293	386,667	414,521	444,381
KEIZER	21,768	31,890	34,735	37,481	40,729	44,260	47,402	50,769
SALEM (MarCo)	95,667	119,373	126,525	135,561	146,466	158,248	168,580	179,586
SALEM	108,784	137,543	147,250	160,294	174,819	190,659	205,389	221,257
SILVERTON	5,932	7,610	8,230	9,845	11,010	12,313	13,363	14,502
STAYTON	5,029	6,829	7,505	8,344	9,331	10,434	11,521	12,721
WOODBURN	13,535	20,191	22,110	25,305	29,034	33,313	37,279	41,718
SALEM-KEIZER UGB	159,677	203,966	217,284	237,207	258,054	280,734	302,024	324,929

Ave. Annual Change in #	**Historical----------→**		**Forecast---------->					
AREA	**1990-00**	**2000-05**	**2005-10**	**2010-15**	**2015-20**	**2020-25**	**2025-30**	**2010-2030**
MARION CO	5,632	3,460	5,234	5,598	6,075	5,571	5,972	5,804
KEIZER	1,012	569	549	650	706	629	673	664
SALEM (MarCo)	2,371	1,430	1,807	2,181	2,356	2,066	2,201	2,201
SALEM	2,876	1,941	2,609	2,905	3,168	2,946	3,174	3,048
SILVERTON	168	124	323	233	261	210	228	233
STAYTON	180	135	168	197	221	217	240	219
WOODBURN	666	384	639	746	856	793	888	821
SALEM-KEIZER UGB	4,429	2,663	3,985	4,169	4,536	4,258	4,581	4,386

Ave. Annual Growth Rates	**Historical----------→**		**Forecast---------->					
AREA	**1990-00**	**2000-05**	**2005-10**	**2010-15**	**2015-20**	**2020-25**	**2025-30**	**2010-2030**
MARION CO	2.2%	1.2%	1.7%	1.6%	1.6%	1.4%	1.4%	1.5%
KEIZER	3.8%	1.7%	1.5%	1.7%	1.7%	1.4%	1.4%	1.5%
SALEM (MarCo)	2.2%	1.2%	1.4%	1.5%	1.5%	1.3%	1.3%	1.4%
SALEM	2.3%	1.4%	1.7%	1.7%	1.7%	1.5%	1.5%	1.6%
SILVERTON	2.5%	1.6%	3.6%	2.2%	2.2%	1.6%	1.6%	1.9%
STAYTON	3.1%	1.9%	2.1%	2.2%	2.2%	2.0%	2.0%	2.1%
WOODBURN	4.0%	1.8%	2.7%	2.7%	2.7%	2.2%	2.2%	2.5%
SALEM-KEIZER UGB	2.4%	1.3%	1.8%	1.7%	1.7%	1.5%	1.5%	1.6%

APPENDIX 2

Population Forecasts
Marion County's Fifteen Smaller Cities

Populations for Marion County's Fifteen Smaller Cities and Unincorporated Area

	Historical----------→			Forecast---------->				
AREA	**1990**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**
AUMSVILLE	1,660	2,989	3,130	3,448	3,837	4,238	4,636	5,063
AURORA	597	664	785	1,008	1,083	1,233	1,306	1,382
DETROIT	331	262	255	265	322	340	355	371
DONALD	314	607	750	1,083	1,145	1,359	1,660	2,034
GATES (MarCo)	466	437	450	465	468	479	483	487
GATES	501	473	495	513	518	535	542	550
GERVAIS	999	1,923	2,240	2,647	3,071	3,554	4,055	4,597
HUBBARD	1,901	2,458	2,855	3,185	3,570	4,004	4,486	4,919
IDANHA (MarCo)	160	131	145	150	154	160	163	170
IDANHA	264	210	230	237	249	259	266	279
JEFFERSON	1,810	2,488	2,515	3,162	3,598	4,085	4,583	5,121
MILL CITY (MarCo)	309	316	315	330	334	343	352	367
MILL CITY	1,537	1,516	1,555	1,629	1,644	1,703	1,747	1,792
MT ANGEL	2,794	3,128	3,630	4,013	4,272	4,434	4,697	4,977
SCOTTS MILLS	286	316	330	388	425	476	526	581
ST. PAUL	322	352	415	441	510	586	663	747
SUBLIMITY	1,487	2,139	2,225	2,677	2,963	3,304	3,633	4,004
TURNER	1,266	1,175	1,570	1,970	2,334	2,753	3,188	3,664
MARION CO (UNICORP)	71,882	79,555	81,420	84,985	87,783	91,565	94,516	97,541

Ave. Annual Change in #	Historical----------→		Forecast---------->					
AREA	**1990-00**	**2000-05**	**2005-10**	**2010-15**	**2015-20**	**2020-25**	**2025-30**	**2010-2030**
AUMSVILLE	133	28	64	78	80	80	85	81
AURORA	7	24	45	15	30	15	15	19
DETROIT	-7	-1	2	11	3	3	3	5
DONALD	29	29	67	12	43	60	75	48
GATES (MarCo)	-3	3	3	0	2	1	1	1
GATES	-3	4	4	1	3	1	2	2
GERVAIS	92	63	81	85	97	100	108	98
HUBBARD	56	79	66	77	87	96	87	87
IDANHA (MarCo)	-3	3	1	1	1	1	1	1
IDANHA	-5	4	1	2	2	1	3	2
JEFFERSON	68	5	129	87	97	100	108	98
MILL CITY (MarCo)	1	0	3	1	2	2	3	2
MILL CITY	-2	8	15	3	12	9	9	8
MT ANGEL	33	100	77	52	33	53	56	48
SCOTTS MILLS	3	3	12	8	10	10	11	10
ST. PAUL	3	13	5	14	15	16	17	15
SUBLIMITY	65	17	90	57	68	66	74	66
TURNER	-9	79	80	73	84	87	95	85
MARION CO (UNICORP)	767	373	713	560	756	590	605	628

Ave. Annual Growth Rates	Historical----------→		Forecast---------->					
AREA	**1990-00**	**2000-05**	**2005-10**	**2010-15**	**2015-20**	**2020-25**	**2025-30**	**2010-2030**
AUMSVILLE	5.9%	0.9%	1.9%	2.1%	2.0%	1.8%	1.8%	1.9%
AURORA	1.1%	3.3%	5.0%	1.4%	2.6%	1.2%	1.1%	1.6%
DETROIT	-2.3%	-0.5%	0.8%	3.9%	1.0%	0.9%	0.9%	1.7%
DONALD	6.6%	4.2%	7.3%	1.1%	3.4%	4.0%	4.1%	3.2%
GATES (MarCo)	-0.6%	0.6%	0.7%	0.1%	0.5%	0.2%	0.2%	0.2%
GATES	-0.6%	0.9%	0.7%	0.2%	0.6%	0.3%	0.3%	0.3%
GERVAIS	6.5%	3.1%	3.3%	3.0%	2.9%	2.6%	2.5%	2.8%
HUBBARD	2.6%	3.0%	2.2%	2.3%	2.3%	2.3%	1.8%	2.2%
IDANHA (MarCo)	-2.0%	2.0%	0.7%	0.4%	0.8%	0.4%	0.9%	0.6%
IDANHA	-2.3%	1.8%	0.6%	0.9%	0.8%	0.5%	1.0%	0.8%
JEFFERSON	3.2%	0.2%	4.6%	2.6%	2.5%	2.3%	2.2%	2.4%
MILL CITY (MarCo)	0.2%	-0.1%	0.9%	0.3%	0.5%	0.5%	0.9%	0.5%
MILL CITY	-0.1%	0.5%	0.9%	0.2%	0.7%	0.5%	0.5%	0.5%
MT ANGEL	1.1%	3.0%	2.0%	1.3%	0.7%	1.2%	1.2%	1.1%
SCOTTS MILLS	1.0%	-1.0%	5.1%	1.9%	2.2%	2.0%	2.0%	2.0%
ST. PAUL	0.9%	3.3%	1.2%	2.9%	2.8%	2.5%	2.4%	2.6%
SUBLIMITY	3.6%	0.8%	3.7%	2.0%	2.2%	1.9%	1.9%	2.0%
TURNER	-0.7%	5.8%	4.5%	3.4%	3.3%	2.9%	2.8%	3.1%
MARION CO (UNICORP)	1.0%	0.5%	0.8%	0.6%	0.8%	0.6%	0.6%	0.7%

APPENDIX 3

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 Marion County and one for each of its cities, unincorporated area, and the Salem-Keizer UGB. For cities that are located in another county besides Marion, an additional table for each is included that shows data for the entire city as well as the portion that is in Marion County.

Population and housing data and rates for 1990 and 2000 are from decennial censuses, and for 2005 are estimated;
1990-2005 birth data and 2000-2007 enrollment data are from administrative records;
All numbers for years 2010-2030 are predicted.

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; **Emplmnt Projections** = employment projections.

Marion 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*	Emplmnt Projections**
1990	228,516			14.3%	8.0%	83,490	86,866			96.1%	2.60	11,414	3,850		
2000	284,834	5,632	2.2%	12.4%	17.1%	101,650	108,183	2,132	2.2%	94.0%	2.70	10,588	4,528	52,271	
2005	302,135	3,460	1.2%	11.6%	21.3%	108,051	114,931	1,350	1.2%	94.0%	2.69	11,047	4,662	56,899	115,988
2010	323,266	4,226	1.4%			114,213	121,486	1,311	1.1%	94.0%	2.73	11,500		59,144	
2015	345,077	4,362	1.3%			122,222	129,047	1,512	1.2%	94.7%	2.73	11,500			132,632
2020	368,364	4,657	1.3%			130,568	137,859	1,762	1.3%	94.7%	2.73	12,000			
2025	388,827	4,093	1.1%			138,062	145,771	1,582	1.1%	94.7%	2.73	12,000			
2030	410,431	4,321	1.1%			145,787	153,927	1,631	1.1%	94.7%	2.73	12,500			

*Countywide public school enrollment reported here.; 2007 enrollment number is placed in '2010' cell.

**# forecast Jobs in 2006 and in 2016 in Marion County.

Aumsville	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	1,660			4.7%	7.4%	517	551			93.8%	3.21	0	36	
2000	2,989	133	5.9%	5.9%	11.4%	957	1,020	47	6.2%	93.8%	3.12	0	45	2,199
2005	3,130	28	0.9%			1,002	1,077	11	1.1%	93.1%	3.12	2	34	2,245
2010	3,448	64	1.9%			1,119	1,202	25	2.2%	93.1%	3.08	2		2,254
2015	3,837	78	2.1%			1,247	1,318	23	1.8%	94.7%	3.08	2		
2020	4,238	80	2.0%			1,378	1,457	28	2.0%	94.7%	3.07	2		
2025	4,636	80	1.8%			1,509	1,595	28	1.8%	94.7%	3.07	2		
2030	5,063	85	1.8%			1,650	1,743	30	1.8%	94.7%	3.07	2		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Aurora	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	597			13.9%	3.6%	226	238			95.0%	2.64	0	10	
2000	664	7	1.1%	13.7%	6.1%	253	265	3	1.06%	95.4%	2.63	0	10	1,716
2005	785	24	3.3%			299	311	9	3.20%	96.1%	2.63	0	11	1,895
2010	1,008	45	5.0%			383	398	17	4.96%	96.1%	2.63	0		1,945
2015	1,083	15	1.4%			412	432	7	1.65%	95.3%	2.63	0		
2020	1,233	30	2.6%			469	492	12	2.60%	95.3%	2.63	0		
2025	1,306	15	1.2%			497	522	6	1.16%	95.3%	2.63	0		
2030	1,382	15	1.1%			526	553	6	1.14%	95.3%	2.62	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Detroit	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	331			10.9%	2.1%	145	319			45.5%	2.28	0	9	
2000	262	-7	-2.3%	16.4%	3.8%	119	383	6	1.83%	31.1%	2.20	0	2	718
2005	255	-1	-0.5%			116	373	-2	-0.53%	31.1%	2.20	0	2	681
2010	265	2	0.8%			121	388	3	0.82%	31.1%	2.20	0		634
2015	322	11	3.9%			147	406	3	0.87%	36.2%	2.19	0		
2020	340	3	1.0%			155	428	4	1.06%	36.2%	2.19	0		
2025	355	3	0.9%			162	448	4	0.90%	36.2%	2.19	0		
2030	371	3	0.9%			169	468	4	0.89%	36.2%	2.19	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Donald	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	314			8.7%	18.7%	112	118			94.9%	2.81	0	1	
2000	607	29	6.6%	5.8%	11.2%	201	234	12	6.90%	85.6%	3.03	0	1	1,716
2005	750	29	4.2%			248	282	10	3.69%	88.0%	3.02	0	5	1,895
2010	1,083	67	7.3%			359	408	25	7.40%	88.0%	3.02	0		1,945
2015	1,145	12	1.1%			380	433	5	1.17%	87.9%	3.01	0		
2020	1,359	43	3.4%			451	514	16	3.43%	87.9%	3.01	0		
2025	1,660	60	4.0%			552	628	23	4.02%	87.9%	3.01	0		
2030	2,034	75	4.1%			677	770	28	4.08%	87.9%	3.01	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Gates	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	501			21.4%	9.6%	202	228			88.6%	2.46	5	8	
2000	473	-3	-0.6%	20.7%	6.3%	213	262	3	1.4%	81.3%	2.22	0	2	718
2005	495	4	0.9%			224	273	2	0.9%	81.9%	2.21	0	7	681
2010	514	4	0.7%			232	283	2	0.7%	81.9%	2.21	0		634
2015	518	1	0.2%			235	278	-1	-0.4%	84.0%	2.21	0		
2020	535	3	0.6%			244	288	2	0.7%	84.0%	2.20	0		
2025	542	1	0.3%			247	292	1	0.3%	84.0%	2.19	0		
2030	551	2	0.3%			252	298	1	0.4%	84.0%	2.18	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Gates (MarCo)	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	466			22.1%	10.4%	187	212			88.5%	2.46	5	7	
2000	437	-3	-0.6%	20.3%	6.9%	192	241	3	1.3%	79.7%	2.27	0	2	718
2005	450	3	0.6%			198	248	1	0.5%	79.9%	2.27	0	7	681
2010	465	3	0.7%			203	254	1	0.5%	79.9%	2.30	0		634
2015	468	0	0.1%			204	246	-2	-0.6%	82.9%	2.29	0		
2020	479	2	0.5%			209	252	1	0.5%	82.9%	2.29	0		
2025	483	1	0.2%			211	254	0	0.2%	82.9%	2.29	0		
2030	487	1	0.2%			213	257	1	0.2%	82.9%	2.29	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Gervais	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	999			10.0%	52.7%	252	259			97.3%	3.84	32	62	
2000	1,923	92	6.5%	4.5%	66.8%	428	451	19	5.6%	94.8%	4.44	26	76	1,102
2005	2,240	63	3.1%			505	532	16	3.3%	95.0%	4.43	0	58	1,096
2010	2,647	81	3.3%			609	641	22	3.7%	95.0%	4.34	0		1,096
2015	3,071	85	3.0%			708	742	20	2.9%	95.5%	4.34	0		
2020	3,554	97	2.9%			820	859	23	2.9%	95.5%	4.33	0		
2025	4,055	100	2.6%			936	981	24	2.6%	95.5%	4.33	0		
2030	4,597	108	2.5%			1,062	1,113	26	2.5%	95.5%	4.33	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Hubbard	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	1,901			10.9%	20.6%	642	658			97.7%	2.94	14	61	
2000	2,458	56	2.6%	7.3%	32.6%	748	794	14	1.9%	94.2%	3.29	0	45	1,716
2005	2,855	79	3.0%			869	919	25	2.9%	94.6%	3.28	0	65	1,895
2010	3,185	66	2.2%			956	1,011	18	1.9%	94.6%	3.33	0		1,945
2015	3,570	77	2.3%			1,073	1,124	23	2.1%	95.5%	3.33	0		
2020	4,004	87	2.3%			1,205	1,262	28	2.3%	95.5%	3.32	0		
2025	4,486	96	2.3%			1,351	1,415	31	2.3%	95.5%	3.32	0		
2030	4,919	87	1.8%			1,482	1,553	28	1.9%	95.5%	3.32	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Idanha	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	264			11.1%	4.5%	96	103			93.2%	2.75	0	0	
2000	210	-5	-2.3%	9.0%	5.1%	87	112	1	0.9%	77.8%	2.42	0	0	718
2005	230	4	1.8%			95	120	2	1.4%	79.2%	2.42	0	3	681
2010	237	1	0.6%			98	124	1	0.6%	79.2%	2.43	0		634
2015	249	2	0.9%			103	123	0	-0.1%	83.6%	2.42	0		
2020	259	2	0.8%			107	128	1	0.8%	83.6%	2.42	0		
2025	266	1	0.5%			110	132	1	0.6%	83.6%	2.41	0		
2030	279	3	1.0%			116	139	1	1.0%	83.6%	2.41	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Idanha (MarCo)	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	160			12.5%	4.9%	60	66			90.7%	2.67	0	0	
2000	131	-3	-2.0%	8.9%	6.8%	53	67	0	0.1%	79.2%	2.48	0	0	718
2005	145	3	2.0%			58	74	1	2.0%	79.5%	2.48	0	2	681
2010	150	1	0.7%			60	76	0	0.5%	79.5%	2.50	0		634
2015	154	1	0.4%			61	73	0	-0.6%	83.8%	2.50	0		
2020	160	1	0.8%			64	77	1	0.8%	83.8%	2.50	0		
2025	163	1	0.4%			65	78	0	0.4%	83.8%	2.50	0		
2030	170	1	0.9%			68	82	1	0.9%	83.8%	2.49	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Jefferson	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	1,810			9.0%	11.6%	600	630			95.2%	3.01	3	41	
2000	2,488	68	3.2%	7.2%	20.7%	818	886	26	3.4%	92.3%	3.04	0	51	981
2005	2,515	5	0.2%			827	894	2	0.2%	92.5%	3.04	0	48	877
2010	3,162	129	4.6%			1,038	1,122	46	4.5%	92.5%	3.05	0		930
2015	3,598	87	2.6%			1,183	1,269	29	2.5%	93.2%	3.04	0		
2020	4,085	97	2.5%			1,344	1,442	35	2.6%	93.2%	3.04	0		
2025	4,583	100	2.3%			1,509	1,619	35	2.3%	93.2%	3.04	0		
2030	5,121	108	2.2%			1,687	1,810	38	2.2%	93.2%	3.03	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Keizer	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	21,768			14.1%	5.7%	8,288	8,529			97.2%	2.59	307	395	
2000	31,890	1,012	3.8%	12.1%	12.3%	11,978	12,635	411	3.9%	94.8%	2.64	279	504	35,108
2005	34,735	569	1.7%			13,028	13,742	222	1.7%	94.8%	2.63	416	557	38,873
2010	36,892	431	1.2%			13,702	14,454	142	1.0%	94.8%	2.66	402		40,144
2015	39,424	506	1.3%			14,674	15,364	182	1.2%	95.5%	2.66	402		
2020	42,129	541	1.3%			15,701	16,439	215	1.4%	95.5%	2.66	419		
2025	44,476	469	1.1%			16,598	17,378	188	1.1%	95.5%	2.65	419		
2030	46,955	496	1.1%			17,540	18,363	197	1.1%	95.5%	2.65	437		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Mill 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	1,537			15.4%	6.7%	570	609			93.6%	2.69	0	41	
2000	1,516	-2	-0.1%	13.4%	11.4%	551	620	1	0.2%	88.9%	2.75	0	26	718
2005	1,555	8	0.5%			566	639	4	0.6%	88.5%	2.75	0	20	681
2010	1,629	15	0.9%			613	692	11	1.6%	88.5%	2.66	0		634
2015	1,644	3	0.2%			619	682	-2	-0.3%	90.7%	2.65	0		
2020	1,703	12	0.7%			642	707	5	0.7%	90.7%	2.65	0		
2025	1,747	9	0.5%			659	726	4	0.5%	90.7%	2.65	0		
2030	1,792	9	0.5%			677	746	4	0.5%	90.7%	2.65	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Mill City (MarCo)	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	309			12.2%	14.3%	109	121			89.5%	2.85	0	7	
2000	316	1	0.2%	12.5%	10.9%	107	135	1	1.0%	79.5%	2.95	0	5	718
2005	315	0	-0.1%			107	134	0	-0.1%	79.8%	2.95	0	5	681
2010	330	3	0.9%			114	143	2	1.4%	79.8%	2.88	0		634
2015	334	1	0.3%			116	140	-1	-0.6%	83.3%	2.88	0		
2020	343	2	0.5%			119	144	1	0.6%	83.3%	2.87	0		
2025	352	2	0.5%			123	147	1	0.5%	83.3%	2.87	0		
2030	367	3	0.9%			128	154	1	0.9%	83.3%	2.87	0		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Mt Angel	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	2,794			20.8%	20.2%	801	813			98.5%	2.93	447	53	
2000	3,128	33	1.1%	18.2%	27.7%	1,062	1,128	32	3.3%	94.2%	2.75	209	46	754
2005	3,630	100	3.0%			1,212	1,287	32	2.6%	94.2%	2.72	337	62	799
2010	4,013	77	2.0%			1,376	1,460	35	2.5%	94.2%	2.68	325		793
2015	4,272	52	1.3%			1,385	1,449	-2	-0.2%	95.6%	2.85	325		
2020	4,434	33	0.7%			1,439	1,505	11	0.8%	95.6%	2.85	340		
2025	4,697	53	1.2%			1,532	1,603	20	1.3%	95.6%	2.84	340		
2030	4,977	56	1.2%			1,626	1,701	20	1.2%	95.6%	2.84	354		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Salem	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	108,784			14.5%	6.1%	41,304	42,970			96.1%	2.41	9,082	1,792	
2000	137,543	2,876	2.3%	12.4%	14.6%	50,940	54,043	1,107	2.3%	94.3%	2.53	8,832	2,109	35,108
2005	147,250	1,941	1.4%	11.6%	21.3%	54,816	58,111	814	1.5%	94.3%	2.52	8,868	2,106	38,873
2010	157,974	2,145	1.4%			58,384	61,894	757	1.3%	94.3%	2.54	9,578		40,144
2015	169,416	2,288	1.4%			62,990	66,395	900	1.4%	94.9%	2.54	9,578		
2020	181,690	2,455	1.4%			67,779	71,440	1,009	1.5%	94.9%	2.53	9,994		
2025	192,672	2,196	1.2%			72,210	76,109	934	1.3%	94.9%	2.53	9,994		
2030	204,320	2,330	1.2%			76,758	80,899	958	1.2%	94.9%	2.53	10,411		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Salem (MarCo)	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	95,667			13.8%	6.2%	36,070	37,528			96.1%	2.41	8,758	1,573	
2000	119,373	2,371	2.2%	11.5%	15.4%	43,764	46,443	891	2.1%	94.2%	2.54	8,288	1,869	35,108
2005	126,525	1,430	1.2%			46,596	49,412	594	1.2%	94.3%	2.53	8,445	1,803	38,873
2010	133,568	1,409	1.1%			48,560	51,496	417	0.8%	94.3%	2.57	8,988		40,144
2015	142,491	1,785	1.3%			52,112	54,936	688	1.3%	94.9%	2.56	8,988		
2020	150,798	1,661	1.1%			55,259	58,253	663	1.2%	94.9%	2.56	9,379		
2025	158,157	1,472	1.0%			58,181	61,332	616	1.0%	94.9%	2.56	9,379		
2030	165,824	1,533	0.9%			61,079	64,383	610	1.0%	94.9%	2.55	9,770		

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Scotts Mills	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	286			8.5%	2.1%	91	94			96.9%	3.12	0	10	
2000	316	3	1.0%	12.5%	3.5%	109	109	1	1.4%	100.0%	2.91	0	7	3,664
2005	330	3	0.9%			115	115	1	1.1%	100.0%	2.87	0	4	3,604
2010	388	12	3.2%			135	135	4	3.2%	100.0%	2.88	0		3,610
2015	425	8	1.9%			148	150	3	2.1%	98.8%	2.87	0		
2020	476	10	2.2%			166	168	4	2.3%	98.8%	2.87	0		
2025	526	10	2.0%			184	186	4	2.0%	98.8%	2.87	0		
2030	581	11	2.0%			203	205	4	2.0%	98.8%	2.87	0		

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Silverton	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	5,932			18.6%	6.1%	2,237	2,331			96.0%	2.60	114	104	
2000	7,610	168	2.5%	13.4%	11.3%	2,775	2,937	61	2.3%	94.5%	2.71	80	130	3,664
2005	8,230	124	1.6%			3,000	3,174	47	1.6%	94.5%	2.71	105	128	3,604
2010	9,552	264	3.0%			3,493	3,695	104	3.0%	94.5%	2.71	101		3,610
2015	10,484	186	1.9%			3,843	4,046	70	1.8%	95.0%	2.70	101		
2020	11,507	205	1.9%			4,224	4,447	80	1.9%	95.0%	2.70	106		
2025	12,255	150	1.3%			4,504	4,743	59	1.3%	95.0%	2.70	106		
2030	13,052	159	1.3%			4,802	5,056	63	1.3%	95.0%	2.69	110		

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St. Paul	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	322			11.8%	26.0%	104	105			99.0%	3.09	0	10	
2000	352	3	0.9%	14.1%	25.8%	122	127	2	1.9%	96.1%	2.88	0	6	222
2005	415	13	3.3%			144	150	5	3.4%	95.9%	2.88	0	3	228
2010	441	5	1.2%			156	162	2	1.6%	95.9%	2.83	0		234
2015	510	14	2.9%			181	186	5	2.7%	97.1%	2.83	0		
2020	586	15	2.8%			207	214	6	2.8%	97.1%	2.82	0		
2025	663	16	2.5%			235	242	6	2.5%	97.1%	2.82	0		
2030	747	17	2.4%			265	273	6	2.4%	97.1%	2.82	0		

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Stayton	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	5,029			13.2%	3.1%	1,870	1,922			97.3%	2.69	0	90	
2000	6,829	180	3.1%	12.3%	9.2%	2,523	2,658	74	3.2%	94.9%	2.71	5	119	2,339
2005	7,505	135	1.9%			2,776	2,922	53	1.9%	95.0%	2.70	0	118	2,452
2010	8,171	133	1.7%			2,973	3,129	41	1.4%	95.0%	2.75	0		2,466
2015	8,938	153	1.8%			3,256	3,404	55	1.7%	95.7%	2.74	0		
2020	9,777	168	1.8%			3,566	3,727	65	1.8%	95.7%	2.74	0		
2025	10,538	152	1.5%			3,846	4,021	59	1.5%	95.7%	2.74	0		
2030	11,359	164	1.5%			4,149	4,337	63	1.5%	95.7%	2.74	0		

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Sublimity	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	1,487			31.9%	0.9%	493	502			98.2%	2.57	221	28	
2000	2,139	65	3.6%	29.4%	1.6%	684	709	21	3.4%	96.5%	2.66	317	15	2,339
2005	2,225	17	0.8%			709	736	5	0.8%	96.3%	2.61	377	22	2,452
2010	2,677	90	3.7%			944	981	49	5.7%	96.3%	2.45	364		2,466
2015	2,963	57	2.0%			1,062	1,095	23	2.2%	97.0%	2.45	364		
2020	3,304	68	2.2%			1,196	1,233	28	2.4%	97.0%	2.44	380		
2025	3,633	66	1.9%			1,332	1,373	28	2.1%	97.0%	2.44	380		
2030	4,004	74	1.9%			1,478	1,524	30	2.1%	97.0%	2.44	396		

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Turner	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	1,266			18.6%	2.3%	438	455			96.3%	2.78	47	20	
2000	1,175	-9	-0.7%	22.5%	4.3%	482	513	6	1.2%	94.1%	2.43	3	21	2,199
2005	1,570	79	5.8%			630	667	31	5.3%	94.5%	2.42	44	14	2,245
2010	1,970	80	4.5%			796	843	35	4.7%	94.5%	2.42	42		2,254
2015	2,334	73	3.4%			948	999	31	3.4%	94.9%	2.42	42		
2020	2,753	84	3.3%			1,122	1,182	37	3.4%	94.9%	2.41	44		
2025	3,188	87	2.9%			1,303	1,373	38	3.0%	94.9%	2.41	44		
2030	3,664	95	2.8%			1,500	1,581	42	2.8%	94.9%	2.41	46		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Woodburn	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	13,535			26.8%	31.2%	4,823	4,957			97.3%	2.70	492	355	
2000	20,191	666	4.0%	18.1%	49.9%	6,316	6,870	191	3.3%	91.9%	3.12	511	413	4,186
2005	22,110	384	1.8%			6,971	7,585	143	2.0%	91.9%	3.11	450	526	4,830
2010	24,866	551	2.3%			7,346	7,993	82	1.0%	91.9%	3.33	434		5,121
2015	27,872	601	2.3%			8,261	8,822	166	2.0%	93.7%	3.32	434		
2020	31,243	674	2.3%			9,280	9,909	218	2.3%	93.7%	3.32	453		
2025	34,099	571	1.7%			10,149	10,837	186	1.8%	93.7%	3.32	453		
2030	37,216	623	1.7%			11,093	11,844	202	1.8%	93.7%	3.31	472		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Marion Co (unicorp)	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	71,882			12.4%	5.9%	25,426	26,460			96.1%	2.79	975	962	
2000	79,555	767	1.0%	12.2%	13.3%	27,960	29,581	312	1.1%	94.5%	2.81	870	1,161	52,271
2005	81,420	373	0.5%			28,639	30,298	143	0.5%	94.5%	2.81	870	1,188	56,899
2010	84,985	713	0.9%			29,770	31,495	239	0.8%	94.5%	2.83	840		59,144
2015	87,783	560	0.6%			30,821	32,413	184	0.6%	95.1%	2.82	840		
2020	91,565	756	0.8%			32,194	33,856	289	0.9%	95.1%	2.82	877		
2025	94,516	590	0.6%			33,283	34,998	228	0.7%	95.1%	2.81	877		
2030	97,541	605	0.6%			34,387	36,158	232	0.7%	95.1%	2.81	913		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

Salem-Keizer 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	159,677			14.1%	5.8%	60,635	62,911			96.4%	2.48	9,437	2,676	
2000	203,966	4,429	2.4%	12.2%	14.7%	75,513	79,983	1,707	2.4%	94.4%	2.58	9,331	3,240	35,108
2005	217,284	2,663	1.3%			80,734	85,467	1,097	1.3%	94.5%	2.56	10,557	3,380	38,873
2010	233,864	3,316	1.5%			86,246	91,304	1,167	1.3%	94.5%	2.59	10,193		40,144
2015	250,246	3,276	1.4%			92,724	97,545	1,248	1.3%	95.1%	2.59	10,193		
2020	267,780	3,507	1.4%			99,485	104,656	1,422	1.4%	95.1%	2.58	10,636		
2025	283,422	3,128	1.1%			105,672	111,161	1,301	1.2%	95.1%	2.58	10,636		
2030	299,980	3,312	1.1%			112,062	117,877	1,343	1.2%	95.1%	2.58	11,079		

*Total public school enrolled in school district(s) in which area is located; 2007 enrollment number is placed in '2010' cell.

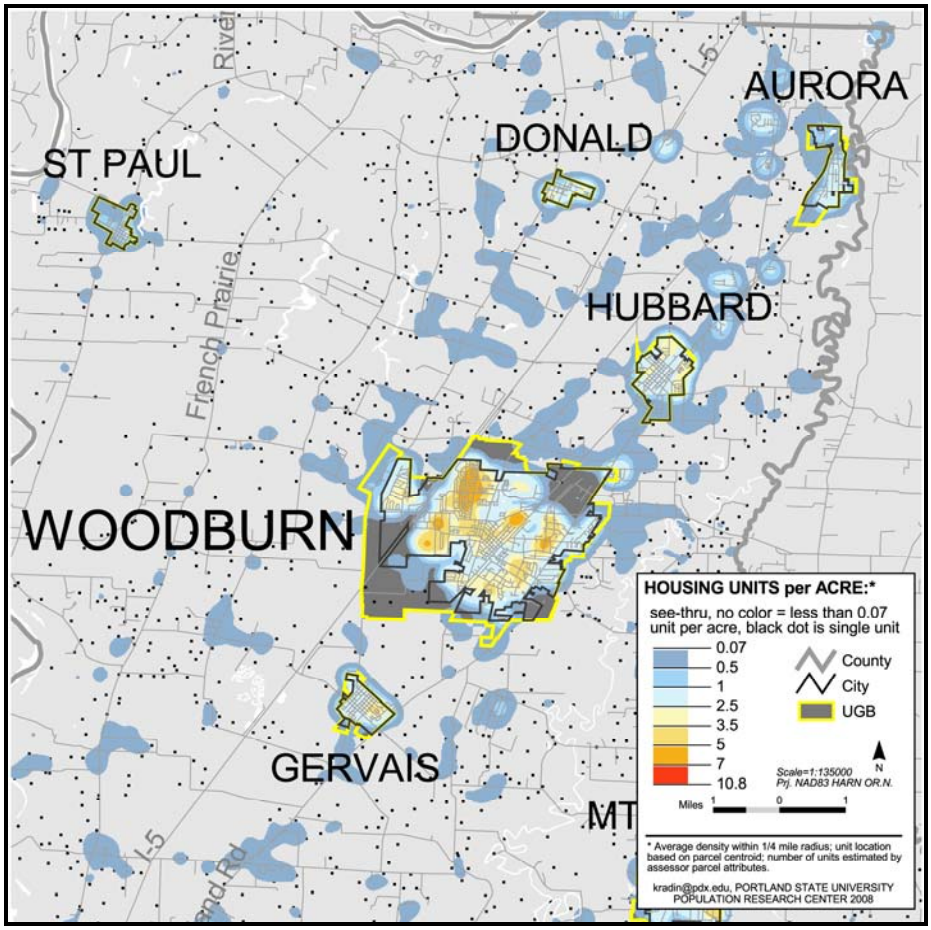
APPENDIX 4

Maps of Housing Unit Density in Marion County Cities & Urban Growth Areas

Housing Density Maps (2007)
Marion County Cities & Urban Growth Areas

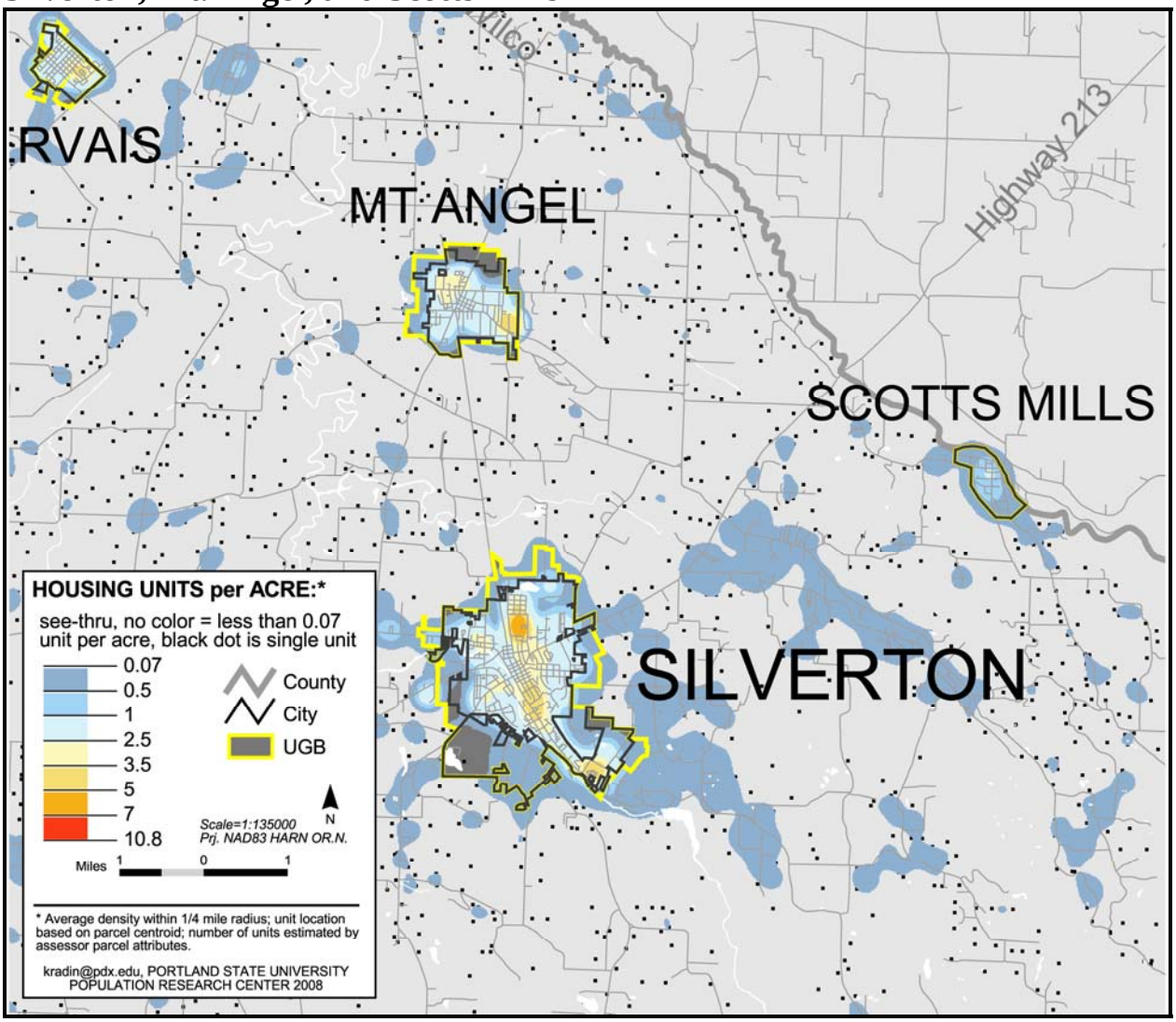
The following maps show the density distribution of existing housing in and around the cities of Marion County. Depicted at the same scale, four of the five images group cities that are close to one other, which allows for easy comparison of sizes and densities. Images start at the north side of the county, along I-5, then work their way south and east to Mill City, Gates, Detroit and Idanha. These latter four cities are mapped at a larger scale and grouped together in separate panes. Urban Growth Boundaries (yellow lines) are graphically drawn beneath city boundaries (thinner black lines), and the urban growth areas are filled-in dark grey. 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 0.07 units per acre, on average) have no color and they are see-through. Legends use the same classes and colors from map to map. Classes are separated by break values. The first class is 0 to 0.07 units per acre (no color, see-through), the second class is 0.07 to 0.5 units per acre (dark, flat blue), the third class is 0.5 to 1 unit per acre (lighter blue), and so on. Lower density colors are 'cool', such as blue; higher densities colors are 'hot', such as orange and red. Individual housing units in rural locations are represented with black dots.

Woodburn Area Cities



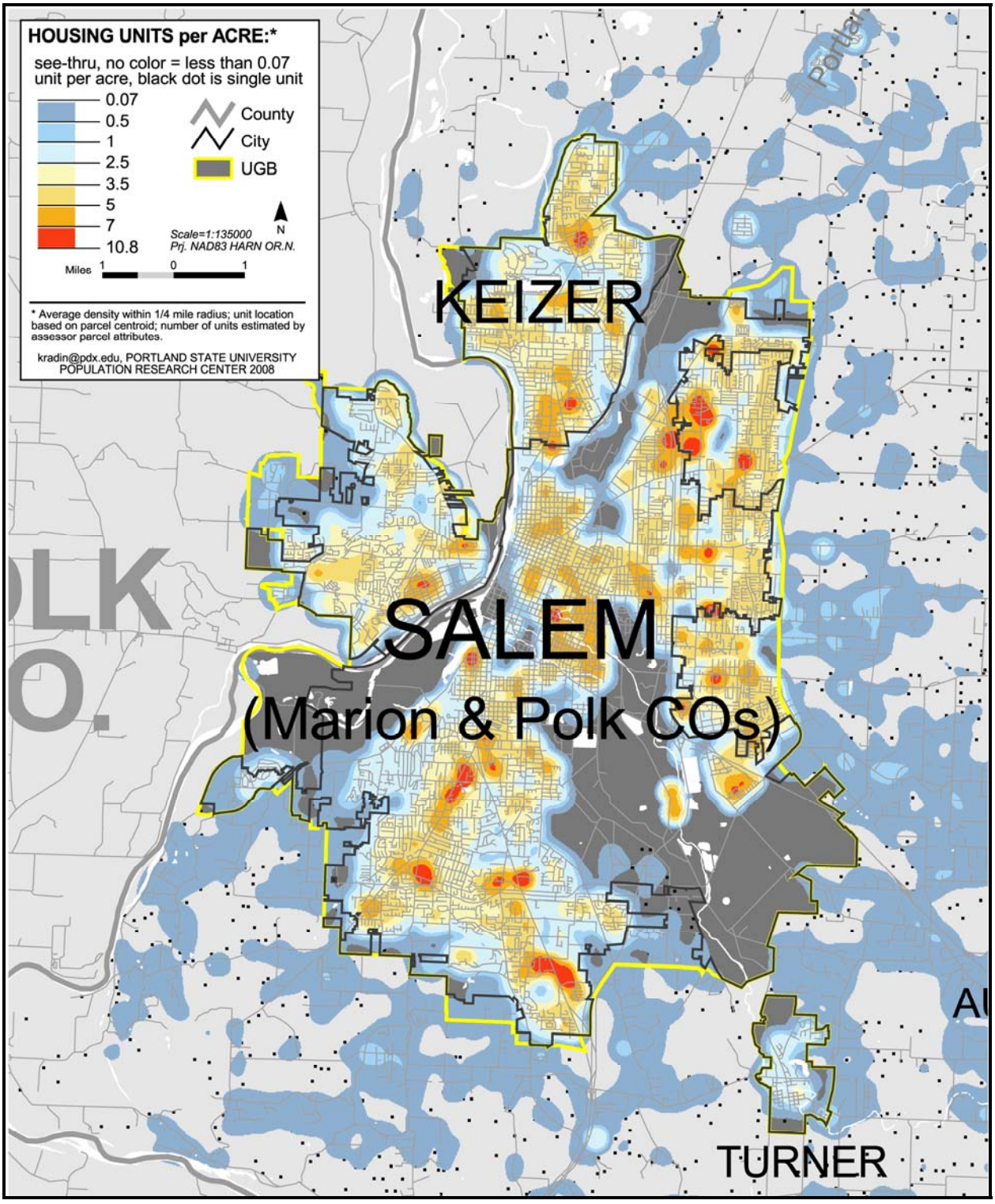
The densest locations in Woodburn, the largest city at the north side of the county, range from 5 to 7 units per acre on average (dark orange). Territory within the city and inside the UGB remains undeveloped and/or non-residential (dark gray).

Silverton, Mt. Angel, and Scotts Mills



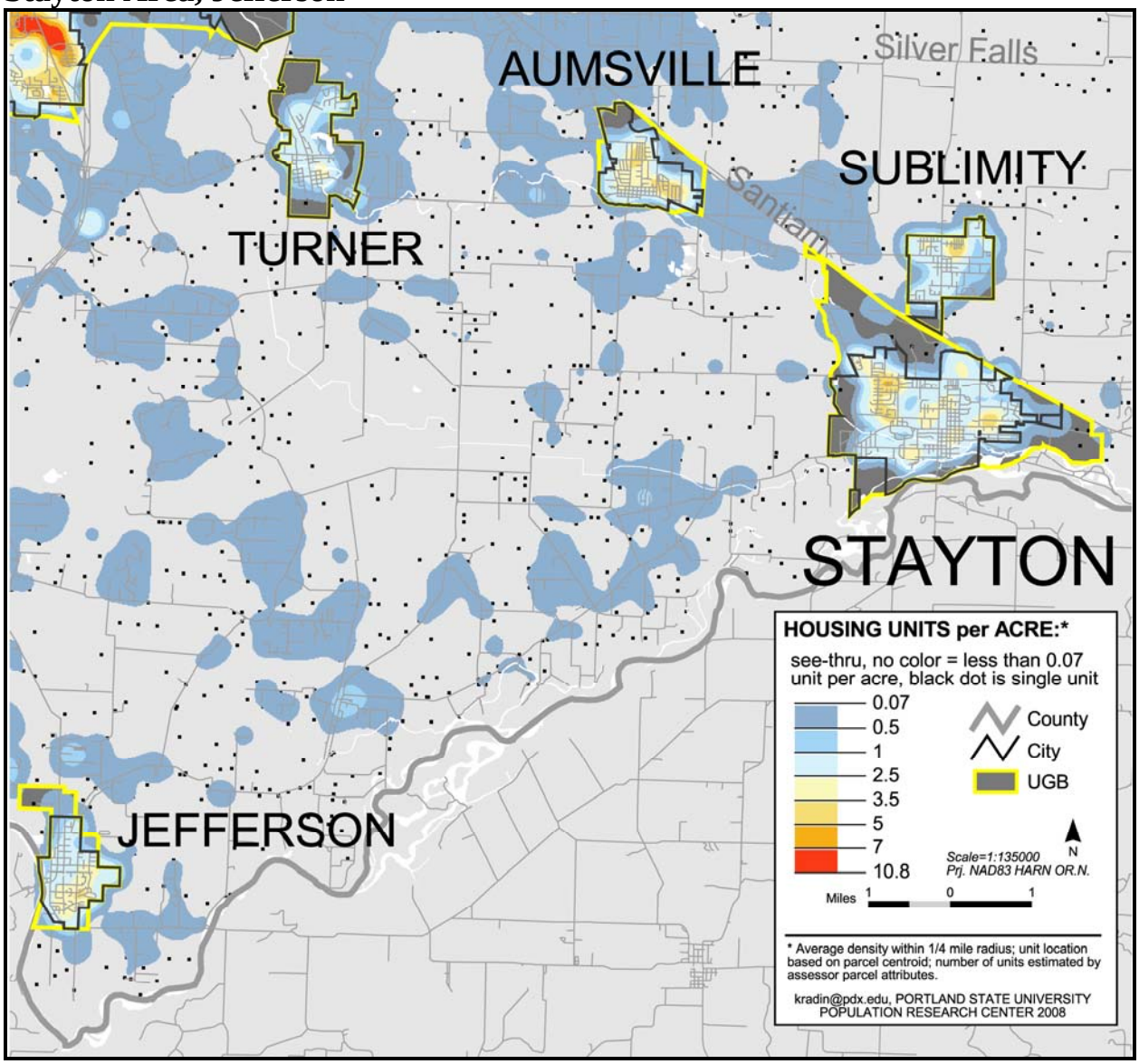
Mount Angel, Silverton and Scotts Mills are southeast of Woodburn. Scotts Mills' UGB and city limits are the same (black and yellow boundaries perfectly coincide), while those for Mt Angel and Silverton differ. Silverton has a substantial amount of undeveloped land at its southwest corner.

Salem-Keizer Area



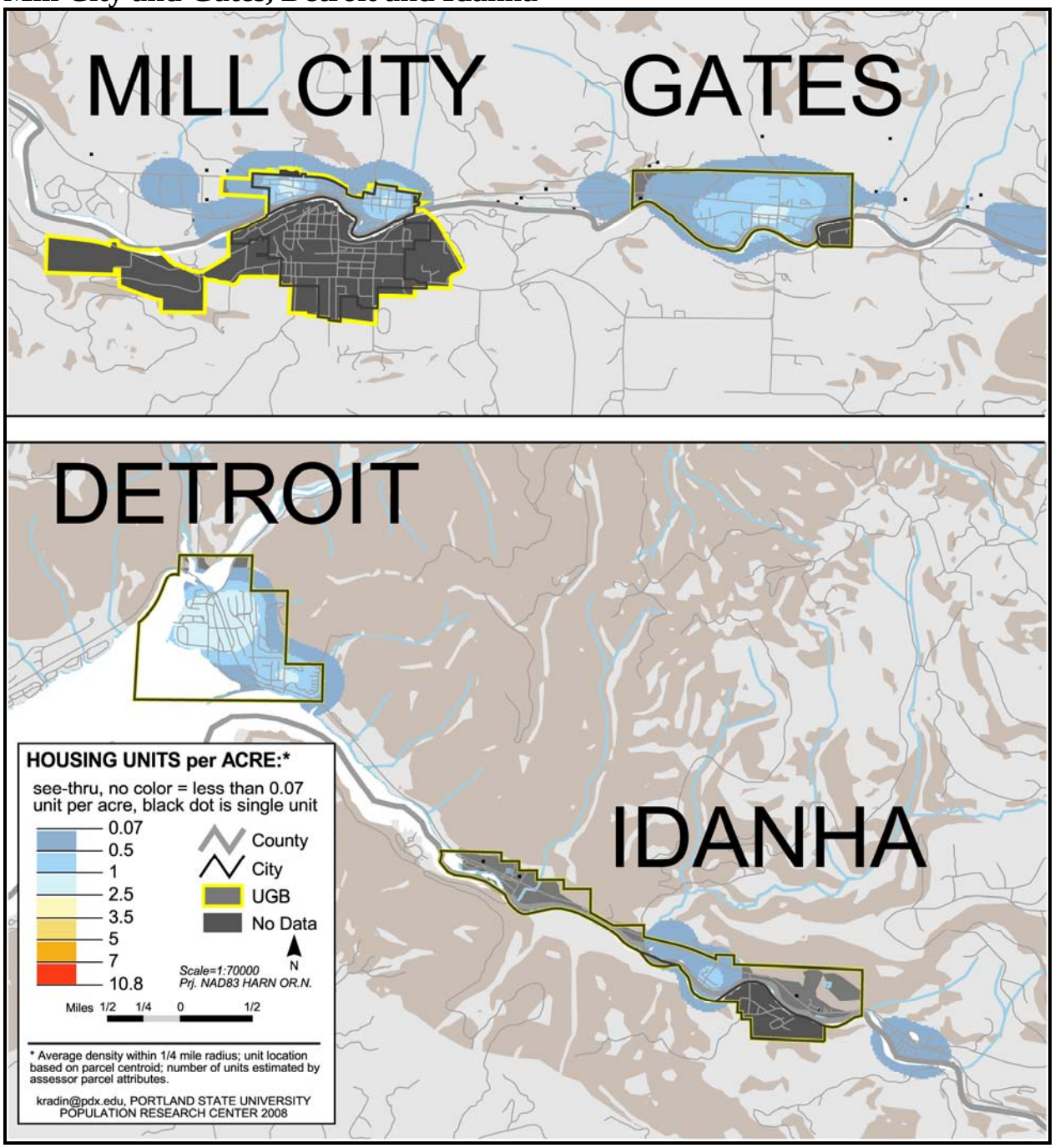
Salem and Keizer are the only places in the county with housing unit densities in the 7 to 10.8 unit-per-acre range (red blobs). Some of the highest housing unit densities are found in unincorporated portions of the urban growth area. The Willamette River divides Salem into west and east sides; the east side in Marion County and the west side in Polk County. The Polk County side is not as densely settled as other developed parts in the S-K UGB.

Stayton Area, Jefferson



Like Scotts Mills, Turner's and Sublimity's UGB and city boundaries coincide. The other cities in this area have undeveloped land outside the city boundaries yet within their UGBs.

Mill City and Gates, Detroit and Idanha



Traveling east along the Santiam Highway, Mill City and Gates are reached, and then Detroit and Idanha further east. The darker portions of Mill City, Gates, and Idanha reflect parts within Linn County. No location-specific housing units have been converted to a density surface in these areas.

APPENDIX 5

Estimated Land Capacity for New Housing Units
(Potential Numbers of New Housing Units on Vacant Taxlots Zoned Residential)

Please note the following when reviewing the estimated capacities:

- Estimates were prepared for cities and their UGBs and were developed for research purposes.
- Current (2007) zoning, city boundaries and UGB areas are assumed to be consistent through the forecast period.
- Taxlots zoned as 'Urban Transitional Farm' are included in the capacity estimates.
- Environmental and building constraints accounted for in the taxlot datasets were used to exclude taxlots where housing development is unlikely or difficult.
- The capacity estimates were developed for a range of potential housing units that Marion County may have the capacity to hold. The difference between the high and low numbers in the range is the number of taxlots with additional environmental constraints. The lower number includes fewer buildable taxlots than the higher estimate because more taxlots were excluded from the inventory due to the consideration of more environmental constraints.
- Housing unit density coefficients were multiplied by estimated vacant residential acreage to estimate housing unit capacity. Coefficients are based on existing housing unit density and current zoning. Different coefficients were calculated for each residential zone.
- Some areas within UGBs are not yet zoned for urban densities. In these cases, efficiency guidelines from the Marion County Comprehensive Plan (adopted in 2002) were used.
- The capacities can easily be different as zoning and average densities can vary or may change.

Potential Capacity of Vacant Land Zoned Residential for New Housing Units

Area	City Capacity		UGB Capacity	
	Est. Housing Units on Lots with More Bldg Constraints	Est. Housing Units on Lots with Fewer Bldg Constraints	Est. Housing Units on Lots with More Bldg Constraints	Est. Hsg Units on Lots with Fewer Bldg Constraints
AUMSVILLE	504	753	1,036	1,287
AURORA	129	201	404	522
DETROIT	522	536	522	536
DONALD	60	60	60	60
GATES (Marion Co.)	760	787	760	787
GERVAIS	64	64	200	200
HUBBARD	47	54	51	80
IDANHA (Marion Co.)	226	240	226	240
JEFFERSON	222	261	537	872
KEIZER	736	1,628	736	1,628
MILL CITY (Marion Co.)	42	55	58	72
MT ANGEL	529	529	1,379	1,379
SALEM (Marion Co.)	6,838	7,343	16,108	20,459
SCOTTS MILLS	459	510	459	510
SILVERTON	1,434	1,605	3,447	3,999
ST PAUL	56	59	56	59
STAYTON	545	695	4,618	5,636
SUBLIMITY	862	864	1,076	1,077
TURNER	296	535	296	535
WOODBURN	1,262	1,414	3,805	4,083
MARION COUNTY	15,593	18,194	35,098	42,393

APPENDIX 6

Data Sources

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 15-40 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 is survey data from the U.S. Census Bureau survey that are available for area with population of 65,000 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 2004-2006 American Community Survey data to develop estimates of housing and population change, including estimates of net migration for Marion 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 Marion County and its cities and unincorporated area from 2000 to 2007 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 2007.

- Area Boundary Files. Marion County GIS Division, Polk County GIS Department, 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 2007. 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 three different sources: PRC's Population Estimates Program annual questionnaires, U.S. Census Bureau Residential Construction Division, and as an ancillary reference for the Salem-Keizer area, *Building Permit Data and Population Estimates for the Salem-Keizer Area, January-December 2007*, created by Mid-Willamette Valley Council Of Governments. 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 Marion County Taxation & Assessment, dated August 8, 2006, and Polk County GIS Department. Zoning data are from Marion County GIS Division and Polk County GIS Department. 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 develop the housing unit capacity estimates. Additionally, data for taxlots with environmental constraints included in a spatial dataset from a 2002 Fregonese study and transferred to PRC from Marion County GIS were also used to develop the capacity estimates.

- Birth and Death Data. Information on births and deaths reported for the Marion County area were obtained from the Oregon Center for Health Statistics for years 1990 to 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 the correspondence between births and population change.

- School Enrollment Data. These data were obtained from the Oregon Department of Education for school districts in Marion County for years 1997-2007. 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 Marion County and have jobs in the County was calculated. Where within the County these workers have jobs was also detected. An area's availability of employment or draw of workers, influences population and housing changes.

- Oregon Labor Force Data and Employment Projections. Labor force data from the Oregon Employment Department for 2000-2007 were evaluated to determine trends and relation to population change. The employment projections, also from the Employment Department, were available for the economic region in which Marion County is located (Region 3, which also includes Polk and Yamhill Counties) are available for 2006 to 2016. We approximated a portion of Region 3's projected number of jobs to represent the number of projected jobs in Marion County. 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 Marion County and Economic Region 3 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 Marion County's future population.

- Other Background Information. Marion County Comprehensive Plan (versions dated during 1998-2006), amendments to the Comprehensive Plan, Marion County Rural Transportation System Plan (2005), and the SKATS Regional Transportation System Plan (2007) were reviewed for background information and for purposes of comparing population forecasts.