## Coordinated Population Forecast



## Klamath

## County

Urban Growth
Boundaries (UGB)
\& Area Outside UGBs

## How to Read this Report

This report should be read with reference to the documents listed below, which are downloadable on the Forecast Program website (https://www.pdx.edu/population-research/population-forecasts).

- Methods and Data for Developing Coordinated Population Forecasts: Provides a detailed description and discussion of the forecast methods employed. This document also describes the assumptions that feed into these methods and determine the forecast output.
- Forecast Tables: Provides complete tables of population forecast numbers by county and all subareas within each county for each five-year interval of the forecast period (2022-2072).


# Population Research Center (PRC) Project Staff 

Cindy Chen, Population Forecast Program Manager<br>Ethan Sharygin, Director<br>Meisha Whyte, Graduate Research Assistant<br>Deborah Loftus, Accounting Technician<br>Charles Rynerson, Oregon State Data Center Coordinator<br>Huda Alkitkat, Population Estimates Program Manager

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# Coordinated Population Forecast for Klamath County, its Urban Growth Boundaries (UGB), and Area Outside UGBs 

2022-2072

Prepared by<br>Population Research Center<br>College of Urban and Public Affairs<br>Portland State University

June 30, 2022

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## 1. Methodology

Counties were forecast using the cohort component method. Deaths and survival rates were projected based on historical trends (2000-2020) and based on the methodology published by Clark and Sharrow 2011 ${ }^{1}$. Mortality rates for the 85+ age group were further divided into 5-year age groups up to 100+ (i.e., 85-89, 90-94, 95-99, and 100+) using the proportion of each age group calculated from the single-year age group data in the 2010 decennial census. Age specific fertility rates were projected based on historical trends up to 2035 and held constant afterwards. The 2021 births data was not included in the projection model for two reasons: 1) the 2021 vital statistics were not finalized at the time of this report, and 2) due to uncertainties related to COVID-19 impacts on births and deaths, incorporating the 2021 births data into births and fertility rate projection may lead to errors such as underestimation. Nonetheless, the 2021 births and deaths numbers are included in Figures 3 and 4 to provide a more consistent visualization. Since the 2020 deaths data may be impacted by COVID-19, deaths were adjusted based on CDC's estimated excess deaths when forecasting future mortality rates to ensure these rates were not affected by short-term pandemic-related deaths.

Annual net migrants were calculated based on published data gathered from the IRS and the U.S. Census Bureau's American Community Survey (ACS) Public Use Microdata Sample (PUMS) and Population Estimates Program (PEP). Historical county level in-, out-, and net migration (domestic and foreign) were obtained from IRS and PEP (1991 - 2020). IRS provides domestic in- and out- while PEP provides domestic and foreign net. Age structures of gross migrants by direction (domestic in- and out- and foreign in-migration) were calculated for ACS Public Use Microdata Areas (PUMAs) which were used for migration to or from constituent counties. Future total net migrants were projected by applying an ARIMA model appropriate for each individual county.

The PRC estimate formed the baseline of the forecast for individual UGBs, with the difference in population between incorporated city and UGB boundaries estimated based on assignment of population in individual census blocks in each county into a UGB area and or city area, or balance of county. Populations in individual UGBs or in the balance of county were forecast by projections of individual components of the housing unit method of population estimation. Historical rates of population and housing unit change since 1990 were used to generate a weighted average annual rate of change. Jurisdiction-level vacancy rates and average household size were held constant from the 2020 decennial census. Population forecasts for sub-areas were then controlled by the county-level forecasts, e.g., sub-area populations were allocated using the county total (top-down approach), and the population summation of the sub-areas does not exceed the county population.

Forecast Program surveys were used to make adjustments to the baseline results for counties and UGB areas. Recent development and plans obtained from surveys were generally implemented in the first 510 years of the forecast, except where they indicate a change in long-run outlook. For the immediate period (2022-2030), the development rate derived from the surveys or received reports was applied before 2030. If no planned housing units were reported, recent development rate (2010-2020) or the overall county rate was used. For the later period (2030-2047), housing unit growth was based on either

[^2]a weighted average or an extrapolation of historic trend (1990-2020). Assumptions were made for individual cities based on knowledge obtained from the general surveys, housing surveys, as well as documentations (e.g., housing needs assessment, comprehensive development plans) received from the cities.

Many uncertainties still remain in understanding the climate change impacts on migration. Thus, specific scenarios of climate change, political unrest, or other shocks were not reflected in the current forecast. The forecast program methodology is described in further detail in an accompanying report available on the Population Research Center's website.

## 2. County Overview

As the seat of Klamath County, the City of Klamath Falls has a total population of 21,813 according to the 2020 census. Klamath County's total population has been increasing at an AAGR of $0.4 \%$ in the past 20 years and the forecast suggests the county continues to grow at an AAGR of around $0.1 \%$ after 2030. According to the general survey responses received from Klamath County, people in surrounding areas such as Deschutes County tend to move to Klamath County because of lower housing prices and the ability to work remotely since the pandemic. As the most populated city in Klamath County, Klamath Falls has completed multiple housing projects in the last 2 years and plans to add more new housings in the next 2 years. Other cities in Klamath County did not report significant changes or plans for new housing developments.

## 3. Historical Trend and Population Forecast

### 3.1 County Population

As illustrated in the Figure 1, Klamath County experienced several peak population growths over the past 80 years. The highest AAGR occurred in the 1980 Census, meaning the county's population experienced the highest annual growth in the 10-year period between 1970 and 1980. There has been a population downfall in the 1980s in which the county experienced population decline. Nonetheless, Klamath County has maintained a positive AAGR since the 2000 census. The 2020 census put Klamath County's population at 69,413. Throughout the forecast period, the county is projected to maintain a relatively slow but positive average annual growth rate (AAGR). With a $0.1 \%$ AAGR starting in 2030, the long-term forecasted AAGR is relatively low compared to the past 20 years (Figure 2). Components such as fertility rate, net migration, and changes in age structure play an important role in the forecast, which are explained in more details in the following sections. Klamath County's population is projected to reach 73,857 by 2072, a $5.4 \%$ increase from 2022.

Historical Census Population


Sources: US Census Bureau, 1950, 1060, 1970, 1980, 1990, 2000, 2010, and 2020 Decennial Census.

Figure 1. Historical total county population and AAGR, 1950-2020.


Sources: Forecasted by Population Research Center (PRC).
Figure 2. Forecasted total county population and AAGR, 2022-2072.

### 3.2 Births and Deaths

The total fertility rate (TFR) is shown in Figure 3. The TFR in the county dropped from 2.2 in 2000 to 1.9 in 2021. The lowest TFR, which was 1.8, occurred in 2018. Compared to Oregon state, which experienced a TFR drop from 1.7 to 1.4 between 2014 and 2020, Klamath County's projected TFR of 1.9 remains higher than the state. According to the preliminary 2021 births data, the county did not appear to be significantly impacted by the lower fertility rate related to COVID-19 as seen in many other places.

The actual number of births can follow a different trend than TFR if there are unusually high or low numbers of women of childbearing age in a given year. Figure 4 includes historical and projected births (and deaths) in the county. Annual births are projected to remain at a range between the mid-700s to lower 800s in the next 25 years, which is similar to the historic pattern. Annual births are also expected to continue to be outnumbered by annual deaths, which has occurred since 2017.

In comparison, annual deaths continue to grow at a faster pace than births, reaching a peak of over 1,000 around 2040. The sudden increase in deaths shown in the 2021 OHA preliminary data may mainly be associated with excess deaths related to COVID-19. Toward the end of the forecast period, annual deaths appear to show signs of decline. These dynamics are due to aging in the population, with the aging of the large baby boom cohort accounting for most of the increases in death counts during 20202040.

Total Fertility Rate (TFR) for Women Age 15-44


Note: OHA's vital statistics for 2021 are preliminary at the time of this report.
Sources: Oregon Health Authority (OHA), Center for Health Statistics. Calculations and forecast by Population Research Center (PRC).

Figure 3. Historical and projected total fertility rate (TFR), 2000-2047.


Note: OHA's vital statistics for 2021 are preliminary at the time of this report.
Sources: Oregon Health Authority (OHA), Center for Health Statistics. Calculations and forecast by Population Research Center (PRC).

Figure 4. Historical and projected annual births/deaths trend, 2000-2047.

### 3.3 Migration

Age-specific migration was estimated based on the 2006-2010, 2011-2015, and 2015-2019 5-year ACS. The age patterns were used from the ACS but controlled to the number of total migrants by direction (in or out) and domestic (inter-state or between counties in Oregon) or foreign. The overall net migrants for each county were adjusted for consistency with annual PRC population estimates. Figure 5 illustrates the percentage each 10-year age group accounts for among total county net migration calculated based on the 2015-2019 ACS migration flow. The only age groups that had negative net migration were the 70-84 and $85+$ groups. The highest shares of positive net migrants were in the 0-9 and 30-39 age groups, which implied that families with children may be more likely to move into the county.

Average Annual Net Migration Percentage by Broad Age Groups (2015-2019)


Sources: American Community Survey (ACS); Internal Revenue Services (IRS); US Census Bureau Population Estimated Program (PEP); Calculated by Population Research Center (PRC).

Figure 5. Percentage of net migrations by broad age groups in Klamath County, 2015-2019.

As shown in Figure 6, the historic annual net migration in Klamath County varied significantly between 2000 and 2020. County-wide net migration experienced some downturns in the late 2000s and early 2010s, which may be associated with the impacts of the economic recession during that period. The county experienced the highest numbers of net migration in 2018, in which the annual net migration reached almost 1,000 . The total annual net migration is projected remain relatively constant with slight decrease toward the end of the next 25 years. The overall annual net migration is expected to be in the lower 200s for most years.

Annual Net Migration (2000-2047)


Sources: Internal Revenue Service (IRS) Tax Stats (1990-2020); American Community Survey (ACS); Population Estimates Program (PEP) 1990-2020. Calculations and forecast by Population Research Center (PRC).

Figure 6. Historical and projected total county net migration, 2000-2047.

### 3.4 Age Structure

As shown in Figure 7, the 2000 and 2010 censuses showed the population aging forward in the 10-year period. In 2000, populations aged 10-19 and 40-54 accounted for the largest share in the county. By 2010, the 40-54 age group from the 2000 census aged forward and the 50-64 age group became the largest population group. Similar pattern can be observed for the 5-19 age groups. However, the 2010 census showed the youngest age groups have lost some shares in 2010 compared to the 2000 census. The 2022 forecast indicates the county population continues to age forward and the 60-74 age group accounts for the largest population share. As the county losses some of its older populations through out-migration and mortality, by 2035, the age structure shifts and the 40-49 age group takes up the largest share. Because of a higher age-specific net migration rate in the 30-39 age group, by 2047, this age group is projected to account for an increased share of county population.



Sources: Calculations and forecast by Population Research Center (PRC).
Figure 7. Population structure by age and sex, historical (2000 and 2010) and forecast (2022, 2035, and 2047).

### 3.5 Race/Ethnicity

Table 1 shows the race/ethnicity characteristics in the county from the 2010 and 2020 censuses. Race/ethnicity was not included as a component in the current forecast model but is provided in this report for reference. Population identified as "Some Other Race alone" has the most relative gain compared to other race/ethnicity groups, followed by population of two or more races. In 2020, population of two or more races outnumbered those identified as American Indian and Alaska Native alone and becomes the second largest non-Hispanic population. The Hispanic or Latino population continues to be the largest non-White alone population.

Table 1. County population by race/ethnicity.

| Hispanic or Latino and Race | 2010 |  | 2020 |  | Absolute Change | Relative Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Population | 66,380 |  | 69,413 |  | 3,033 | 4.6\% |
| Hispanic or Latino (of any race) | 6,915 | 10.4\% | 8,772 | 12.6\% | 1,857 | 26.9\% |
| Not Hispanic or Latino | 59,465 | 89.6\% | 60,641 | 87.4\% | 1,176 | 2.0\% |
| White alone | 53,822 | 81.1\% | 51,919 | 74.8\% | -1,903 | -3.5\% |
| Black or African American alone | 394 | 0.6\% | 497 | 0.7\% | 103 | 26.1\% |
| American Indian and Alaska Native alone | 2,407 | 3.6\% | 2,493 | 3.6\% | 86 | 3.6\% |
| Asian alone | 615 | 0.9\% | 754 | 1.1\% | 139 | 22.6\% |
| Native Hawaiian and Other Pacific Islander alone | 68 | 0.1\% | 104 | 0.1\% | 36 | 52.9\% |
| Some Other Race alone | 63 | 0.1\% | 396 | 0.6\% | 333 | 528.6\% |
| Two or More Races | 2,096 | 3.2\% | 4,478 | 6.5\% | 2,382 | 113.6\% |

Sources: US Census Bureau, 2010 and 2020 Decennial Census. Calculated by PRC.

### 3.6 Component of Change

The component of population changes up to 2072 is shown in Figure 8. The darker blue shade indicates the natural increase/decrease (births less than deaths, which is negative in Klamath county because there are more deaths than births), while the lighter blue shade indicates the net migration. At the county level, net migration remains positive throughout the forecast period while natural decrease continues. Natural decrease is projected to remain in the 160-200 range for most of the next 50 years. Annual net migration is projected to gradually increase over time, ranging from the upper 400s to the upper 600 s. The positive net migration and natural decrease tend to balance each other out, which explains the very slow rate of population growth in the county. As net migration remains slightly higher than natural decrease, the county is projected have population growth throughout the forecast period.

Components of Population Change by 5-year Intervals (2015-2072)


Figure 8. Historical and forecast components of population change, 2015-2072.

### 3.7 Sub-Area Population

Sub-area populations within and outside the urban growth boundaries (UGBs) are forecasted using the housing unit method, and then adjusted to be consistent with the county level forecast. Klamath Falls is the largest UGB in Klamath County and is projected to grow at an AAGR of $0.3 \%$ between 2022 and 2047. All other UGBs in the county are projected to either experience population growth or maintain a population close to the current number. Among smaller UGBs, Bonanza and Merrill have the highest AAGR in the next 50 years, which may be associated with their closer proximity to Klamath Falls. By 2072, the Merrill UGB is projected to have the largest population among the smaller UGBs. Area outside of the UGBs, however, is projected to loss population.

Table 2. Historical and forecasted population and AAGR in Klamath County and its sub-areas.

|  | Historical |  |  | Forecast |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | 2020 | $\begin{gathered} \text { AAGR } \\ (2010-2020) \\ \hline \end{gathered}$ | 2022 | 2047 | 2072 | $\begin{gathered} \text { AAGR } \\ (2022-2047) \\ \hline \end{gathered}$ | $\begin{gathered} \text { AAGR } \\ (2047-2072) \\ \hline \end{gathered}$ |
| Klamath County | 66,380 | 69,413 | 0.4\% | 70,074 | 72,024 | 73,857 | 0.1\% | 0.1\% |
| Larger Sub-Areas |  |  |  |  |  |  |  |  |
| Klamath Falls | 42,771 | 44,349 | 0.4\% | 45,164 | 48,247 | 50,403 | 0.3\% | 0.2\% |
| Smaller Sub-Areas |  |  |  |  |  |  |  |  |
| Bonanza | 432 | 410 | -0.5\% | 407 | 439 | 448 | 0.3\% | 0.1\% |
| Chiloquin | 835 | 870 | 0.4\% | 860 | 885 | 892 | 0.1\% | 0.0\% |
| Malin | 894 | 853 | -0.5\% | 757 | 748 | 745 | 0.0\% | 0.0\% |
| Merrill | 853 | 828 | -0.3\% | 919 | 993 | 1,011 | 0.3\% | 0.1\% |
| Outside UGBs | 20,594 | 22,103 | 0.7\% | 21,968 | 20,712 | 20,359 | -0.2\% | -0.1\% |

Note: UGBs are indicated by their city names. Lager sub-areas are those with populations of at least 8,000 in 2020.
Sources: U.S. Census Bureau; Forecast by Population Research Center (PRC)

### 3.7.1 Larger UGBs

UGBs with more than 8,000 residents in the 2020 census are considered larger UGBs. The only larger UGB in Klamath County is Klamath Falls, which has most of the population in the county. As shown in Table 3, Klamath Falls' population share continues to growth, reaching $68.2 \%$ by 2072, which is a 3.7 percent point increase from 2022.

Table 3. Population forecast for larger sub-areas and their shares of county population.

|  |  | Population |  | Share of County Population |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2022 | 2047 | $\mathbf{2 0 7 2}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 4 7}$ | $\mathbf{2 0 7 2}$ |
| Klamath County | 70,074 | 72,024 | 73,857 |  |  |  |
| Larger Sub-Areas |  |  |  |  |  |  |
| Klamath Falls | 45,164 | 48,247 | 50,403 | $64.5 \%$ | $67.0 \%$ | $68.2 \%$ |
| Outside UGBs | 21,968 | 20,712 | 20,359 | $31.3 \%$ | $28.8 \%$ | $27.6 \%$ |

Note: Larger sub-areas refer to those with populations of at least 8,000 in 2020.
Sources: Forecast by Population Research Center (PRC)

### 3.7.2 Smaller UGBs

The Merrill UGB continues to have the largest share of population among the smaller UGBs. With 1,011 people forecasted by 2072, it becomes the most populated smaller UGB. The population shares in smaller UGBs are not projected to change significantly in the next 50 years. However, because most of the population growth are projected to occur inside the UGBs, area outside of the UGBs is expected to lose some of its shares.

Table 4. Population forecast for smaller sub-areas and their shares of county population.

|  |  | Population |  | Share of County Population |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2022 | 2047 | $\mathbf{2 0 7 2}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 4 7}$ | $\mathbf{2 0 7 2}$ |
| Klamath County | 70,074 | 72,024 | 73,857 |  |  |  |
| Smaller Sub-Areas |  |  |  |  |  |  |
| Bonanza | 407 | 439 | 448 | $0.6 \%$ | $0.6 \%$ | $0.6 \%$ |
| Chiloquin | 860 | 885 | 892 | $1.2 \%$ | $1.2 \%$ | $1.2 \%$ |
| Malin | 757 | 748 | 745 | $1.1 \%$ | $1.0 \%$ | $1.0 \%$ |
| Merrill | 919 | 993 | 1,011 | $1.3 \%$ | $1.4 \%$ | $1.4 \%$ |
| Outside UGBs | 21,968 | 20,712 | 20,359 | $31.3 \%$ | $28.8 \%$ | $27.6 \%$ |

Note: Smaller sub-areas refer to those with populations under 8,000 in 2020. Sources: Forecast by Population Research Center (PRC)

## 4. Glossary of Key Terms

Average Annual Growth Rate (AAGR): The average rate of growth over a specific period of time. The AAGR is calculated using natural logarithm of the end-year value and the starting-year value, divided by the number of years.

Cohort-Component Method: A method used to forecast future populations based on a baseline or starting population, and cumulative changes in births, deaths, and migration.

Coordinated population forecast: A population forecast prepared for the county and sub-county jurisdictions including urban growth boundary (UGB) areas and all non-UGB area in the balance of county.

Group quarters: The US Census Bureau defines group quarters as places where "people live or stay in a group living arrangement that is owned or managed by an organization providing housing and/or services for the residents". Examples of a group quarter may include college dorms, skilled nursing facilities, groups homes, prison, etc.

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

Housing-Unit Method: A method used to estimate current populations or forecast future populations based on changes in housing units, vacancy rates, the average numbers of persons per household (PPH), and group quarters population counts.

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

Total Fertility Rate (TFR): The number of children a woman would have by the end of a defined childbearing age. In this report, child-bearing age is from 15 to 44.

## 5. Appendix A: General Survey for Oregon Forecast Program

Each year, the jurisdictions in the region that is to be forecast is surveyed. The following are transcripts of what was received from jurisdictions who responded to the OPFP survey.

| County | Klamath |
| :--- | :--- |
| Date\|Time |  |
| Jurisdiction | City of Chiloquin |
| Name and Title | Teresa R Foreman City recorder |
| Observations about Population (e.g. <br> birth rates, aging, immigration, racial <br> and ethnic change) |  |
| Observations about Housing (Vacancy <br> rates, seasonal occupancy, <br> demolitions, renovations) |  |
| Planned Housing Developments or <br> Group Quarters Facilities (including <br> number of units, occupancy, and <br> estimated year of completion) | our population fluctuates only slightly from year to year. <br> Native American population tends to remain near 50\%. plus <br> or minus |
| Economic Development (e.g. new <br> employers or facilities, including <br> number of jobs and est. year of <br> completion) |  |
| Infrastructure Projects (e.g. <br> transportation and utilities) | New Sewer Lagoon and water well are projects being <br> planned. |
| Other Factors Promoting Population <br> or Housing Growth |  |
| Other Factors Hindering Population <br> or Housing Growth | Small town. Very few job opportunities. 30 miles to Hospital, <br> Bank and adequate shopping |
| 8a. Summary of current or proposed <br> policies affection growth in your <br> jurisdiction. | none |
| 8b. Findings related to growth or <br> population change from studies <br> conducted in you jurisdiction. | none |
| 8c. The effects of wildfires or other <br> disasters in your jurisdiction on <br> housing, employment/economics, <br> and infrastructure. | 8 homes were lost in the fire. Those folks are still recovering. <br> No other lingering impacts |
| 8d. The effects of the COVID-19 <br> pandemic and policy measure on <br> employment and current and planned <br> developments. | Of our 12 downtown businesses, many shut down <br> temporarily and 2 shut down permanently. One Restaurant is <br> for sale and COVID19 hindered any interest . |


| County | Kalmath |
| :---: | :---: |
| Date\|Time | 12.09.21 |
| Jurisdiction | City of Klamath Falls |
| Name and Title | Joe Wall, Planning Manager |
| Observations about Population (e.g. birth rates, aging, immigration, racial and ethnic change) | Near zero rental vacancy rate. Active renovation market due to limited new home availability. |
| Observations about Housing (Vacancy rates, seasonal occupancy, demolitions, renovations) | Development Name: Sunrise Vista Income restricted and operated by Klamath Housing <br> Authority (KHA) <br> 58 multifamily units <br> Address: 5175 Homedale Road K.F., OR 97603 <br> Map Tax Lot: R-3909-01400-00104-000 <br> Received Certificate of Occupancy in summer 2021 (not included within annual report) <br> Development Name: Bridgeway Apartments <br> Income restricted and operated by Klamath Housing <br> Authority (KHA) <br> 8 multifamily units (4 duplexes) <br> Address: 5528 Russet Drive K.F., OR 97603 <br> Map Tax Lot: R-3909-01400-00106-000 <br> Received Certificate of Occupancy in summer 2021 (not <br> included within annual report) <br> Development Name: Confluence <br> Downtown mixed-use project <br> 42 market rate apartments <br> Address: 1305 Main Street K.F., OR 97601 <br> Map Tax Lot: R-3809-028CC-11200-000 <br> Received land use \& building permits, construction to start 2022 |
| Planned Housing Developments or Group Quarters Facilities (including number of units, occupancy, and estimated year of completion) |  |


| Economic Development (e.g. new employers or facilities, including number of jobs and est. year of completion) | From Klamath County Economic Development Association (KCEDA): <br> Over the last 2 Years - we have recruited or expanded 16 companies into Klamath County. This represents 507 direct jobs created with approximately 192 indirect jobs within Klamath County. Estimated Capital Investment of $\$ 94,000,000$. <br> Projected for the next 2 Years - we are projected to close 30 projects over the next 2 years in Klamath County creating 649 direct jobs and 424 indirect jobs within the County. Estimated Capital Investment of $\$ 432,390,000$. <br> Expansion of Existing Businesses Employment - we are projecting the expansion of existing business within Klamath County at 351 direct jobs with approximately 172 indirect jobs over the next 18 months. <br> The combined projected growth for new companies and expansion of existing companies within our community within the next 2 years is 1,000 direct jobs with estimated 596 indirect jobs. Combining these two equates to 1,596 jobs created within Klamath County. |
| :---: | :---: |
| Infrastructure Projects (e.g. transportation and utilities) |  |
| Other Factors Promoting Population or Housing Growth | Increased in-migration from California and other more costly, urban areas due to Covid, political, quality of life and other factors. |
| Other Factors Hindering Population or Housing Growth | An undersupply of skilled tradespeople required to build needed housing. |
| 8a. Summary of current or proposed policies affection growth in your jurisdiction. |  |
| 8b. Findings related to growth or population change from studies conducted in you jurisdiction. |  |
| 8c. The effects of wildfires or other disasters in your jurisdiction on housing, employment/economics, and infrastructure. |  |
| 8d. The effects of the COVID-19 pandemic and policy measure on employment and current and planned developments. |  |
| 9. For representatives from counties only: we invite you to provide tax lot |  |


| data if available. These may be sent <br> via email to askprc@pdx.edu |  |
| :--- | :--- |
| Comments? |  |


| County | Kalmath |
| :--- | :--- |
| Date\|Time |  |
| Jurisdiction | City of Merrill |
| Name and Title | City Recorder |
| Observations about Population (e.g. <br> birth rates, aging, immigration, racial <br> and ethnic change) |  |
| Two demolitions in the past month, vacancy rates low |  |
| Observations about Housing <br> (Vacancy rates, seasonal occupancy, <br> demolitions, renovations) | We were suppose to have a developer purchase City property <br> for 12 single family residential housing units-contract expires <br> 2024, but there has been no progress made. In fact, developer <br> is appealing water and sewer requirements. |
| Planned Housing Developments or <br> Group Quarters Facilities (including <br> number of units, occupancy, and <br> estimated year of completion) |  |
| Economic Development (e.g. new <br> employers or facilities, including <br> number of jobs and est. year of <br> completion) |  |
| Infrastructure Projects (e.g. <br> transportation and utilities) |  |
| Other Factors Promoting Population <br> or Housing Growth |  |
| Other Factors Hindering Population <br> or Housing Growth |  |
| 8a. Summary of current or proposed <br> policies affection growth in your <br> jurisdiction. |  |
| 8b. Findings related to growth or <br> population change from studies <br> conducted in you jurisdiction. |  |
| 8c. The effects of wildfires or other <br> disasters in your jurisdiction on <br> housing, employment/economics, <br> and infrastructure. |  |
| 8d. The effects of the CoVID-19 <br> pandemic and policy measure on <br> employment and current and <br> planned developments. |  |
| 9. For representatives from counties <br> only: we invite you to provide tax lot <br> data if available. These may be sent <br> via email to askprc@ @pdx.edu |  |
| Comments? |  |


| County | Klamath |
| :---: | :---: |
| Date\|Time | 12.07.21 |
| Jurisdiction | Klamath County |
| Name and Title | Erik Nobel, Planning Director |
| Observations about Population (e.g. birth rates, aging, immigration, racial and ethnic change) | Klamath County is two different geographic area: North County (Gilchrist/ Crescent / LaPine) and Southern (Klamath Falls) <br> The North County has been experiencing good growth. As Bend becomes more expensive and grows people are able to sell there property and move south into Klamath County. We heard the same story - We are moving to Klamath County because it reminds us of how Bend or LaPine was when we moved there originally. <br> The south part of the County has also been growing. The Klamath County Realtors Association has calculated that Klamath Falls needs at least 800 more homes. The inventor of home for sale is extremely low. <br> Rural Residential Lots. In the late ' 60 and early ' 70 thousand of the rural residential subdivision lots were created in the County. These lots are only $10 \%$ developed. During the Covid stay at home orders, the County was receiving 80 to 100 call a day from people from all over the nation interested in these rural properties. |
| Observations about Housing (Vacancy rates, seasonal occupancy, demolitions, renovations) | The County has not had any specific housing projects application submitted. The County main growth is in the rural subdivision. These subdivision were create in the 70 and still only $10 \%$ full. |
| Planned Housing Developments or Group Quarters Facilities (including number of units, occupancy, and estimated year of completion) | The biggest change is in the north county where people are finding affordable housing in Klamth County and then commuting to jobs in Deschutes County. Also we have had a number of new citizen come from other parts of the state due to new found ability work remotely from home. Klamth County has affordable housing and great internet access and speeds.. |
| Economic Development (e.g. new employers or facilities, including number of jobs and est. year of completion) | Klamath County Economic Development Association predicts 1,073 new jobs in the next 2 years. Those are traditional jobs. There will be additional jobs from individual relocating to Klamath County to work remotely. These untraditional employees will create more demand serves workers. |
| Infrastructure Projects (e.g. transportation and utilities) | ODOT continue to work and improve HWY 97. Yearly the amount of traffic continue to increase on this highway. which is leading to growth for Klamath Falls. Soon Klamath Falls will have all three major truck stops: Pilot is already open, Loves is under construction, and TA has been permitted. |


| Other Factors Promoting Population or Housing Growth | Klamath County still has affordable housing prices compared to the central oregon area and rogue valley. Klamath County offer the same recreational activities as those other areas. |
| :---: | :---: |
| Other Factors Hindering Population or Housing Growth | Biggest factor that hinders our growth is the draught, and loss of irrigation water. The agriculture sector of the County Economy is not growing. |
| 8a. Summary of current or proposed policies affection growth in your jurisdiction. | Klamath County is pro development. We try our best to make easy for development to occur. |
| 8b. Findings related to growth or population change from studies conducted in you jurisdiction. |  |
| 8 c . The effects of wildfires or other disasters in your jurisdiction on housing, employment/economics, and infrastructure. | Luckily the wildfire experience in our are have not destroyed many home. |
| 8d. The effects of the COVID-19 pandemic and policy measure on employment and current and planned developments. | See above |
| 9. For representatives from counties only: we invite you to provide tax lot data if available. These may be sent via email to askprc@pdx.edu |  |
| Comments? |  |

6. Appendix B: Detail Population Forecast Results

| Age | 2021 | 2022 | 2025 | 2030 | 2035 | 2040 | 2045 | 2047 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-4 | 3,962 | 3,922 | 3,835 | 3,841 | 3,904 | 4,031 | 4,124 | 4,135 |
| 5-9 | 4,422 | 4,399 | 4,191 | 3,951 | 3,957 | 4,021 | 4,148 | 4,193 |
| 10-14 | 4,312 | 4,406 | 4,619 | 4,392 | 4,151 | 4,159 | 4,225 | 4,274 |
| 15-19 | 3,999 | 4,064 | 4,273 | 4,695 | 4,461 | 4,215 | 4,219 | 4,230 |
| 20-24 | 3,912 | 3,924 | 4,047 | 4,279 | 4,682 | 4,431 | 4,168 | 4,160 |
| 25-29 | 4,346 | 4,226 | 3,947 | 4,092 | 4,303 | 4,686 | 4,417 | 4,252 |
| 30-34 | 4,618 | 4,659 | 4,747 | 4,109 | 4,244 | 4,448 | 4,825 | 4,795 |
| 35-39 | 4,089 | 4,241 | 4,624 | 4,963 | 4,333 | 4,477 | 4,690 | 4,893 |
| 40-44 | 3,771 | 3,856 | 4,015 | 4,656 | 4,982 | 4,345 | 4,477 | 4,501 |
| 45-49 | 3,658 | 3,644 | 3,797 | 4,108 | 4,747 | 5,074 | 4,449 | 4,483 |
| 50-54 | 3,875 | 3,929 | 3,811 | 3,838 | 4,144 | 4,775 | 5,099 | 4,763 |
| 55-59 | 4,349 | 4,101 | 3,751 | 3,715 | 3,736 | 4,029 | 4,636 | 4,878 |
| 60-64 | 4,856 | 4,724 | 4,420 | 3,681 | 3,648 | 3,677 | 3,962 | 4,210 |
| 65-69 | 5,149 | 5,096 | 4,740 | 4,222 | 3,536 | 3,505 | 3,539 | 3,673 |
| 70-74 | 4,508 | 4,523 | 4,629 | 4,242 | 3,778 | 3,161 | 3,124 | 3,042 |
| 75-79 | 2,827 | 3,105 | 3,561 | 3,841 | 3,526 | 3,136 | 2,619 | 2,665 |
| 80-84 | 1,728 | 1,780 | 2,047 | 2,641 | 2,864 | 2,636 | 2,344 | 2,119 |
| 85+ | 1,442 | 1,478 | 1,568 | 1,883 | 2,405 | 2,791 | 2,813 | 2,758 |

Source: PRC Estimates, 2021; Forecast by Population Research Center (PRC).

## 7. Appendix C: Comparison of Current and Previous Forecast

To provide a better understanding of the changes since the last round of forecast for the Region 1 counties, this section compares the current 2022 total county population forecast to the population forecast published by the Population Research Center in 2018.

Population Forecast Comparison



[^0]:    Cover Photo Credit: Gary Halvorson, September 2010.
    https://commons.wikimedia.org/wiki/File:Lake of the Woods (Klamath County, Oregon scenic imag es) (klaDA0185).jpg

[^1]:    This project is funded by the State of Oregon through the Department of Land Conservation and
    Development (DLCD). The contents of this document do not necessarily reflect the views or policies of the State of Oregon.

[^2]:    ${ }^{1}$ https://csss.uw.edu/research/working-papers/contemporary-model-life-tables-developed-countries-application-model-based

