

# Coordinated Population Forecast



**2022**

Through

**2072**

## Deschutes 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 sub-areas within each county for each five-year interval of the forecast period (2022-2072).

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[https://commons.wikimedia.org/wiki/File:Three\\_Sisters\\_\(Deschutes\\_County,\\_Oregon\\_scenic\\_images\)\\_\\_\(desDA0141\).jpg](https://commons.wikimedia.org/wiki/File:Three_Sisters_(Deschutes_County,_Oregon_scenic_images)__(desDA0141).jpg)

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

**2022 – 2072**

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

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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<sup>1</sup>. 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 5-10 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

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<sup>1</sup> <https://csss.uw.edu/research/working-papers/contemporary-model-life-tables-developed-countries-application-model-based>

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

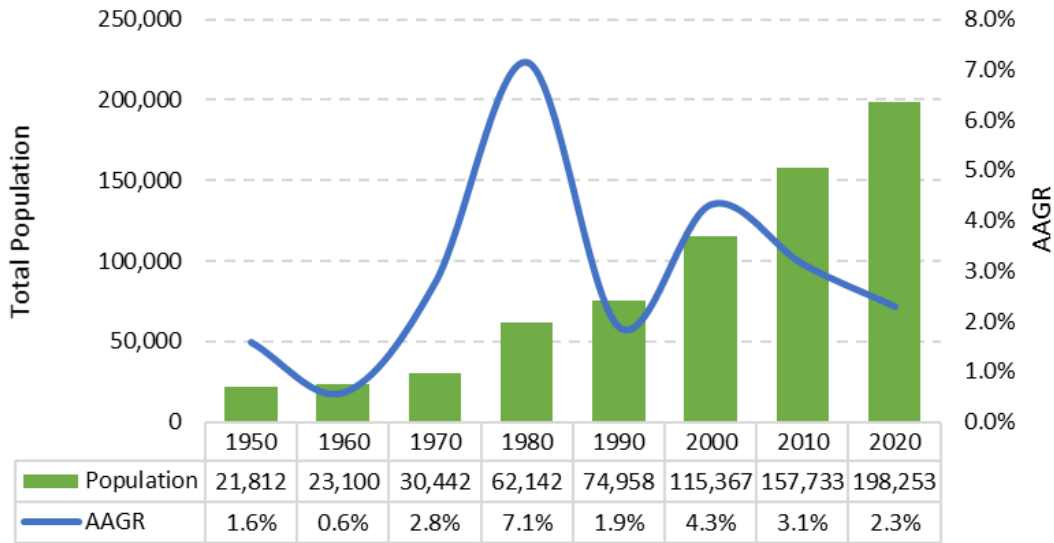
There has been a significant increase in population, diversity, and age groups among Deschutes county's community members in the past decade according to the general survey responses received from the county and its cities. During COVID-19, there has been a notable influx of Portland/Seattle/CA migrants. The increased allowance for remote work across many industries has further prompted an influx of new residents who work remotely or commute to other areas outside of Deschutes County. Noted in the general response survey, there have been approved for new residential subdivisions west of the city of Bend, which contains approximately 187 residential lots (estimated completion in 2023). In the City of Bend, construction of new housing has been steady over the last decade and has not slowed during the pandemic. It is documented that in areas such as Petrosa there will be 1,101 total units' owner a renter occupancy estimated to be completed in the next five to ten years. There are several more areas across the City of Bend ranging from 409 units to 1710 units to be completed in the next 10 years. Across the county, there are several notable pieces of documentation stating the increased cost of housing is with the lack of housing, building materials, and labor. The 2020 wildfires have made an impact on the county and its cities.

## 3. Historical Trend and Population Forecast

### 3.1 County Population

As illustrated in the Figure 1, Deschutes County experienced a peak growth in the 1980 census and the AAGR has been over 2.0% for the last three censuses. The county reached an AAGR of over 7.0% in the 1970s in which the population more than doubled in a 10-year period. In the past two decades, the county population achieved the fastest growth in the 2000s and since then, the AAGR has declined compared to the 2000 census. The forecast shows Deschutes County's population is expected to continue growing and maintain an AAGR of at least 1.1% over the next 50-year (Figure 2). The growth rate is projected to continue the 2010-2020 AAGR of 2.3% up to 2025. Over time, the county growth rate is projected to decline compared to historic rate in the past 20 years. By 2072, the county population reaches over 392,000, which is nearly a 89% increase from the population forecast for 2022.

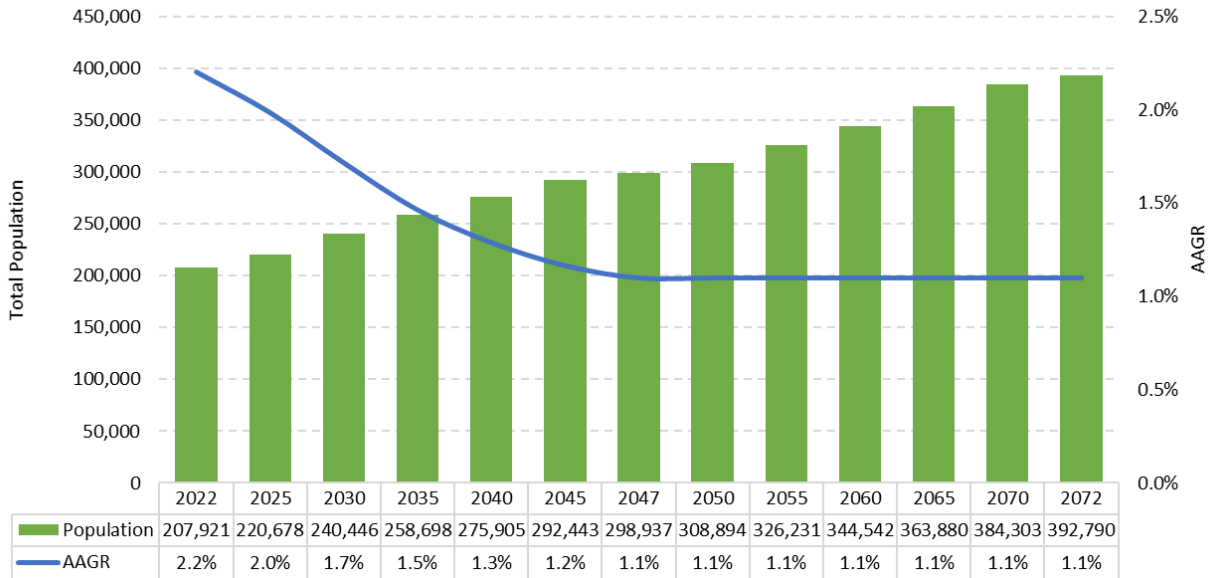
### Historical Census Population



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.

### Population Forecast by year (2022-2072)



Sources: Forecasted by Population Research Center (PRC).

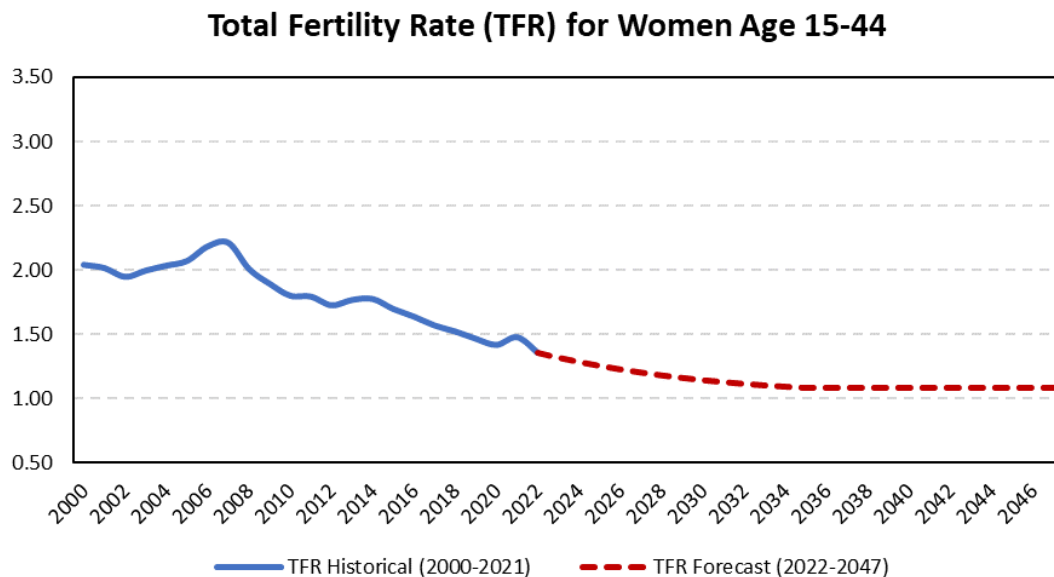
Figure 2. Forecasted total county population and AAGR, 2022-2072.

### 3.2 Births and Deaths

The total fertility rate (TFR) is shown in Figure 3. Deschutes County's TFR has been declining in most years since 2007. Compared to Oregon state, which experienced a TFR drop from 1.7 to 1.4 between 2014 and 2020, Deschutes County's TFR followed a similar declining trend during that same time period. The TFR is projected to continue declining in the forecast, from 1.4 in 2022 to 1.1 in 2035. A TFR of 1.1 was held constant in the forecast after 2035. The county TFR is projected to be around 1.8 throughout the forecast. Compared to other counties in southern Oregon, Deschutes County's TFR is on the lower side, which means population growth in the county may rely more on in-migration than natural increase.

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 in the county is projected to be outnumbered by annual deaths around 2022, which is a shift compared to historic trend. Annual births in the county declined slightly between 2022 and 2032, from over 1,770 to 1,672, but recovers afterwards. This may be associated with changes in population age structure that promote births, for example, higher proportion of younger populations.

In comparison, annual deaths are projected to continue to increase. The increase in deaths shown in the 2021 OHA preliminary data may mainly be associated with excess deaths related to COVID-19. The impacts of COVID-19 was considered to be short-term in our forecast and the county annual deaths are expected to return to continue the pre-pandemic trend. Annual deaths are projected to reach over 4,000 by 2047, an increase of over 2,000 compared to 1,774 in 2022. As the gap between births and deaths becomes greater, population growth is expected to slow down.



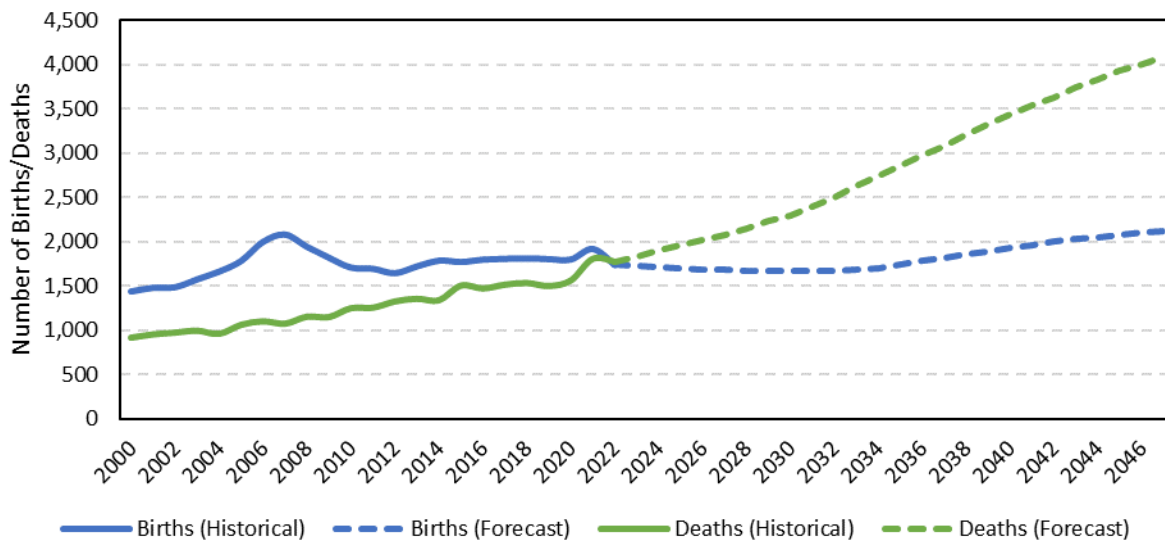
*Note: OHA's vital statistics for 2021 are preliminary at the time of this report.*

*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.**



## Historical and Forecast Annual Births and Deaths (2000-2047)



*Note: OHA's vital statistics for 2021 are preliminary at the time of this report.*

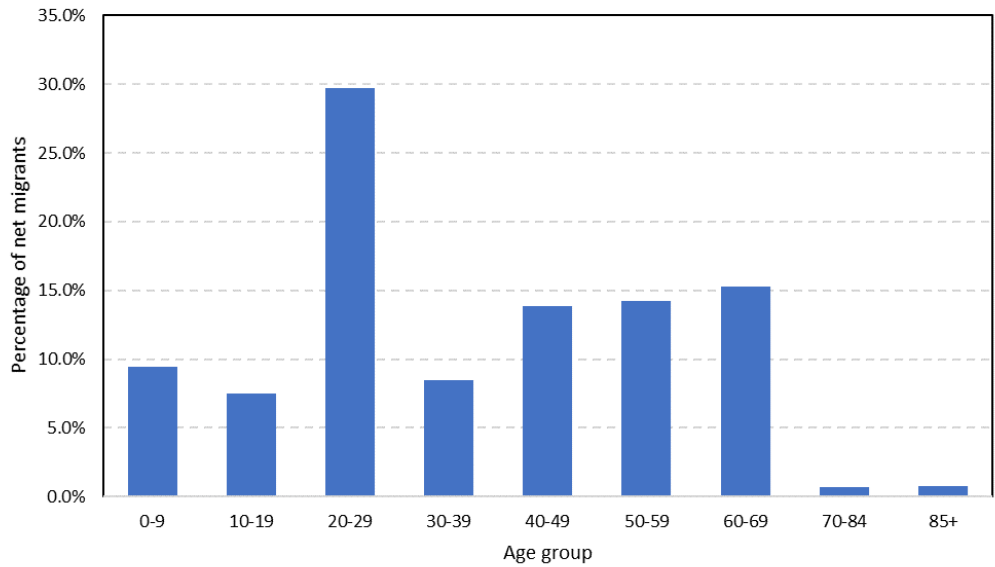
*Sources: Oregon Health Authority (OHA), Center for Health Statistics. Calculations and forecast by Population Research Center (PRC).*

**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. All age groups shown in Figure 5 indicated positive net migration and the 20-29 age group accounted for the highest proportion of net migration in the county. The oldest age groups accounted for only a small share of net migration, meaning the older population is very unlikely to move in or out of the county. The higher share of positive net migration in the younger age groups can play a role in the increases in births shown in Figure 4.

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

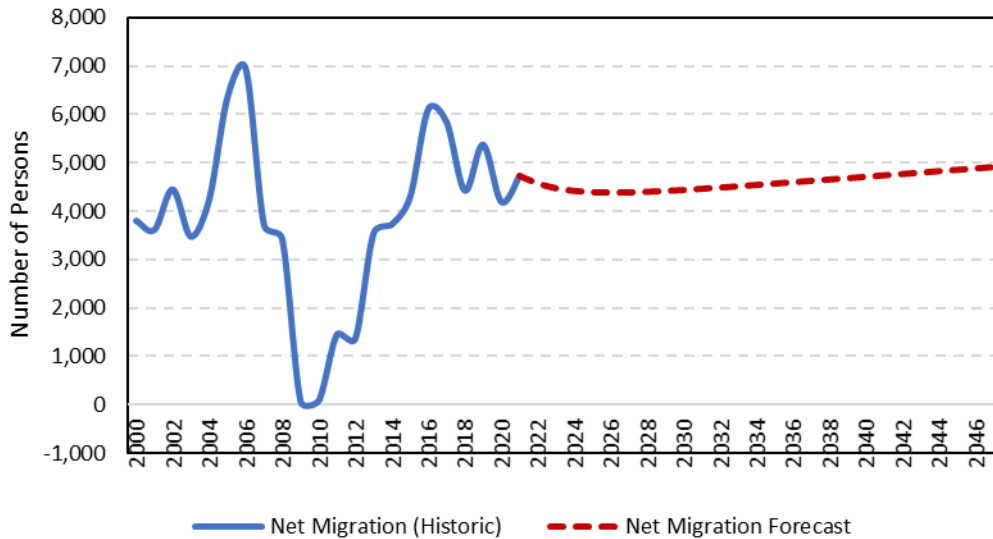


*Sources: American Community Survey (ACS); Internal Revenue Services (IRS); US Census Bureau Population Estimated Program (PEP); Calculated by Population Research Center (PRC).*

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

As shown in Figure 6, the historic annual net migration in Deschutes 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 number of net migrations in 2006, in which the annual net migration reached nearly 7,000. Annual net migration is projected to remain between 4,000 to 5,000 and gradually increase over time, which contributes to population growth.

### Annual Net Migration (2000-2047)

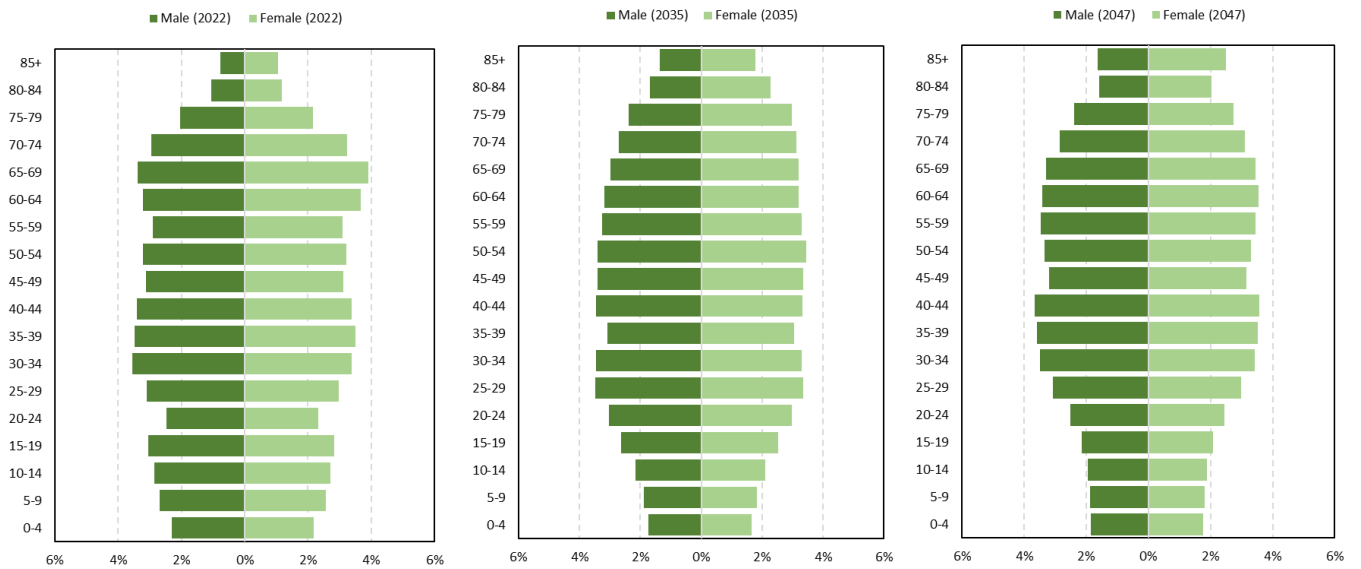
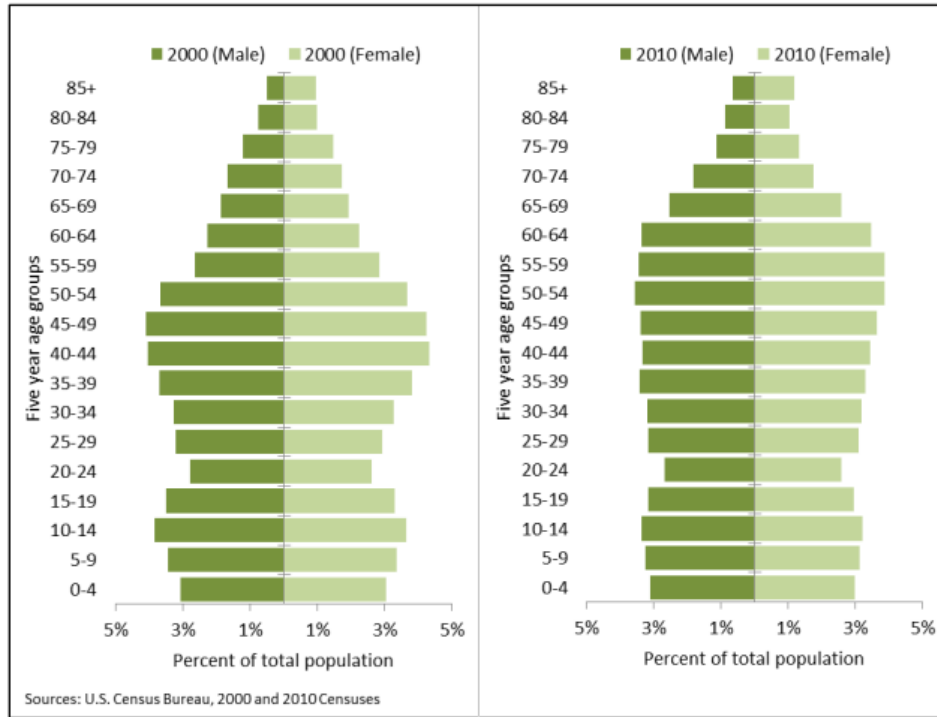


Sources: Internal Revenue Service (IRS) Tax Stats (1990-2020); American Community Survey (ACS); Population Estimates Program (PEP) 1990-2020. Calculations and forecast by Population Research Center (PRC).

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. The share of populations aged 40-44 and 45-49, which were the two age groups accounting for the highest population shares in 2000, lost some of their shares while other age groups gained shares in 2010. The 2010 age pyramid showed that populations in age groups between 25-64 were more evenly distributed than in the 2000 census. In the forecast, population between the ages of 30 and 64 accounts for the largest share in the county. In 2035, age groups between 0 and 19 shows a decline in population shares compared to 2022, which may mainly be associated with declining births shown in Figure 4. In contrast, the oldest age group is projected to increase its share over time. Population 85+ is projected to account for around 3.2% of the total population in 2035 and 4.2% in 2047, compared to 1.9% in 2022.



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. Between the two censuses, 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. Among non-Hispanic and non-White alone populations, population identified as “American Indian and Alaska Native alone” in the 2020 census was the only group that had a relative loss. In the 2020 census, the Hispanic or Latino population continued to be the largest non-white alone population in the county.

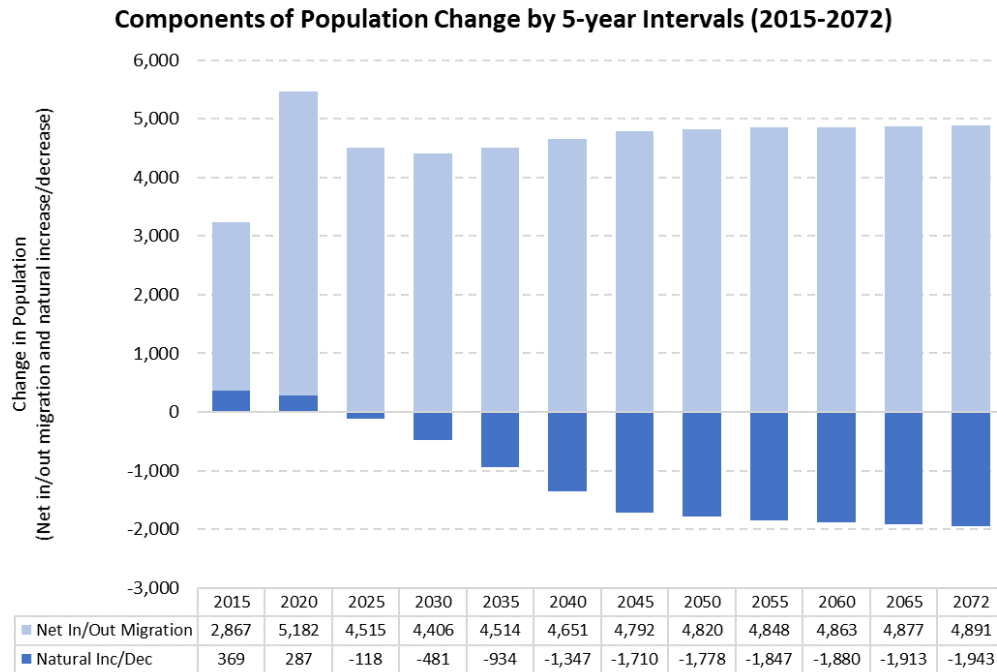
**Table 1. County population by race/ethnicity.**

Hispanic or Latino and Race	2010		2020		Absolute Change	Relative Change
<b>Total Population</b>	157,733		198,253		40,520	25.7%
Hispanic or Latino (of any race)	11,718	7.4%	17,237	8.7%	5,519	47.1%
<b>Not Hispanic or Latino</b>	146,015	92.6%	181,016	91.3%	35,001	24.0%
White alone	139,470	88.4%	164,595	83.0%	25,125	18.0%
Black or African American alone	524	0.3%	786	0.4%	262	50.0%
American Indian and Alaska Native alone	1,197	0.8%	1,139	0.6%	-58	-4.8%
Asian alone	1,412	0.9%	2,421	1.2%	1,009	71.5%
Native Hawaiian and Other Pacific Islander alone	183	0.1%	258	0.1%	75	41.0%
Some Other Race alone	141	0.1%	1,028	0.5%	887	629.1%
Two or More Races	3,088	2.0%	10,789	5.4%	7,701	249.4%

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 the county because there are more deaths than births), while the lighter blue shade indicates the net migration. At the county level, natural decrease is projected to occur as annual deaths outnumber annual births. In the meantime, positive net migration is projected to continue and gradually increase over time. Although annual deaths are projected to increase at a faster pace compared to births, net migration remains significantly higher than natural decrease, which promotes population growth.



**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. As shown in Table 2, all four UGBs in Deschutes County are projected to grow in the next 50 years. Between 2010 and 2020, the four UGBs experienced AAGRs of at least 2.4% or higher while the population outside of UGBs experienced a relatively lower AAGR in comparison. The Sisters UGB is projected to have the highest AAGR throughout the forecast period and its population is projected to reach nearly 15,000 by 2072. The two smaller UGBs are projected to have higher AAGRs compared to the larger UGBs. On the other hand, population outside of UGBs are expected to decline in the second half of the forecast time horizon.

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

	Historical			Forecast				
	2010	2020	AAGR (2010-2020)	2022	2047	2072	AAGR (2022-2047)	AAGR (2047-2072)
<b>Deschutes County</b>	157,733	198,253	2.3%	207,921	298,937	392,790	1.5%	1.1%
<b>Larger Sub-Areas</b>								
Bend	77,122	99,598	2.6%	103,976	160,361	225,619	1.7%	1.4%
Redmond	26,508	33,608	2.4%	37,342	60,060	82,601	1.9%	1.3%
<b>Smaller Sub-Areas</b>								
La Pine	1,653	2,512	4.2%	2,736	5,129	8,336	2.5%	1.9%
Sisters	2,038	3,064	4.1%	3,437	7,911	14,881	3.3%	2.5%
<b>Outside UGBs</b>	50,412	59,471	1.7%	60,430	65,476	61,352	0.3%	-0.3%

*Note: UGBs are indicated by their city names. Larger 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

As shown in Table 3, the Bend UGB continues to account for most of the population shares among all UGBs, reaching 57.4% of the county population by 2072. The Redmond UGB is also expected to obtain larger population share and it is projected to have a 121% population increase in the next 50 years. The two larger UGBs are projected to account for 78% of the county population by 2072, an increase of 10 percent points from 2022. Both the Bend and Redmond UGBs are projected to more than double their 2022 populations in the next 50 years.

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

	Population			Share of County Population		
	2022	2047	2072	2022	2047	2072
<b>Deschutes County</b>	207,921	298,937	392,790			
<b>Larger Sub-Areas</b>						
Bend	103,976	160,361	225,619	50.0%	53.6%	57.4%
Redmond	37,342	60,060	82,601	18.0%	20.1%	21.0%
Outside UGBs	60,430	65,476	61,352	29.1%	21.9%	15.6%

*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

Although the La Pine and Sisters UGBs only account for 3% of the county population in 2022, they are projected to double this share by 2072 (Table 4). During the first 25 years of the 50-year forecast period, population in the Sisters UGB is projected to increase by 130%, from 3,437 in 2022 to 7,911 in 2047. Population in the La Pine UGB is projected to increase by 87% in the next 25 years.

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

	Population			Share of County Population		
	2022	2047	2072	2022	2047	2072
<b>Deschutes County</b>	207,921	298,937	392,790			
<b>Smaller Sub-Areas</b>						
La Pine	2,736	5,129	8,336	1.3%	1.7%	2.1%
Sisters	3,437	7,911	14,881	1.7%	2.6%	3.8%
Outside UGBs	60,430	65,476	61,352	29.1%	21.9%	15.6%

*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	Deschutes
Date   Time	10.15.21
Jurisdiction	City of Bend
Name and Title	Damian Syrnyk, AICP City of Bend Growth Management Division Senior Planner
Observations about Population (e.g. birth rates, aging, immigration, racial and ethnic change)	Population growth was steady between 2010 and 2020 Census counts. On April 1, 2020, Bend's population reached 99,178. For context, PSU's 2020 population forecast for the Bend UGB in 2020 was 98,205; the City's Coordinated Population forecast for the UGB in 2020 was 100,646.
Observations about Housing (Vacancy rates, seasonal occupancy, demolitions, renovations)	Construction of new housing has been steady over the last decade, and has not slowed during the COVID pandemic. Vacancy rates are very low (around 1%) for both owner and renter occupied housing. Average sales prices have continued to increase along with average rents for all types of rental housing.
Planned Housing Developments or Group Quarters Facilities (including number of units, occupancy, and estimated year of completion)	<p>Several large master planned developments have been recently approved:</p> <p>Discovery West, Treeline, Area #3, and Shevlin West (one area, multiple projects) – 967 units, for owner and renter occupancy, estimated completion next five years.</p> <p>Petrosa – 1,101 total units, owner and renter occupancy, estimated completion next five to ten years.</p> <p>Easton – 409 total units, owner and renter occupancy, estimated completion next five years. Southeast Area Plan – planned capacity for 1,231 total units, for owner and renter occupancy, estimated completion TBD. Further sewer and transportation work to be completed.</p> <p>Stevens Ranch Master Plan – 1,710 total units, for owner and renter occupancy. Estimated completion next five to 10 years.</p>

	<p>15th Street School District Plan. This plan includes a site for a new high school (construction finished for 2021-2022 school year).</p> <p>Two additional master plans are in development:  North Triangle UGB Expansion Area – planned capacity for 505 housing units, owner and renter occupancy. No scheduled for development yet. Development team preparing master plan for area.</p> <p>East Stevens Road Concept Plan – concept plan in development, will include at least 20 acres of land for deed-restricted affordable housing. No maximum numbers of units or schedule for completion yet. Master planning underway per 2021 HB 3318.</p>
<p>Economic Development (e.g. new employers or facilities, including number of jobs and est. year of completion)</p>	<p>The COVID 19 pandemic has had the hardest effects on the leisure and hospitality industry. Retail, manufacturing, construction are still strong during the pandemic.</p> <p>For the Bend-Redmond MSA (Deschutes County) seasonally adjusted non-farm payroll employment increased by 2,400 jobs between August 2020 and August 2021.</p> <p>The Oregon Employment Department’s “Industry Employment Forecasts” for 2019-2029 for Central Oregon (Crook, Deschutes, Jefferson Counties) shows total employment growing by 12%.</p> <p>The following is excerpted from the Central Oregon Business Index, 4th quarter 2020 report prepared by the Oregon Economic Forum  The Central Oregon Business Index continued to rise in the fourth quarter despite the winter wave of the Covid-19 pandemic and the associated restrictions on business activities. While a broad array of indicators has improved, the labor market remains depressed. Assuming the pandemic ebbs as vaccines become more widely available, activity should accelerate in 2021.</p> <p>The following is excerpted from the August 2021 Central Oregon Labor Trends for the Bend-Redmond MSA:</p>

Employment gains over the last year are widespread with significant gains in financial activities, construction, manufacturing, wholesale trade, transportation, and local government. However, these estimates show a decline in employment for professional and business services and leisure and hospitality over the past year. Both those losses, particularly losses in leisure and hospitality, are questionable as the industry has posted record hiring demand this summer.

From Bend Bulletin article dated October 3, 2021 on regional economic outlooks, quoting from Damon Runberg, Central Oregon Regional Economist with the Oregon Employment Department:

Central Oregon outlook by Runberg: “A full recovery is an important milestone, but it does not mean that we will avoid significant head winds moving forward. Difficulty finding workers will continue to plague employers as unemployment levels fall dramatically and demand for workers remains elevated. The labor market is also increasingly feeling the pinch of baby boomers retiring out of the labor force.

“However, this labor tightness should ease, at least marginally, as the demand for labor slows moving into the winter months and normal migration patterns resume. Central Oregon has long relied on in-migration to help bolster the local labor supply. The pandemic and the housing shortage likely slowed that inflow over the past 18 months. Despite the marginal improvement, employers should already be planning for a future where labor supply constraints are the norm. This likely looks like more automation, higher wages, and on-the-job training.”

<p>Infrastructure Projects (e.g. transportation and utilities)</p>	<p>Infrastructure construction has been strong since 2017, and the City of Bend has or will be completed several large infrastructure plans with projects to be constructed over the next 20 years.</p> <p>2018 Collection System (sewer) Public Facility Plan. Outlines sewer collection projects for the Bend UGB, including areas added through the 2016 UGB Expansion. City is just starting on a new collection system master plan, to be completed mid-2023. The City will begin to develop a new master plan for the Wastewater Treatment Plan next year (2022-23).</p> <p>2020 Transportation System Plan (TSP). City Council adopted the TSP in September of 2020. In November or 2020, Bend voters approved a \$190 million general obligation bond for transportation projects. A Transportation Bond Oversight Committee (TBOC) is now prioritizing projects for construction in the capital improvement program.</p> <p>2021 Integrated Water System Master Plan (iWSMP). On October 6th, the City Council approved the iWSMP, which includes projects to improve reservoirs, booster pumping stations, and water pipes in Bend’s water utility. In October, the Oregon Water Resources Department (OWRD) approved Bend’s Water Management and Conservation Plan (WMCP).</p>
<p>Other Factors Promoting Population or Housing Growth</p>	<p>Land supply – master planning for areas included in 2016 UGB expansion</p> <p>Infrastructure</p> <p>Strong construction activity, new supply coming on line, and for all types of housing (sale or rent)</p>
<p>Other Factors Hindering Population or Housing Growth</p>	<p>Housing supply – more demand than available supply; prices are high</p> <p>Housing construction not kept pace with population growth. Labor, building materials (e.g. wood products) issues slowing construction.</p>

<p>8a. Summary of current or proposed policies affection growth in your jurisdiction.</p>	<p>City Council has adopted a number of Council goals for the 2021-2023 biennium. Several of these focus on land use and infrastructure planning during this period as foundational pieces for a discussion of land supply and potential infill and/or UGB expansion between 2023-2025.</p>
<p>8b. Findings related to growth or population change from studies conducted in you jurisdiction.</p>	<p>Wildfire and wildfire smoke impacted Bend in 2017, 2020, and in 2021. The Oregon Legislature passed SB 762 during the 2021 session that will eventually require more of cities for planning to mitigate the risk of wildfire in the wildland urban interface (WUI) around cities.</p>
<p>8c. The effects of wildfires or other disasters in your jurisdiction on housing, employment/economics, and infrastructure.</p>	<p>Wildfire smoke impacted tourism, outdoor sporting events, and outdoor entertainment events (e.g. concerts) in addition to the COVID 19 pandemic.</p>
<p>8d. The effects of the COVID-19 pandemic and policy measure on employment and current and planned developments.</p>	<p>Anecdotally, Bend is considered a “Zoom” town that is attracting new residents who can live/play in Bend and work remotely.</p>
<p>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</p>	
<p>Comments?</p>	<p>N/A</p>

County	Deschutes
Date   Time	10.12.21
Jurisdiction	City of La Pine
Name and Title	City Planner Alexa Repko
Observations about Population (e.g. birth rates, aging, immigration, racial and ethnic change)	<p>2010 Census:</p> <ul style="list-style-type: none"> <li>• Age: 22.4% under 18, 6.8% 18-24, 22.7% 25-44, 30.4% 45-64, 17.8% 65+</li> <li>• Racial Makeup: 93.5% White, 0.2% African American, 1.1% Native American, 0.2% Asian, 0.1% Pacific Islander, 1.8% other races, 3.0% two or more races, 5.88% Hispanic or Latino</li> </ul>
Observations about Housing (Vacancy rates, seasonal occupancy, demolitions, renovations)	No vacancy, no demolitions, little seasonal occupancy, and few renovations.
Planned Housing Developments or Group Quarters Facilities (including number of units, occupancy, and estimated year of completion)	<p>Two subdivisions were approved in 2019:</p> <ul style="list-style-type: none"> <li>• Evans Way Estates, located at Tax Lots 200 &amp; 300 on Deschutes County Assessor’s Map 22-10-14CD. This subdivision will be 61 lots and has yet to be recorded.</li> <li>• Reserve in the Pines, located at Tax Lots 200 &amp; 202 on Deschutes County Assessor’s Map 22-10-11. This subdivision was platted for 192 lots and is building in the first phase. Because it has been platted it will no longer come up under those Tax Lot numbers, but is located directly next to our Crescent Creek subdivision on one side and our Senior Center on the other.</li> </ul> <p>One subdivision approved in 2020:</p> <ul style="list-style-type: none"> <li>• Pine Landing, located at Tax Lot 1300 on Deschutes County Assessor’s Map 22-10-14AC. This subdivision will be 10 lots and has yet to be recorded.</li> </ul> <p>Two subdivisions approved in 2021:</p> <ul style="list-style-type: none"> <li>• West Pine Landing, located at Tax Lots 2400 &amp; 2500 on Deschutes County Assessor’s Map 22-10-14BD. This subdivision will be 9 lots and has yet to be recorded.</li> <li>• Finley Butte Ranch, located at Tax lot 100 on Deschutes County Assessor’s Map 22-10-14CD. This subdivision will be 89 lots and has yet to be recorded.</li> </ul>

Economic Development (e.g. new employers or facilities, including number of jobs and est. year of completion)	<ul style="list-style-type: none"> <li>• Outriders Northwest, 6 jobs, est. completion 2022</li> <li>• True Blue, 11 jobs, est. completion 2022</li> <li>• Bath Properties, 1 job, est. completion 2021</li> <li>• Mann Mortgage, 1 job, est. completion 2021</li> <li>• Wild Nectar, 1 job, est. completion 2021</li> <li>• Deschutes County Title, 3 jobs, est. completion 2021</li> </ul>
Infrastructure Projects (e.g. transportation and utilities)	<ul style="list-style-type: none"> <li>• City water and wastewater expansion and improvement project, est. completion 2023</li> <li>• Transit Center, est. completion 2023</li> </ul>
Other Factors Promoting Population or Housing Growth	The cost of living is less expensive than other towns in the County. More open space/rural living. Proximity to natural features.
Other Factors Hindering Population or Housing Growth	Housing is quickly becoming more expensive. Housing isn't available. Cost/availability of building materials.
8a. Summary of current or proposed policies affection growth in your jurisdiction.	<p>a. N/A</p> <p>b. N/A</p> <p>c. Residential/Commercial: Increased setbacks, fire access, specialized landscaping</p> <p>d. Employment: Unwillingness to comply with measures related to COVID</p> <p>Developments: Cost/availability of building materials</p>
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 via email to askprc@pdx.edu	
Comments?	



County	Deschutes
Date   Time	11.30.21
Jurisdiction	City of Redmond
Name and Title	Sarah Vowell, Planning Permit Coordinator & Deborah McMahon, Planning Manager
Observations about Population (e.g. birth rates, aging, immigration, racial and ethnic change)	The housing market in Redmond is under intense pressure with availability at record lows. Inventory of detached single-family dwellings is about 40 days or less and attached units/apartments are at very high monthly payments, if available. Seasonal occupancy is not a problem and the City limits such uses in any event. Pressure on housing is related to population in-migration from other states, lack of housing at attainable levels in Bend, labor availability, and cost.
Observations about Housing (Vacancy rates, seasonal occupancy, demolitions, renovations)	Juniper Canyon Living is an assisted living facility with 108 rooms in five buildings at 701 NW Spruce Ave. It is currently under construction with some buildings complete and Certificate of Occupancy issued.
Planned Housing Developments or Group Quarters Facilities (including number of units, occupancy, and estimated year of completion)	Our observation is that Redmond is attracting younger families and increasing aging of the population too. Racial and ethnic changes indicate increases in these sections. Recent population forecasts far exceeded previous predictions. Redmond = 36,122 residents = 12.13% increase from July 1, 2020 = 3,907 new residents = 10.7 new residents a day.
Economic Development (e.g. new employers or facilities, including number of jobs and est. year of completion)	
Infrastructure Projects (e.g. transportation and utilities)	Our 2021/2022 budget outlines projects at: <a href="https://www.redmondoregon.gov/home/showpublisheddocument/22970/637636723481000000">https://www.redmondoregon.gov/home/showpublisheddocument/22970/637636723481000000</a> . This includes the expansion/relocation of the City Wastewater Treatment Plant and the design work for the Airport Passenger Terminal expansion project.

Other Factors Promoting Population or Housing Growth	Lack of attainable housing in other areas of the state, natural attractiveness of the area, job growth, and availability of land.
Other Factors Hindering Population or Housing Growth	Infrastructure, primarily sewer expansion hinders housing growth at levels that keep prices from skyrocketing.
8a. Summary of current or proposed policies affection growth in your jurisdiction.	Please see the 2040 Comprehensive Plan at: <a href="https://www.redmondoregon.gov/home/showpublisheddocument/22576/637528649112970000">https://www.redmondoregon.gov/home/showpublisheddocument/22576/637528649112970000</a>
8b. Findings related to growth or population change from studies conducted in you jurisdiction.	Please see the Housing Needs Analysis at: <a href="https://www.redmondoregon.gov/home/showpublisheddocument/22997/637654187381400000">https://www.redmondoregon.gov/home/showpublisheddocument/22997/637654187381400000</a>
8c. The effects of wildfires or other disasters in your jurisdiction on housing, employment/economics, and infrastructure.	The Central Oregon Regional Emergency Services Training and Coordination Center is currently under discussion of design and location in anticipation of a Cascadia Earthquake event.
8d. The effects of the COVID-19 pandemic and policy measure on employment and current and planned developments.	Clearly, Oregon, especially Central Oregon, provides an escape from densely populated areas in other regions, states, etc.
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?	

County	Deschutes
Date   Time	10.15.21
Jurisdiction	DESCHUTES COUNTY
Name and Title	Associate Planner Tarik Rawlings
Observations about Population (e.g. birth rates, aging, immigration, racial and ethnic change)	<ul style="list-style-type: none"> <li>• Significant population increase (40,520 residents/25%) over past decade</li> <li>• Increased diversity in BIPOC community members and age groups</li> <li>• Notable influx from Portland/Seattle/CA areas during COVID</li> </ul>
Observations about Housing (Vacancy rates, seasonal occupancy, demolitions, renovations)	<ul style="list-style-type: none"> <li>• Some public input indicates frustrations with low vacancy rates and affordable housing available to renters.</li> <li>• Some public criticism of the amount of housing stock used as short-term rentals and not as long-term housing options</li> <li>• There continue to be seasonal changes in occupancy with a heightened number of visitors/short-term occupancies that appear to concentrate in the peak summer months and the winter holiday season</li> <li>• ~34% increase in demolition permits from 2020-2021</li> </ul>
Planned Housing Developments or Group Quarters Facilities (including number of units, occupancy, and estimated year of completion)	<ul style="list-style-type: none"> <li>• Westgate Subdivision has received tentative approval as a new residential subdivision to the west of City of Bend containing approximately 187 residential lots (estimated completion in 2023)</li> <li>• The Tetherow Resort has received tentative approval for an additional 42 residential lots (estimated completion in 2023-24)</li> <li>• The existing Destination Resort, Caldera Springs, is currently being reviewed for a proposal to expand the number of residential lots (estimated completion in 2024)</li> </ul>
Economic Development (e.g. new employers or facilities, including number of jobs and est. year of completion)	<ul style="list-style-type: none"> <li>• Noted increase in pre-application meetings and new land use applications for commercial use site plan reviews in the Tumalo/Terrebonne unincorporated communities</li> <li>• Thornburgh Resort has received tentative approvals for initial development phases of a new Destination Resort. At full approval and buildout, the resort will include approximately 229 new residential lots supporting overnight lodging units, dwellings, a golf course, resort facilities, utility infrastructure, and an unknown number of potential employees. Due to the complex and ongoing review process,</li> </ul>

	<p>it is unclear when this project may be completed.</p> <ul style="list-style-type: none"> <li>• The existing Resort Community of Aspen Lakes has expressed interest in expanding their size and development.</li> </ul>
<p>Infrastructure Projects (e.g. transportation and utilities)</p>	<ul style="list-style-type: none"> <li>• Oregon Department of Transportation (ODOT) improvements are planned for roundabouts and other improvements in Terrebonne and Tumalo unincorporated communities.</li> <li>• A sewer feasibility study is currently underway for the Terrebonne unincorporated community as wastewater challenges increase in scope and frequency</li> <li>• Deschutes County is undertaking a Transportation System Plan (TSP) update in the near future</li> <li>• In coordination with City of Sisters, Deschutes County is involved in the preliminary planning phases for a Sisters County Trail System for multi-modal trails.</li> </ul>
<p>Other Factors Promoting Population or Housing Growth</p>	<ul style="list-style-type: none"> <li>• Senate Bill 391 (SB 391) may allow for numerous Accessory Dwelling Units (ADUs) in the future (pending approval of SB762, see below) which may draw additional population growth as more housing becomes available to both new and existing residents.</li> <li>• Deschutes County continues to be a highly desirable location to live and work based on proximity to recreational amenities, quality of life, and economic opportunities.</li> <li>• The increased allowance for remote work across many industries has further prompted an influx of new residents who work remotely or commute to other areas outside of Deschutes County</li> <li>• Continued public input related to challenges around affordable housing has prompted the Deschutes County Board of County Commissioners (BOCC) to discuss potential solutions including support for alternative housing types such as campgrounds, RV parks, and manufactured home parks. The BOCC intends to lobby the state legislature in 2022 to make these housing types more accessible to residents and housing developers.</li> </ul>
<p>Other Factors Hindering Population or Housing Growth</p>	<ul style="list-style-type: none"> <li>• As part of Senate Bill 762 (SB 762), Oregon jurisdictions must identify properties that are located within the Wildland Urban Interface (WUI) or areas of heightened risk for wildfire. Properties located within WUI areas will likely require significant wildfire mitigation measures (design, materials, access, water, etc.) in order for the county to approve new/expanded/altered residential uses and development in</li> </ul>

	<p>these areas. These measures can prove challenging for new residents or property owners looking to establish dwellings or ADUs (under SB 391, see above).</p> <ul style="list-style-type: none"> <li>• Generally, high housing and rental prices have made it very difficult for new and existing residents to find available rentals and/or maintain their existing residences due to price increases or sale of rentals.</li> <li>• New residential development proposals are often met with public contention and/or opposition based on numerous factors. The robust public involvement, often in an oppositional manner, can be a deterrent for new conditional use proposals or pending proposals.</li> <li>• Generally, Oregon state land use law is more restrictive in county jurisdictions in terms of allowances for new dwellings and residential development, as compared to city jurisdictions.</li> <li>• Based on feedback from county permit applicants and development professionals, the labor and material costs for residential development projects was significantly high in 2021 and resulted in timeline obstacles, delays, and other challenges to housing growth.</li> </ul>
8a. Summary of current or proposed policies affection growth in your jurisdiction.	<ul style="list-style-type: none"> <li>• Please see above.</li> </ul>
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 via email to askprc@pdx.edu	
Comments?	

## 6. Appendix B: Detail Population Forecast Results

<b>Age</b>	<b>2021</b>	<b>2022</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2045</b>	<b>2047</b>
<b>0-4</b>	9,503	9,324	8,829	8,586	8,680	9,497	10,338	10,591
<b>5-9</b>	10,857	10,972	10,669	9,764	9,546	9,668	10,514	10,895
<b>10-14</b>	11,568	11,638	12,255	12,203	11,338	11,169	11,342	11,629
<b>15-19</b>	11,457	11,976	12,399	13,229	13,200	12,367	12,230	12,252
<b>20-24</b>	9,670	10,075	12,352	13,959	14,831	14,852	14,071	14,017
<b>25-29</b>	12,747	12,675	12,807	15,659	17,348	18,324	18,454	18,133
<b>30-34</b>	13,985	14,239	14,692	14,611	17,500	19,240	20,272	20,614
<b>35-39</b>	14,225	14,485	14,635	15,517	15,458	18,364	20,125	20,432
<b>40-44</b>	13,657	14,200	15,486	16,180	17,100	17,091	20,038	21,279
<b>45-49</b>	12,685	12,951	14,548	16,953	17,685	18,648	18,690	19,329
<b>50-54</b>	12,924	13,332	13,724	15,570	17,985	18,744	19,734	19,597
<b>55-59</b>	12,434	12,457	13,522	14,954	16,819	19,240	20,032	20,512
<b>60-64</b>	14,438	14,244	13,839	14,836	16,277	18,153	20,565	21,145
<b>65-69</b>	14,777	15,230	15,489	14,868	15,884	17,308	19,171	20,265
<b>70-74</b>	12,601	12,893	14,590	15,808	15,289	16,284	17,643	17,955
<b>75-79</b>	7,832	8,724	10,617	13,254	14,378	13,917	14,822	15,665
<b>80-84</b>	4,341	4,675	5,789	8,411	10,627	11,515	11,126	11,104
<b>85+</b>	3,690	3,831	4,438	6,084	8,755	11,523	13,275	13,523

## 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.

