### **Population and Demographic Outlook**

#### **Population and Demographic Summary**

Based on the most recent decennial census, Oregon's resident population on April 1, 2020, was 4,237,256. During the past decade, Oregon gained 406,182 residents or 10.6%. This decennial gain was the second lowest since the first census count in Oregon in 1860 after gaining statehood. Still, the gain was substantial enough to yield one additional congressional seat for the state. Oregon now has a total of six members in the House of Representatives. This is rare because it took 40 years for Oregon to gain one additional seat.

Oregon's population growth of 10.6% in the last decade was 11<sup>th</sup> highest in the nation, excluding Washington D.C. The growth rate for the decade lagged all our neighboring states, except California. Oregon's growth has experienced some turbulence since the 2020 census. At OEA we use the Population Research Center, PSU's recent post-censal estimate as the base for our office's population forecasts. The PRC has revised its past estimates for the years 2020 through 2023. The revised estimate shows a loss of 20,478 people between 2000 and 2001.

Additionally, a substantial population increase between 2021 and 2023 estimated previously was revised to a small gain for each year. During the early stage of the COVID-19 pandemic Oregon lost population, according to PSU estimates. PSU's new and revised estimates now show Oregon population growth has remained low, indicating timid economic recovery in the post-pandemic years. The population growth is expected to show a steady but slow increase in the future reaching 4.487 million in the year 2033 with an annual rate of growth of 0.6% between 2024 and 2033.



Oregon's economic environment heavily influences the state's population growth. Its economy determines the ability to retain existing work force as well as attract job seekers from national and international labor markets. As Oregon's total fertility rate remains well below the replacement level and number of deaths continue to rise due to aging population, long-term growth relies entirely from net in-migration.

Working-age adults come to Oregon as long as there are favorable economic conditions such as: affordable housing and childcare, a good educational environment, and a better quality of life that project real and perceived positivity about the state. As a result of a sudden rise in the number of deaths and drop in the number of births coinciding with the COVID-19 pandemic, the natural increase turned negative starting in the year 2020 and will continue through 2033 and beyond. Migration will be solely responsible for Oregon's future population growth. Without a positive net migration stream, Oregon's population will start a steady decline. Under a few scenarios, the negative natural increase may reverse itself. Such reversal can happen if people capable of giving birth start to have more children due to behavioral or motivational factors, improved life expectancy leading to fewer deaths, or a significant migration of individuals of childbearing age into Oregon.

Age structure and its change affect employment, state revenue collection, and tax expenditures. The demand for public services varies by age groups. Demographics are the major budget drivers, which are modified by policy choices on service coverage and delivery. Births, deaths, and migration histories of decades past remain impactful on the current age-sex structure. Growth in many age groups will show the effects of the depression era birth cohort, baby boom and their echo generations, and composition of migrants during the forecast period of 2024-2033.



# Elderly (65+)

The overall elderly population (65+) was growing at a relatively slow pace during the late 1990s and early 2000s when the depression era birth cohort entered this age group. The elderly population picked up a faster pace of growth when the early baby-boom cohort started maturing into the elderly age group. This age cohort has hit the plateau of high growth rates of above 4% annually between 2011 and 2018. The group will experience continued high but diminishing rate of growth in the coming years. The average annual growth of the elderly population will be 1.6% during the 2024-2033 forecast period.

As a sign of massive demographic structural change of Oregon's population, the number of elderly people has exceeded the number of children under the age of 18 since 2023. To illustrate the contrast, in 2000 elderly population numbered a little over half of the number of children in Oregon, now the elderly outnumber the children. Different age groups among the elderly population show quite varied and fascinating growth trends:

The youngest elderly group (aged 65-74) —which was growing at an extremely fast pace in the recent past (averaging 5.2% annually)— will taper off to negative growth by the end of the forecast period as a sign to the end of the baby boom generation transitioning to the elderly age group. This high growth transitioning into a net loss of this youngest elderly population resulting in 0.6% annual average loss in the coming nine years.

- The next older generation of population aged 75-84 has been growing rapidly for a decade after several years of slow as well as negative growth until a decade ago. An unprecedented fast pace of growth, exceeding 6% annually in this age group has already started as the baby boom generation is maturing and the depression era birth cohort exiting this 75-84 age group. Annual growth rate is expected to be unusually high at 3.7% during the forecast period.
- The oldest elderly population (aged 85+) will resume growth at a strong rate steadily gaining momentum due to the combination of cohort change, historical positive net migration, and improving longevity. The average annual rate of growth for this oldest elderly group over the forecast horizon will be 5.5%. An unprecedented annual growth exceeding 8% will commence near the end of the forecast horizon.

### Working Age and Young Adults (18-64)

The oldest working age population aged 45-64 also has seen the dramatic demographic impact as the baby boom generation matures out of this age group and is replaced by smaller baby-bust cohort or Gen X. As the effect of this demographic transition is combined with slowing net migration, the once fast-paced growth has tapered off to negative growth. The growth rate will reverse to positive and will see gaining momentum over the forecast horizon with 1.0% annualized rate of change. The younger working-age population of 25-44 age group will have steady but slow growth of 0.3% annual average throughout the forecast period.

The young adult population (aged 18-24) will see only a small change, averaging 0.3% annually over the forecast period. Although the slow growth of the college-age population (age 18-24), in general, tend to ease the pressure on public spending on higher education, college enrollment typically goes up during times of a very competitive job market, high unemployment, and scarcity of well-paying jobs when the older cohort flock back to colleges to better position themselves in a tough job market.

## School Age (5-17) and pre-School Age (0-4)

The growth in K-12 population (aged 5-17) has been very slow or negative in the past and is expected to decline consistently through the forecast years mainly due to the declining number of births over the years. This will translate into slow growth or decline in the school enrollments. On average for the forecast period, this school-age population will decline by -1.2% annually. The growth rate for children under the age of five has remained near or below zero percent in the recent past and will continue negative or slow growth averaging 0.6% annually in the near future. The demand for childcare services and pre-Kindergarten programs is determined by the size of this population as well as the labor force participation and poverty rates of the parents.

Overall, the elderly population over age 65 will increase rapidly whereas the number of children will decline over the forecast horizon. The number of working-age adults in general will show slow growth during the forecast horizon. Hence, based solely on demographics of Oregon, demand for public services geared towards children and young adults will likely decline or increase only at a slower pace, whereas demand for elderly care and services will increase rapidly.

#### **Procedure and Assumptions**

Population forecasts by age and sex are developed using the cohort-component projection procedure. The population by single year of age and sex is projected based on the specific assumptions of vital events and migrations. The cohort-component projection procedure entails the model "survives" the initial population distribution by age and sex to the next age-sex category in the following year, and then applies age-sex-specific birth and migration rates to the mid-period population.

The population by single age-sex detail from the 2020 census and the most recent estimated total population for Oregon by Population Research Center of Portland State University are the base for the forecast. The numbers of births and deaths through 2023 are from Oregon's Center for Health Statistics. All other numbers and age-sex detail are generated by OEA.

Annual numbers of births are determined from the age-specific fertility rates projected based on Oregon's past trends and past and projected national trends. Oregon's total fertility rate is assumed to be 1.4 per woman in 2024 and this rate is projected to 1.5 children per woman by 2033 which is well below the replacement level fertility of 2.1 children per woman during their reproductive life.

Life Table survival rates are developed for the year 2020. Male and female life expectancies for the 2020-2033 period are projected based on the past three decades of trends and national projected life expectancies. After a sudden decline during the COVID pandemic, gradual improvements in life expectancies are expected over the forecast period. At the same time, the difference between the male and female life expectancies will continue to shrink. The male life expectancy at birth was 77.3 and the female life expectancy was 81.8 in 2010. Because of the COVID-19 pandemic, number of deaths suddenly increased, and the actual life expectancies declined. The life expectancy at birth in 2020 was 76.9 and 81.7 years for males and females, respectively. This is expected to improve to 78.4 years for women and 83.1 years for men by 2033.

Estimates and forecasts of the number of net migrations are based on the residuals from the difference between population change and natural increase (births minus deaths) in a forecast period. The migration forecasting considers Oregon's employment, unemployment rates, income/wage data from Oregon, neighboring states and the nation, and past migration trends. Distribution of migrants by age and sex is based on detailed data from the American Community Survey. The role of net migration in Oregon's population growth has gained prominence as the natural increase has begun to turn negative. Between 2024 and 2033 net migration is expected to be in the range of 28,476 to 31,966, averaging 30,500 persons annually with net migration rate ranging between 6.67 to 7.15 per thousand population.