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Oregon Tribal Land & County Population Projections by Race & Ethnicity

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Portland State Population Research Center

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Portland State
Population Research Center

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1 Introduction

1.1 About this Report

Oregon House Bill 2003 from the 2019 legislative session (HB 2003) prioritizes equitable planning to address past and ongoing disparities in access to affordable housing, and Executive Order (EO) 20-04 (2020) declared a priority to address differential vulnerability to natural hazards by race and ethnicity. These priorities and Goal 10 of the Oregon Department of Land Conservation and Development (DLCD) collectively identify an unmet and growing need for population projections with race and ethnicity detail, disability status, and for American Indian tribal lands in Oregon.

House Bill 5006 from the 2021 session (HB 5006), appropriated funds to study and make legislative recommendations on the incorporation of a regional housing needs analysis into state and local planning programs. To achieve more affordable, fair, and equitable outcomes in the housing planning process, DLCD and Oregon Housing and Community Services (OHCS) developed a plan to achieve these goals and prepare a proposal for the 2023 legislative session. An element of the plan is incorporation of race/ethnicity, disability, and tribal land areas into population projections that are used for planning.

To this end, the Population Research Center (PRC) at Portland State University (PSU) has generated new population forecasts with these elements as a contribution to an Oregon Housing Needs Analysis (OHNA) legislative proposal. This report identifies the methodologies used to make these projections, a review of selected results, and concludes with a discussion of these results and next steps.

1.2 Population Center Research Staff

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- Huda Alkitkat, *Population Estimates Program Manager*

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- David Swanson, *Research Associate*

- Joshua Wilde, *Research Scientist*

1.3 How to Read this Report

This report should be read with reference to the data elements listed below, which are downloadable on the PSUPRC Forecast Program website.

- RHNA State Population Forecasts: 5-year state level forecast of the Oregon population by five year age groups, sex, and bridged race groups from 2025 to 2050.

- RHNA County Population Forecasts: 5-year forecast of the Oregon population by county, five year age groups, sex, and bridged race groups from 2025 to 2050.

- RHNA Disability Forecasts: 5-year county level forecast of the Oregon population by age groups, sex, and bridged race groups for three disability groups from 2025 to 2050.

- RHNA Tribal Lands Forecasts: Forecasts of tribal lands population in Oregon by reservation and age for the year 2030.

1.4   Suggested Citation

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1.5   Acknowledgements

2   Methodology

County populations were forecast using a variation of the cohort component method, wherein mortality, fertility, and migration were forecasted separately. Historic county populations were pulled from the National Cancer Institute Surveillance, Epidemiology, and End Results Program (SEER) US County Population Data bridged race estimates 1990-2019. The SEER program provides annual estimates of every county in the United States broken down by age, sex, and broad racial and ethnic categories. These estimates are derived from population counts published by the US Census Bureau with the added advantage that definitions of race and ethnicity are standardized through race bridging methodologies. Racial and ethnic categories include Hispanic, White, Black, Asian Pacific Islander (API), and American Indian Alaskan Native (AIAN).

Death reports were collected from both the Oregon Health Authority (OHA) as well as the National Vital Statistics System (NVSS). All death records occurring among Oregon residents during the years 1990-2019 were tabulated by year, age, sex, county of residence, and racial or ethnic category matching the bridged race categories used in the SEER population data. Annual rates of mortality were calculated at the county level by age, sex, and bridged race category. Future rates of mortality were estimated out to the year 2073 using a modified version of the Lee-Carter Method developed by Li and Lee (2011).[1] All counties in Oregon were modeled simultaneously such that state level trends partially informed future mortality rates for all counties and all bridged race groups.

Birth records were also obtained from both OHA and NVSS for the years 1990 to 2020. All births were tabulated by year, age of mother, county of residence of mother, and bridged race of mother. Annual rates of fertility were calculated at the county level by age and bridged race category of the mother. Similar to mortality, future rates of fertility were forecasted out to the year 2073 using the Li and Lee method, again modeling all counties simultaneously such that state level trends of fertility informed future county level estimates.

For both fertility and mortality forecasts, data pertaining to deaths and births occurring in the years 2020 and 2021 were not included in the model. This decision was made due to the impacts which the COVID-19 pandemic had on mortality and fertility rates during those years. We, and many other demographers, anticipate the impacts of the COVID-19 pandemic on mortality and fertility to be shock effects from which regular rates will resume following the pandemic. Data pertaining to births and deaths in 2022 were not included as the data was not finalized at the time of this study.

Net migration counts for each county were estimated for 1990-2019 using the residual method. The residual method allows us to detail populations of net migrants by age, sex, and bridged race groups which are not published elsewhere. These data are then calibrated against official migration estimates published by the US Census Bureau's American Community Survey (ACS) Public Use Microdata Sample and Population Estimates Program. Future net migration estimates were made independently for each county in Oregon. Total net

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[1]Coherent Mortality Forecasts for a Group of Populations: An Extension of the Lee-Carter Method. `https://www.jstor.org/stable/4147363`

migration for each county was forecasted to 2073 using traditional time series methods. The demographic distribution of net migrants was taken as the average of the distribution observed over the 1990-2019 time period.

Fertility rates, mortality rates, and net migration counts were applied to the 2020 Oregon population and aged forward such that projections were made up until the year 2050. All data was tabulated by county, age, sex, and bridged race group. Explicit details on the county forecasting methodology can be found on the PSUPRC Forecast Program website.

The county AIAN forecast is used to model the population change on tribal lands using the participation rate method (Baker, Swanson, et al. 2017, 30-31). Age-specific ratios of the population on tribal lands to the total AIAN population in the surrounding county or counties are generated each year between 2000-2010 and in 2020. The county AIAN forecasts are weighted by the participation rate to generate the population of each AIAN area. The participation rate are calculated on the basis of one or more 5-year ACS samples.

As an intermediate step, before county AIAN forecasts are finalized, we developed a protocol to generate preliminary tribal lands forecasts. We produced preliminary AIAN race alone forecasts for each county using the CCR method for one 10-year step between age structured population estimates from 2010 and 2020. A separate county total population is produced by averaging the results of a linear and exponential growth model based on 2010-20 rates of population change, and the result is imposed as a control total to adjust the total population result from the CCR method while retaining the projected age structure. We have prepared preliminary results using a set of participation rates from the 2016-20 ACS ("Phase I") or trended participation rates from decennial censuses from 2000 and 2010 and the 5-year ACS for 2020 ("Phase II"). The preliminary forecasts by age are taken from the 2030 Phase II controlled projection and then controlled to an average of the 2030 total reservation populations found from: the 2030 controlled phase I total reservation population; the 2030 uncontrolled phase I total res. pop.; the 2030 controlled phase II total res. pop; and the 2030 uncontrolled phase II total reservation population uncontrolled phase II total reservation population.

Disability forecasts were made at the county level by age, sex, and race for three disability groups. Disability data was taken from the 2019 ACS. The ACS collects data on disability through six variables which capture hearing, vision, cognitive, self-care, ambulatory, and independent living disability. For this study these disability groups were further collapsed into 3 groups based on how often respondents marked that they had 2 of these disability groups in common with one another. Hearing and vision disabilities were combined into one group, self-care and ambulatory disabilities were combined into a second group, and cognitive and independent living disabilities were combined into a third group. More detailed definitions of these disabilities can be found in the glossary of this report.

Disability rates for the three collapsed groups were then modeled using information on age, sex, and location (public use micro area). Rates were applied to forecasted populations with the expectation that rates of disability will remain similar within these demographic and geographic groups over time. Increases in

disability rates overtime, therefore, come from changes in the composition of the population of Oregon, such as through population aging.

3   Results

3.1   State Overview

Since 1950 the population in Oregon state has grown tremendously. In 1950 the population in Oregon stood at 1.52 million individuals. By 1990 the population rose to 2.86 million individuals, nearly doubling the size of the state. From 1990 to 2020 the population would again increase by 1.38 million individuals reaching 4.24 million persons as of the 2020 Census. In the forecast period, 2020 to 2050, projections show a stable patten of population increase, with the Oregon state population averaging an increase of 0.35 individuals every 10 years. By 2050, forecasts expect the Oregon population to reach 5.29 million individuals.
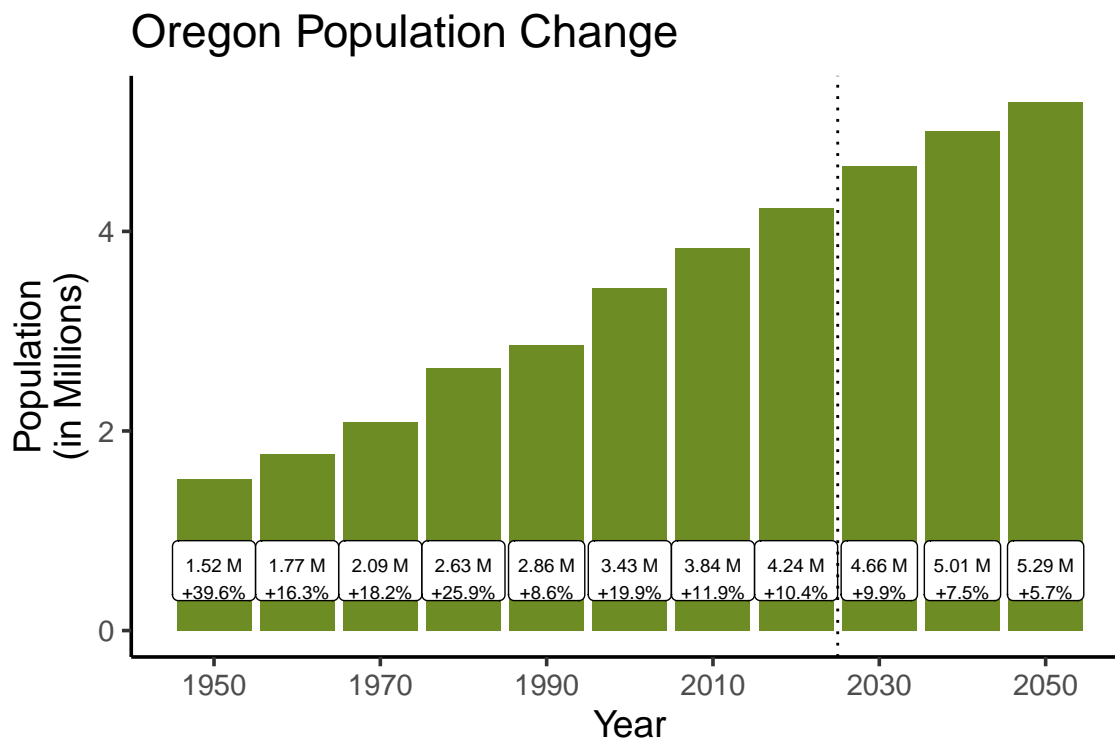
Figure 1: Population estimates and forecasts for decennial years. Values to the right of the dotted line represent forecasts.

Underlying these changes are differences in the way that racial and ethnic groups have grown within the state of Oregon. Oregon has historically been a majority White state and has had less representation of non-White populations than the US as a whole. In 1990, the White population made up 90.75% of the states total population. Compare this to the total US population which, in 1990, was only 75.6% White. Since 1990, the non-White population has more than tripled with particularly large increases among the Hispanic and Asian

Pacific Islander populations. From 1990 to 2020 the Hispanic population in Oregon state increased from 114,212 to 581,458 individuals while the Asian Pacific Islander population increased from 68,700 to 250,886 individuals. By 2020, the non-White population made up 23.69% of the states total population. Even so, Oregon still has lower representation of non-White populations compared to US as a whole, which as of 2020 was 40.7%.

In the forecast period, projections show continued growth of all racial and ethnic populations, however, groups exhibit a high degree of variation in their growth trajectories. Between 2020 and 2030, the White population is expected to grow from 3,233,463 to 3,372,562 individuals, a sizeable increase in the population. Moving forward 10 years to 2040, the population is again expected to grow, however, by a much smaller degree, increasing by about 50,000 to 3,425,035 individuals. By 2050, the White population is forecasted to see its first 10-year decline in population size, dropping to 3,418,735 individuals. While the White population is eventually expected to decline in size, other groups are expected to see continued growth and contribute to Oregon states overall growing population. Most notably growth of the Hispanic and Asian Pacific Islander populations are expected to be quite large, out pacing the rate of the growth of Oregon state more generally. Between 2020 and 2050, the Hispanic population is projected to grow from 581,458 to 1,163,258 individuals. The Asian Pacific Islander population is projected to grow from 250,886 to 460,824 individuals. Growth of the American Indian Alaskan Native and Black populations are expected to be more modest but still substantial. The American Indian Alaskan Native population is projected to grow from 62,967 to 72,045 individuals. The Black population is projected to grow from 108,482 to 179,046 individuals.

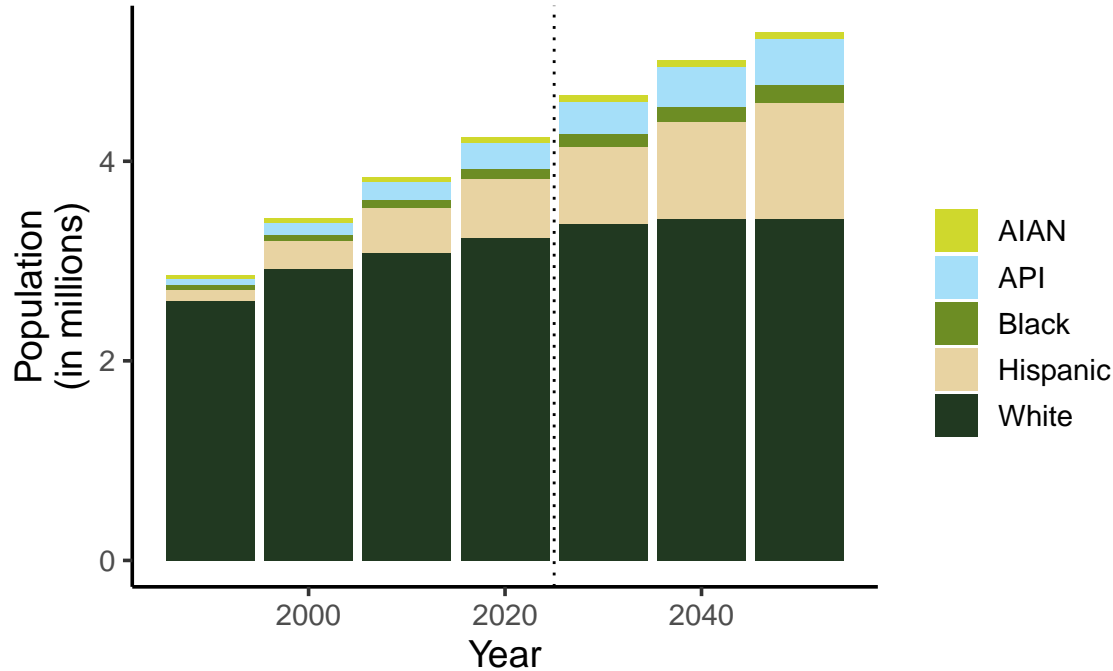## Oregon Race & Ethnicity Projections

Figure 2: Population estimates and forecasts for decennial years broken down by bridged race group. Values to the right of the dotted line represent forecasts.

Differences in population growth by race and ethnicity can be decomposed into three driving factors. Differences in historical patterns of births, deaths, and migration have led to variation in the past growth rates of racial and ethnic groups. Moving into the forecast period we expect these differences to lessen, however, still be present leading to different trajectories of population growth. In the next sections we describe how historical trends of births, deaths, and migration have differed by race and ethnicity and how we expect these patterns to differ into the future.

3.2 Fertility and Births

Similar to the rest of the United States, fertility rates in the state of Oregon have been on the decline. In 1990, the total fertility rate (TFR) of Oregon was 2.06, nearly paralleling the US TFR of 2.08. Notably these values are near the replacement level TFR, ~2.1 the number of births required for a population to sustain its current size. Since, 1990 TFR has been on the decline both across the US and within Oregon. By 2010, TFR fell well below replacement in Oregon dropping to 1.79. While the US also experienced declines in fertility rates, the decline was less dramatic dropping to 1.93. As of 2019, the TFR in Oregon has declined even further, reaching 1.46. Whats more, in 2020 fertility rates fell even further with the COVID-19 pandemic.
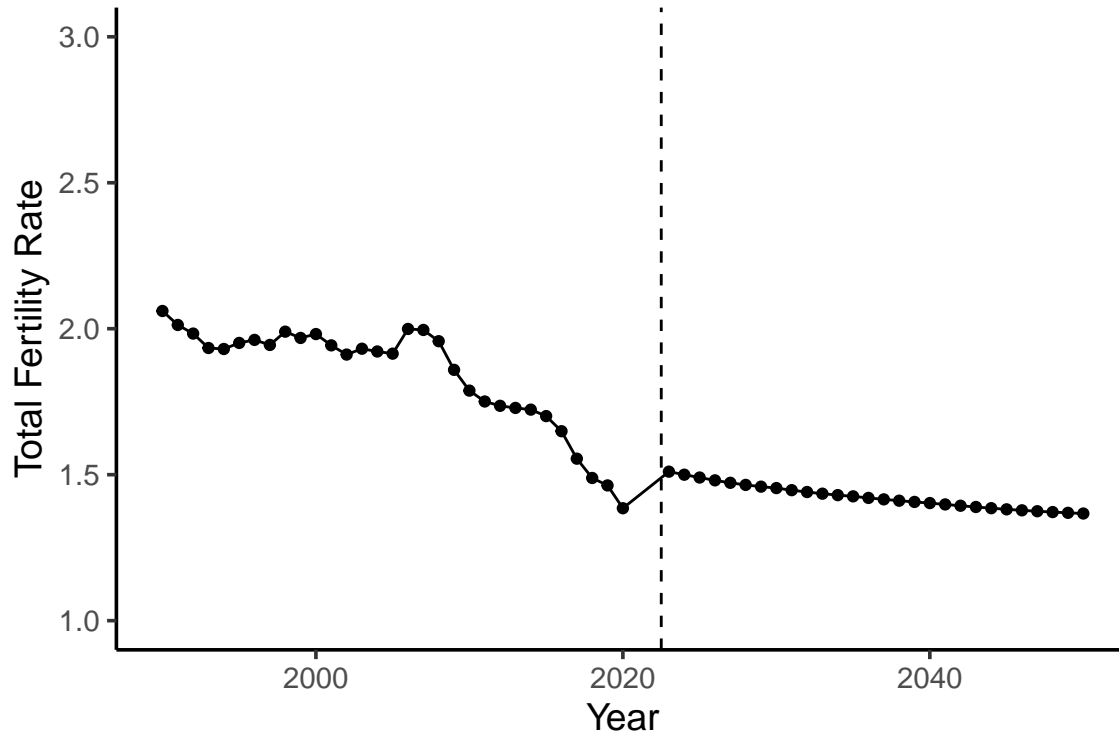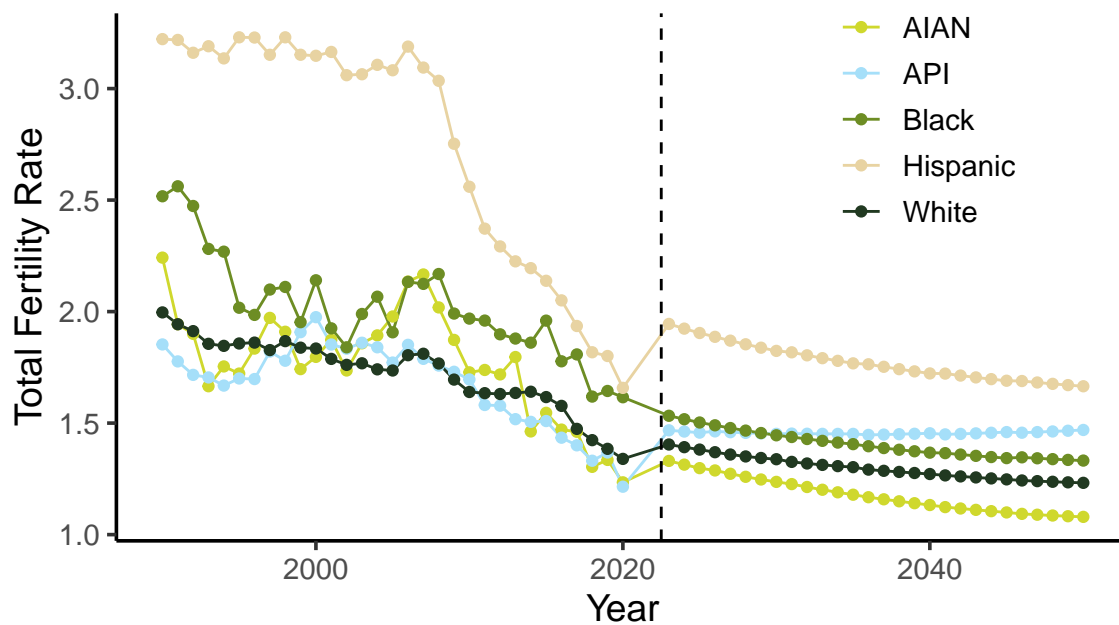
Figure 3: Past estimates and forecasts of total fertility rate for state of Oregon. Values to the right of the dotted line represent forecasts.

In the forecast period, we anticipate trends of fertility decline to continue across the state albeit at a slower rate. In 2023, fertility rates are expected to bounce back to 1.51 from the very low rate observed in 2020 which was likely caused by the global pandemic. By 2050 however, the fertility rate of Oregon is forecasted to be lower than what was observed during 2020. Despite declines in fertility rate, however, the forecasted number of births which are expected to occur in Oregon state are expected to remain relatively stable as seen in Figure 4. In the forecast period births are expected to remain around 45,000 births per year. This is due to the fact that Oregon's population is forecasted to continue to grow. With this growth there is expected to be a larger population of women of reproductive age, leading to more births even though each individual woman will on average have less births than what was observed in the past.

Oregon Birth Projections
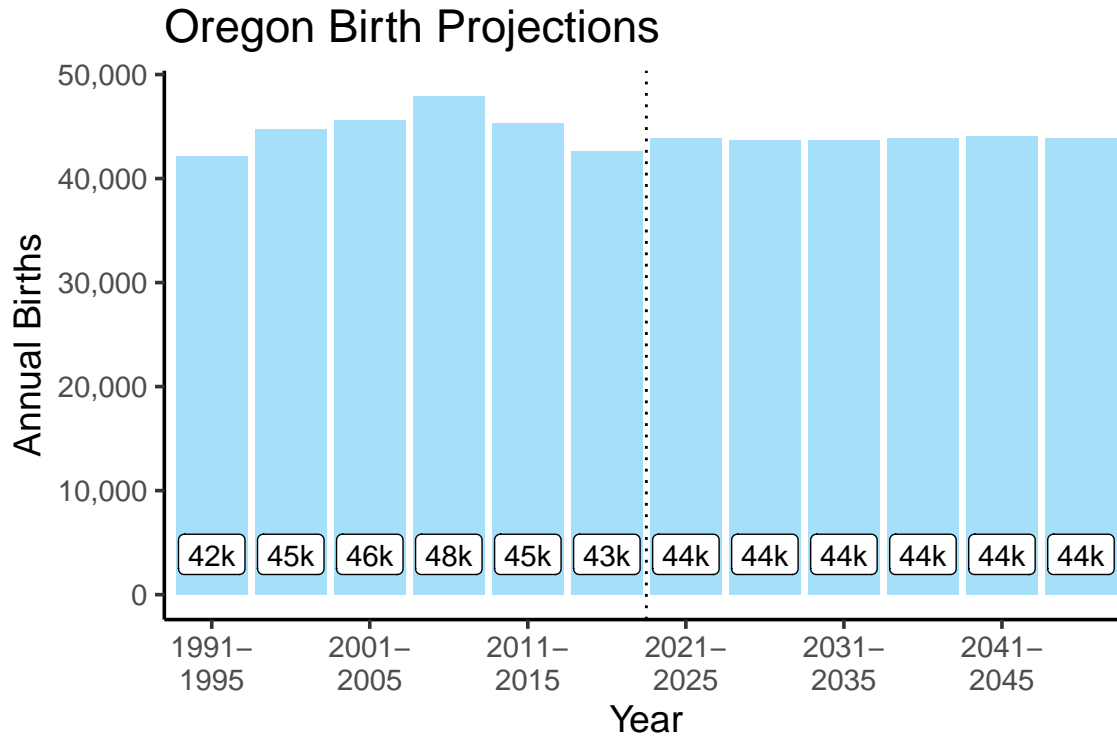
Figure 4: Average birth counts across five year periods for past and forecasted years. Values to the right of the dotted line represent forecasts.

When we break down fertility rates by race and ethnicity, large differences are observed between groups. While all population have seen, and are expected to continue to see, declines in fertility rates, the Hispanic population has historically had a much higher fertility rate than other populations in the state. Between 1990 and 2005, the fertility rate of the Hispanic population exceeded 3.0, much higher than the minimum level required for replacement. The Black and American Indian Alaskan Native population also have had higher than average TFR in the past 30 years, while the Asian Pacific Islander and White populations has historically been lower than the state average. In the forecast period fertility rates are expected to continue to decline and become more similar across racial and ethnic groups. Even with these declines, the Hispanic population is expected to continue to have a higher fertility rate than other groups. Somewhat bucking the trend, the Asian Pacific Islander population is expected to have some increases in TFR in the forecast period as older age Asian Pacific Islander women have seen some increases in their fertility rates in recent years.

Total Fertility Rate in OR
By Race and Ethnicity

Figure 5: Past estimates and forecasts of total fertility rate for state of Oregon by bridged race group. Values to the right of the dotted line represent forecasts.

Breaking down births themselves by race and ethnicity we see that much like the total population, births themselves have been increasingly represented by non-White populations. In 1990, births by non-White mothers made up only 13.59% of the births. By 2020 however, births by non-White mothers more than doubled in percentage points, jumping to 30.86%. Among the non-White population, births among Hispanic women represented the largest number with 19.23% of the state's births in 2020. In the forecast period, projections expect this trend to continue with births among the non-White population to nearly equal that of the White population by 2050.
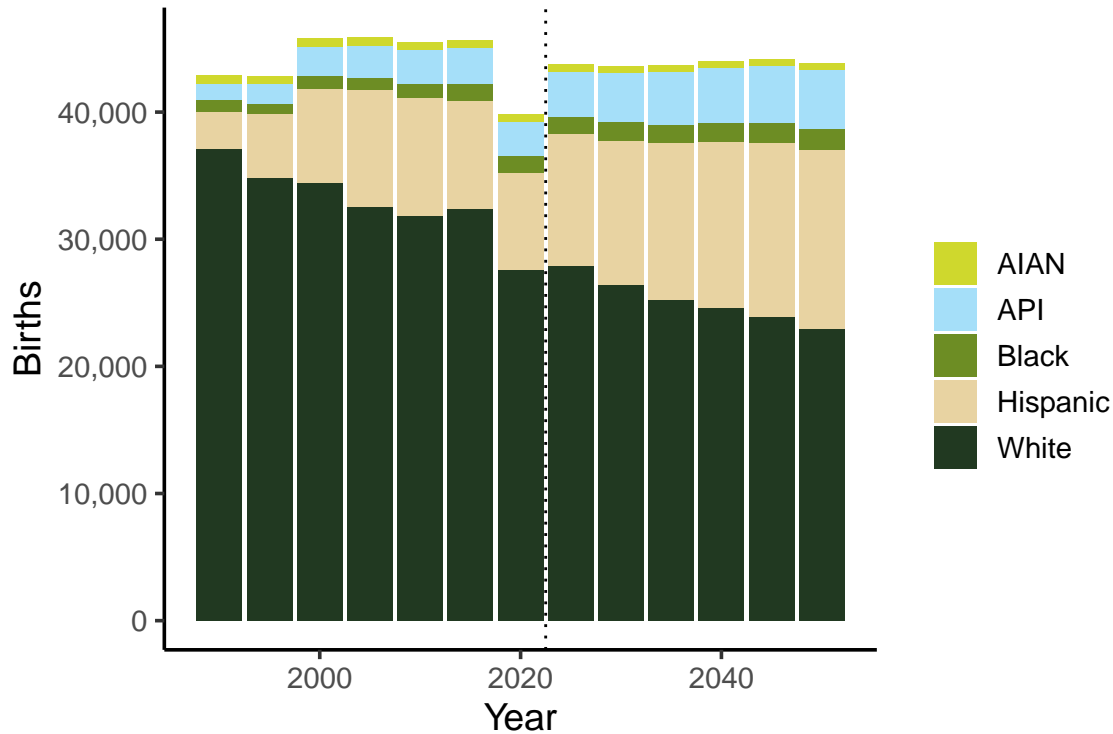
Figure 6: Birth counts for select years broken down by bridged race group of child. Values to the right of the dotted line represent forecasts.

3.3 Mortality and Deaths

While fertility rates have been on the decline in Oregon, life expectancy has been increasing. In 1990, life expectancy in Oregon was 76.69 years, somewhat higher than the national average of 75.21 years. By 2010, Oregon life expectancy greatly increased to 79.66 years. Since then gains in life expectancy have slowed and with the COVID-19 pandemic, life expectancy greatly decreased in 2020, dropping to 79.2 years. In the forecast period, it is expected that life expectancy will rebound from the losses observed during the COVID-19 pandemic and to continue to increase over time. By 2050 forecasts estimate that life expectancy will reach 82.5 years.
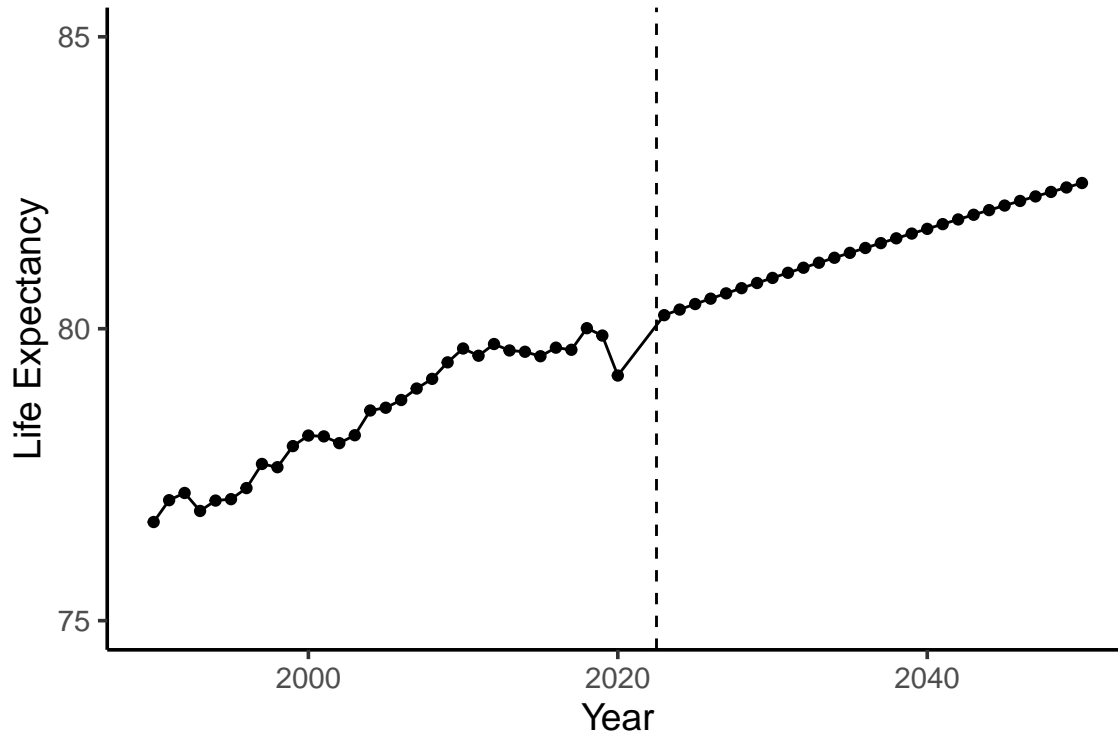
Figure 7: Past estimates and forecasts of life expectancy for state of Oregon. Values to the right of the dotted line represent forecasts.

Despite these gains in life expectancy, the number of deaths expected to occur in Oregon will continue to rise over time. Between 1990 and 2020 annual deaths jumped from 27,000 to 37,000. This was primarily driven by two factors. First, the Oregon population grew substantially between 1990 and 2020 which will naturally lead to more deaths even if life expectancy is increasing. Second, a larger share of the Oregon population is of old age, with higher rates of mortality. For example, in 1990 the share of the population who was 65 and older in Oregon was only 13.72%. In 2020, the share of the population 65 and older increased substantially, now representing 18.04% of the population. Projections estimate that Oregon will continue to grow, but, also age. With aging, substantial increases in the number of deaths occurring in Oregon should be expected.

Oregon Death Projections

Annual Deaths

Year	Value
1991–1995	27k
	29k
2001–2005	31k
	32k
2011–2015	34k
	37k
2021–2025	38k
	42k
2031–2035	48k
	53k
2041–2045	56k
	57k
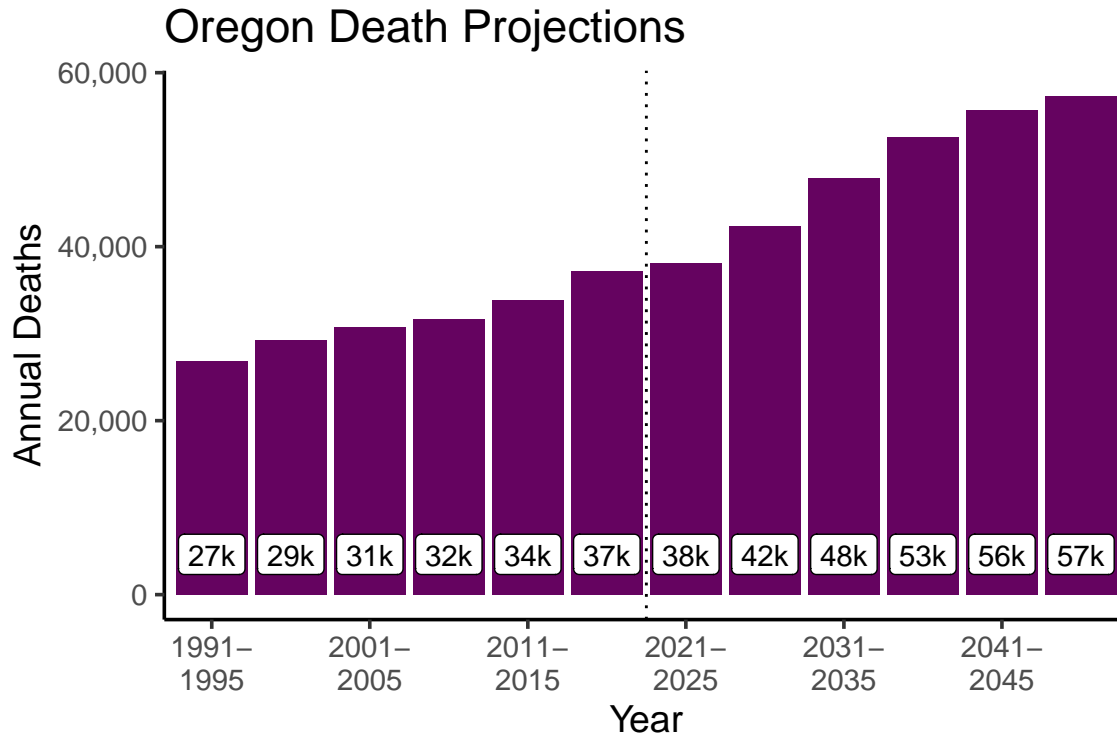
Year

Figure 8: Average death counts across five year periods for past and forecasted years. Values to the right of the dotted line represent forecasts.

When breaking down life expectancy by race and ethnicity, distinct patterns emerge. Historically, Hispanic and Asian Pacific Islander populations have had life expectancies which exceeded the state average, with the Asian Pacific Islander nearly reaching a life expectancy of 85 years. Conversely the Black and American Indian Alaskan Native population have had life expectancies which are below the state average, with Black life expectancy only crossing the 75 year threshold in the past 20 years. The White population life expectancy has been near the state average over the past 30 years. In the forecast period we expect increases in life expectancy for all groups. Differences in life expectancy between groups are expected to lessen over time but still exhibit measurable differences.

Life Expectancy in OR
By Race and Ethnicity
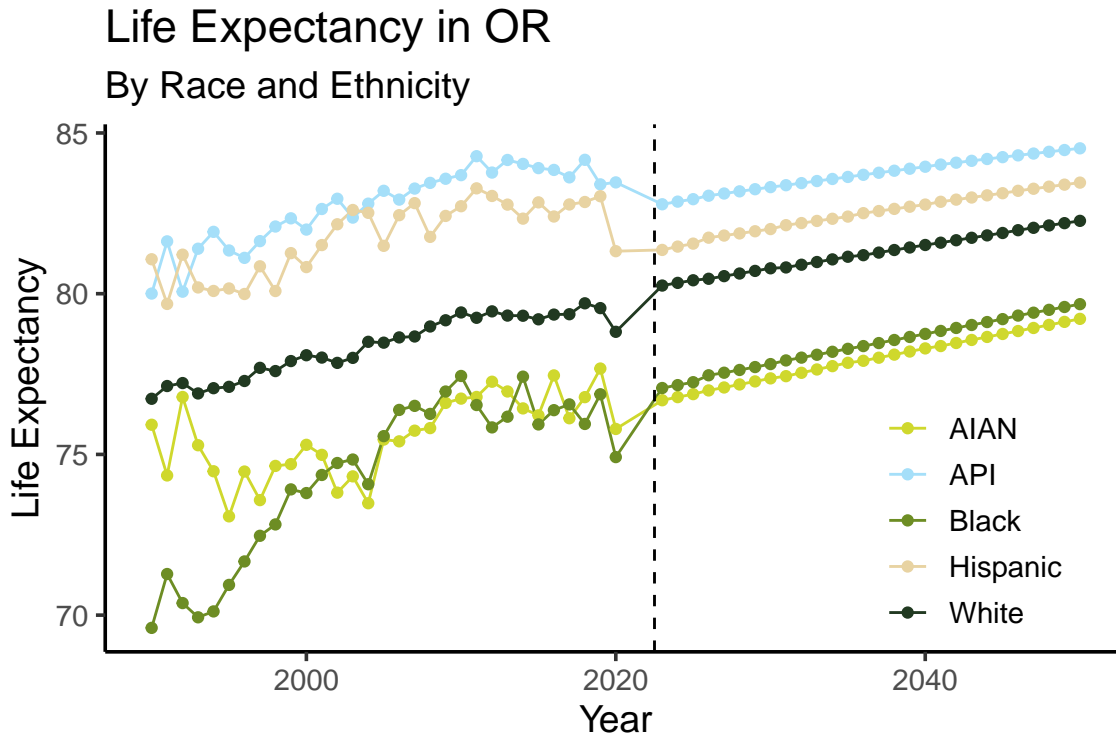
Figure 9: Past estimates and forecasts of total fertility rate for state of Oregon by bridged race group. Values to the right of the dotted line represent forecasts.

Breaking down deaths by the racial and ethnic group of the decedent we see that deaths have historically been over-represented by the White population. This is mostly due to the fact that the White population in Oregon is substantially older than other populations. In 2020 the White population in Oregon had a population over the age of 65 which was 21.45%. For the Black population, this was only 7.77% and for the Hispanic population only 4.87%. As non-White populations age in the forecast period it is expected that they will represent a greater share of the states deaths as shown in Figure 10. Nevertheless, the White population will remain the oldest racial and ethnic population in Oregon and over-represented in the number of deaths which occur.
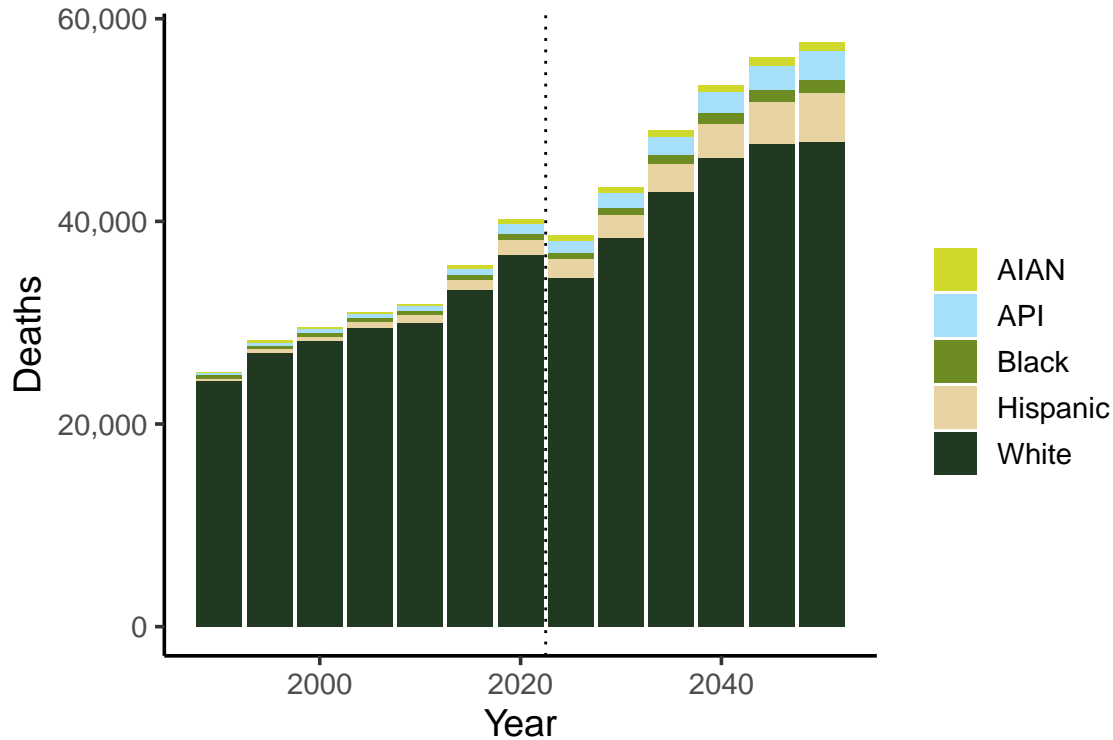
Figure 10: Death counts for select years broken down by bridged race group. Values to the right of the dotted line represent forecasts.

3.4   Migration

Migration to Oregon state has seen large fluctuations over the past 30 years. At its peak, net migration to Oregon reached a high in 2016 with net gains of 64,780 individuals. At its lowest in 2004, net migration was still positive, more people coming into Oregon than leaving, with 7,046 individuals. Annual migration is difficult to predict for any one year, however, long run averages capture general trends in migration. In future years, we expect an average of about 40,000 net migrants moving to Oregon a year, contributing to population growth. It is important to note that in the past 30 years, births have outnumbered deaths in Oregon, and positive net migration has contribute to additional population growth. In the near future, however, deaths are expected to outnumber births as the population ages. When this happens, positive net migration will be necessary if the state of Oregon is to continue to grow in its population size.
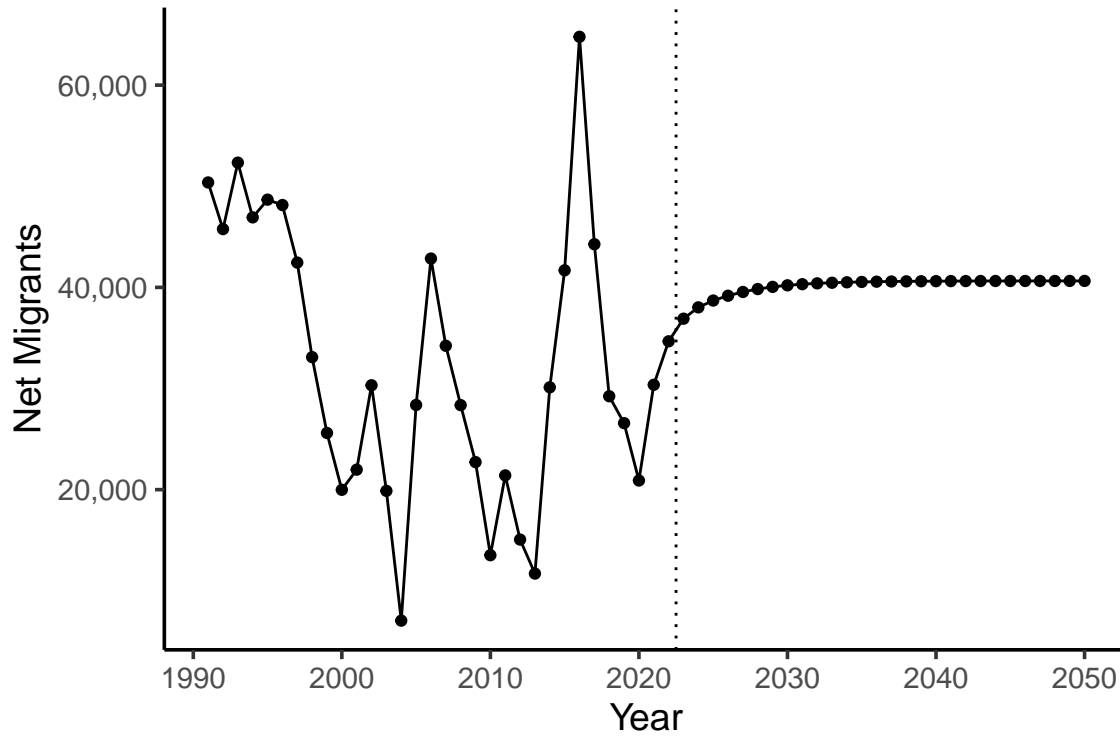
Figure 11:   Annual net migration estimates and forecasts for Oregon. Values to the right of the dotted line represent forecasts.

The composition of migration, by age, race, and ethnicity, is equally difficult to forecast for any one year, however we can again look at the average across the past 30 years. First, the average migrant to Oregon is between the ages of 25-34, however their is a great deal of racial and ethnic variation by age among migrants. For migrants 30 and older, most migrants are White with greater representation among very old age groups. For younger migrants, 25 and younger, non-White populations have greater representation and outnumber White migrants for many age groups under the age of 25.

Average Migrants by Race and Ethnicity
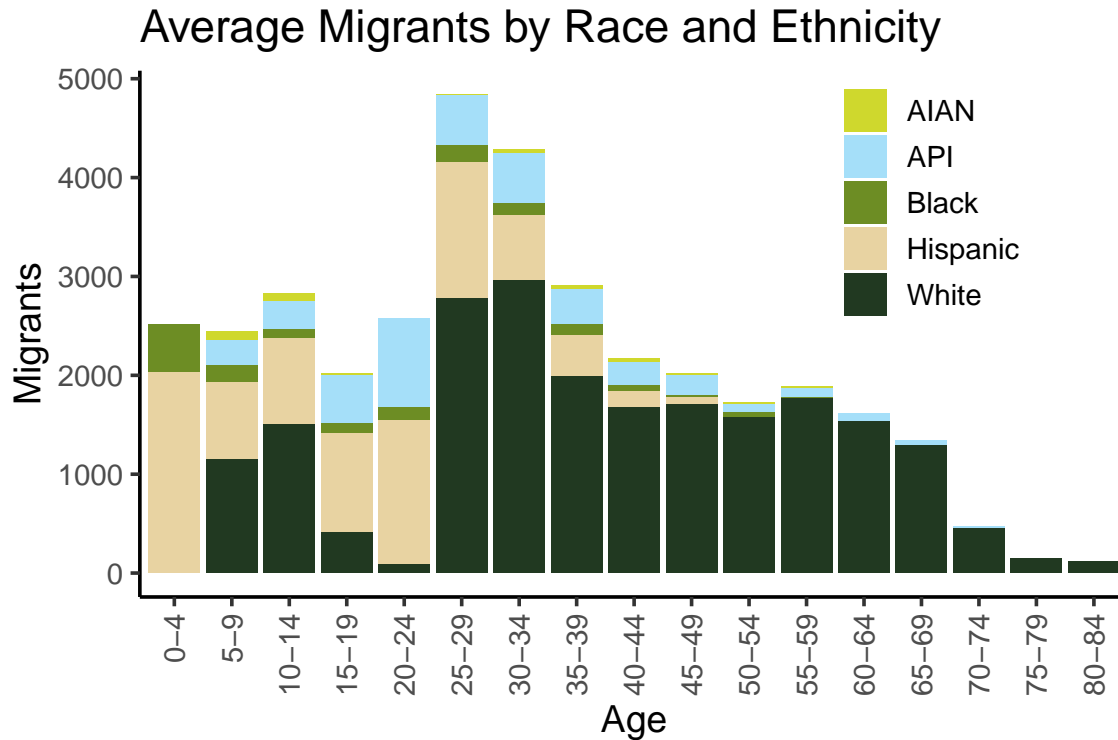
Figure 12: Age and bridged race decomposition of Oregon annual net migration averaged over past 30 years.

3.5 Disability

In addition to changes in the demographic composition of the population occurring within Oregon, large changes in the population living with disability have also occurred. In Figure 13 we show the trend of the number and percent of individuals living with disabilities. DISVH indicates vision and hearing disability, DISGOG represents cognitive and independent living disability, and DISPHYS represents self-care and ambulatory disability. More details on the what constitutes disabilities may be found in the glossary. For all disability groups both the number and percent of the total population living with disabilities has increased, albeit, at different rates. The largest predictive factor of the disabilities shown is age, as individuals of older age are more likely to have any of the disabilities analyzed in this study than those of younger ages.

OR Population Living with Disability
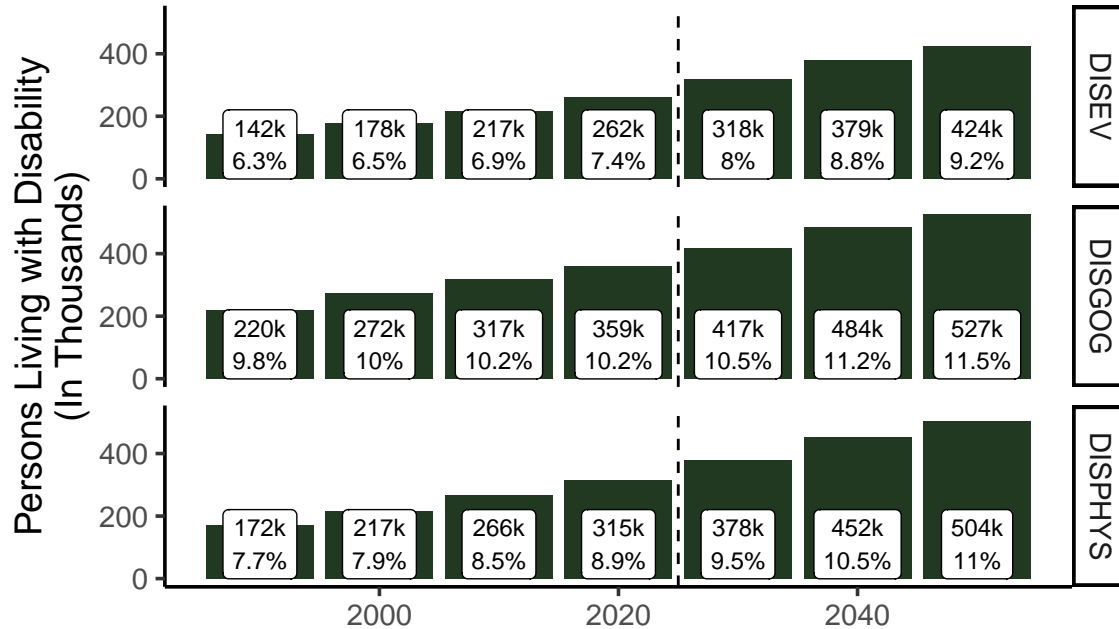
Figure 13: Disability forecasts by disability type. DISVH indicates vision and hearing disability, DISGOG represents cognitive and independent living disability, and DISPHYS represents self-care and ambulatory disability. Values to the right of the dotted line represent forecasts.

Given that the population of Oregon is expected to continue aging into the future, our forecasts too expect to observe increases in rates of disability. By 2050, forecasts expect more than half a million individuals in the state of Oregon to be living with both physical and cognitive disabilities.

3.6 County Inspection

All previous discussion in this report has focused on state level trends with respect to changing demographics. However, large differences exist across counties in both their trajectories of growth and demographic composition. It is not feasible to go into the same level of detail on how fertility, mortality, and migration have been, and are expected to in the future, alter county level population trends. Instead we take a high level view of how all counties non-White population has grown over time. In Figure 14 all counties in Oregon are shown for 10 year periods between 2000 and 2050. For the years 2000, 2010, and 2020, estimates of the non-White population come from Census population counts while for the years, 2030, 2040, and 2050 the non-White population comes from this reports population forecasts.

Percentage of Population Non–White
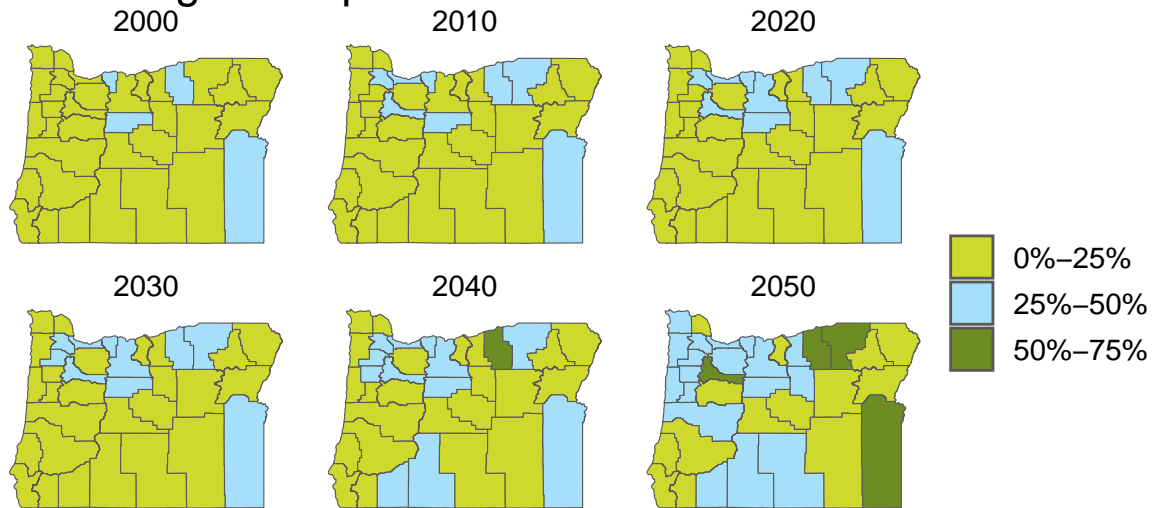
Figure 14: Percentage of county which is non-White for select decennial years. Statistics for 2030, 2040, and 2050 come from population forecasts.

In the year 2000 only 4 counties in Oregon had a non-White population which was between 25% to 50% of the total population; Hood River, Jefferson, Malheur, and Morrow. Every other county in the state had a non-White population of 0 to 25% of the total population. By 2020 however, 9 counties in Oregon had a non-White population which was between 25% to 50%. The 5 additional counties which now reached this statistic were Marion, Multnomah, Umatilla, Wasco, and Washington. In the forecast period, the number of counties with greater representation of non-White population will continue to grow in number. Furthermore, forecasts expect several counties to become majority-minority, non-White population greater than 50%, in the near future. By 2040, forecasts expect Morrow county to be majority-minority while by 2050, Malheur, Marion, and Umatilla are expected to be majority-minority.

3.7 Tribal Lands

In addition to county level forecasts, forecasts for tribal lands populations were also constructed. Like the rest of the state of Oregon, tribal land population are expected to grow in the coming years. Between 2020 and 2030, the total tribal lands population of Oregon state is expected to grow from 8,445 individuals to 9,202 individuals. A notable difference in the expected growth of tribal land areas are found in the change with respect to the age composition of the population. While Oregon is expected to grow in its population size, it is expected to do so with older populations growing at a faster rate than younger populations. Conversely, most of the growth within the tribal lands population is expected to occur among younger aged populations.

Total Tribal Lands Population
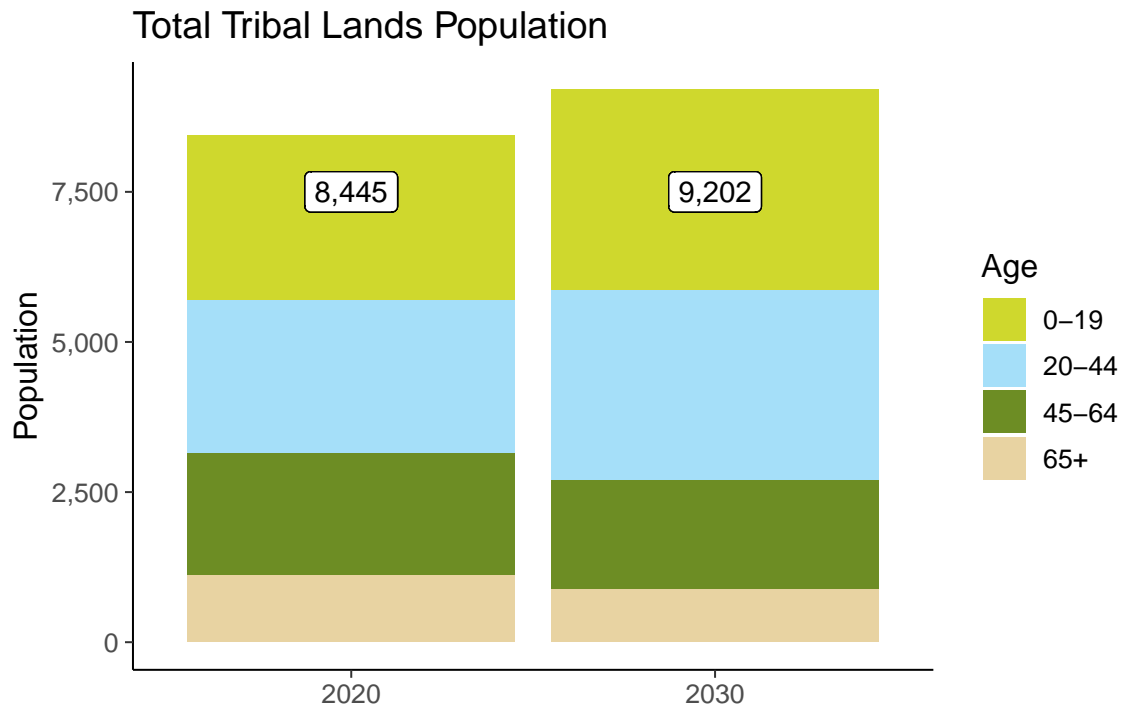
Figure 15: Population estimates (2020) and projections (2030) of tribal lands population by age.

While tribal land populations as a whole are expected to grow over the coming years, not all reservations will have such growth. In Figure 16, we show population forecasts of four selected reservations; Burns-Paiute, Celilo Village, Umatilla, and Warm Springs. Again, population data from 2020 represent population estimates while population data from 2030 represent population forecasts. Umatilla and Warm Springs show patterns of population growth which are more similar to the tribal land growth across the state of Oregon. Both reservations are forecasted to grow in population size with growth being driven predominately by younger age populations. Compare this with the forecasted population change Burns-Paiute and Celilo Village. Both Burns-Paiute and Celilo Village are expected to decline in population size rather than grow. What's more, older age population are expected to grow in size while younger age populations are expected to decline. This pattern is the complete opposite of what is observed across tribal land population more generally.

Tribal Lands Population
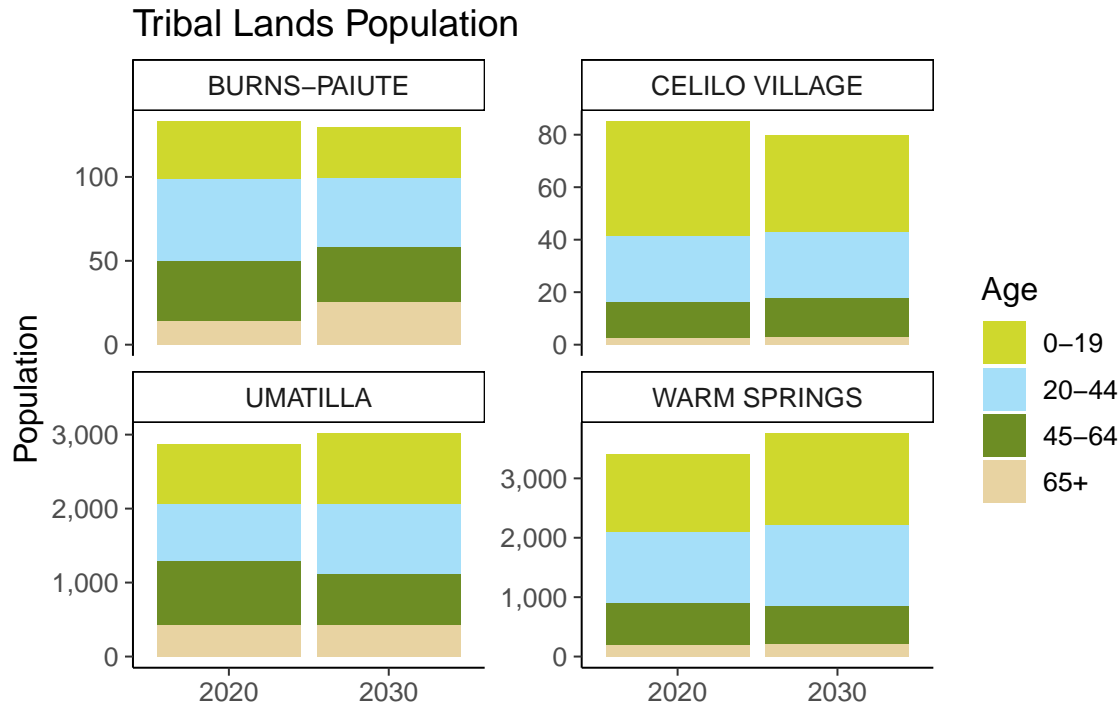
Figure 16: Population estimates (2020) and projections (2030) of specific tribal land reservation populations by age.

4   Discussion

In this report we reviewed projections of the Oregon population by age, sex, race, ethnicity, tribal land areas, and disability. The analysis conducted for this report is markedly different from past population projections, such as previous City-County coordinated forecasts made for the Oregon Population Forecast Program, in that they contain a level of detail not present in earlier analyses. Doing so allows new insight into patterns of change among the composition of the Oregon population.

First, by decomposing populations by bridged race groups, differences in the rate of population growth between groups become apparent. In the past 20 years, the rate of non-White group's population growth has exceeded that of the White population, disproportionately contributing to Oregon state's population growth. This change can largely be tied to differences in birth rates between the White population and non-White populations. As shown in Figure 6, the number of births occurring contributing to White population growth has generally been on the decline since 1990. Conversely, births among non-White populations, especially among the Hispanic and Asian Pacific Islander populations, have been increasing. Combined with the fact that the White population is substantially older than other populations, leading to higher rates of crude mortality, it is expected that growth of the White population will continue to decelerate while growth of non-White populations will remain relatively stable.

While this pattern is expected to occur across Oregon as a whole, counties within Oregon exhibit a great deal of variation in terms of racial heterogeneity and population growth. Appendix A highlights this variation by decomposing population growth and estimates by bridged race groups. For example, an inspection of Multnomah county highlights continued population growth of the county driven mostly by non-White population growth. This is similar to the overall pattern of Oregon state growth. Deschutes county, on the other hand, is also expected to experience population growth, but driven predominately by White population growth. Exhibiting yet a different pattern, Morrow county has historically had declines in their White population while the county has grown in size, driven mostly by Hispanic population growth. Projections expect this pattern to continue in the forecast period. Each county in Oregon exhibits a great array of differences in their past and projected population growth patterns and should be analyzed carefully when considering the nature of population growth in the future.

Tribal land areas too exhibit their own unique patterns of population growth. Much like the state of Oregon, tribal land areas are expected to experience population growth in the near future. Unlike state population growth, however, tribal land populations are expected to grow predominately among younger age groups. Similar to counties, individual reservations populations are expected to see different rates of growth with some reservation populations declining in size while others are expected to increase in size.

Disability too are expected to increase within Oregon, both in number and in rate. This is true for all different disability categories used in this report. Largely driving this growth is changes in the average age of residents of Oregon. Oregon is expected to continue to age in the projection period, a pattern expected across the whole of the United States. With increasing age, comes increasing likelihood of disability. As Oregon ages, we anticipate this to coincide with a larger number of residents living with disabilities.

It should be noted that the forecasts in this report represent a future scenario where general patterns of population dynamics continue on their current trajectory. While the authors of this report see this as a most likely scenario, there is no guarantee that life expectancy will continue to improve that fertility rates will taper off, or that migration will remain consistently positive, as has been observed in the past. Should these demographic rates alter in some unexpected way, the resulting effects of population change will make Oregon look different than what is forecasted in this report. Furthermore, definitions of membership to a particular racial or ethnic group or who is counted in a particular disability group are likely to change. Race, ethnicity, and disability are socially defined and subject to change over time. As such, these forecasts should be viewed as informative with respect to historical definitions of race, ethnicity, and disability as these definitions are likely to change in the future.

Oregon's population is expected to grow, but growth of the population will alter the demographics and characteristics of the state by a considerable degree. The composition of Oregon will likely be markedly different in the coming years with respect to its current state. Oregon is expected to be older, made up of a larger non-White population, and living with a higher rate of disability than previously has been seen in the state. Preparing for these changes across varying domains, such as in housing, transportation, and medical needs, is essential in order to accommodate the future needs of Oregon.

5   Glossary of Key Terms

- **Life Expectancy**: The average number of years of life expected at birth based on the current set of age-specific mortality rates.

- **Race Bridging**: Making data collected using one set of race categories consistent with data collected using a different set of race categories, to permit estimation and comparison of race-specific statistics at a point in time or over time.

- **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.

- **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 49.

- **Hearing Disability**: Is deaf or has serious difficulty hearing.

- **Vision Disability**: Is blind or has serious difficulty seeing even with corrective lenses.

- **Congnitive Disability**: Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions.

- **Ambulatory Disability**: Having serious difficulty walking or climbing stairs.

- **Self-Care Disability**: Having any physical or mental health condition that makes it difficult to take care of own personal needs, such as bathing, dressing, or getting around inside the home.

- **Independent Living Disability**: Because of a physical, mental, or emotional problem, having difficulty doing errands alone.

6 Appendix A: County Race Projections

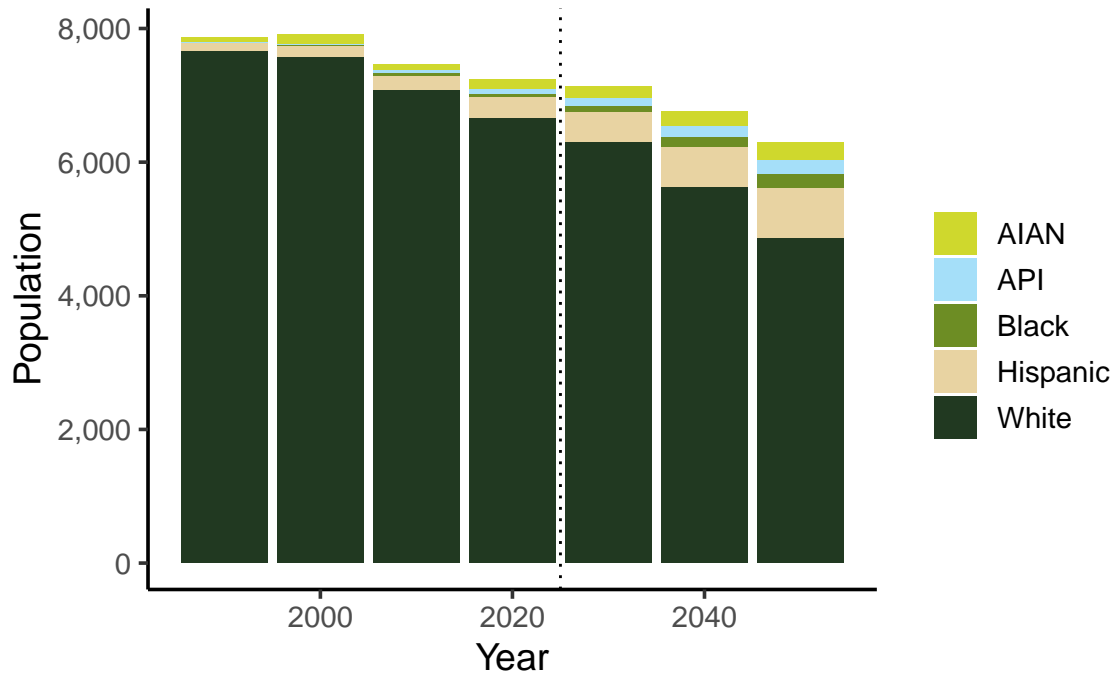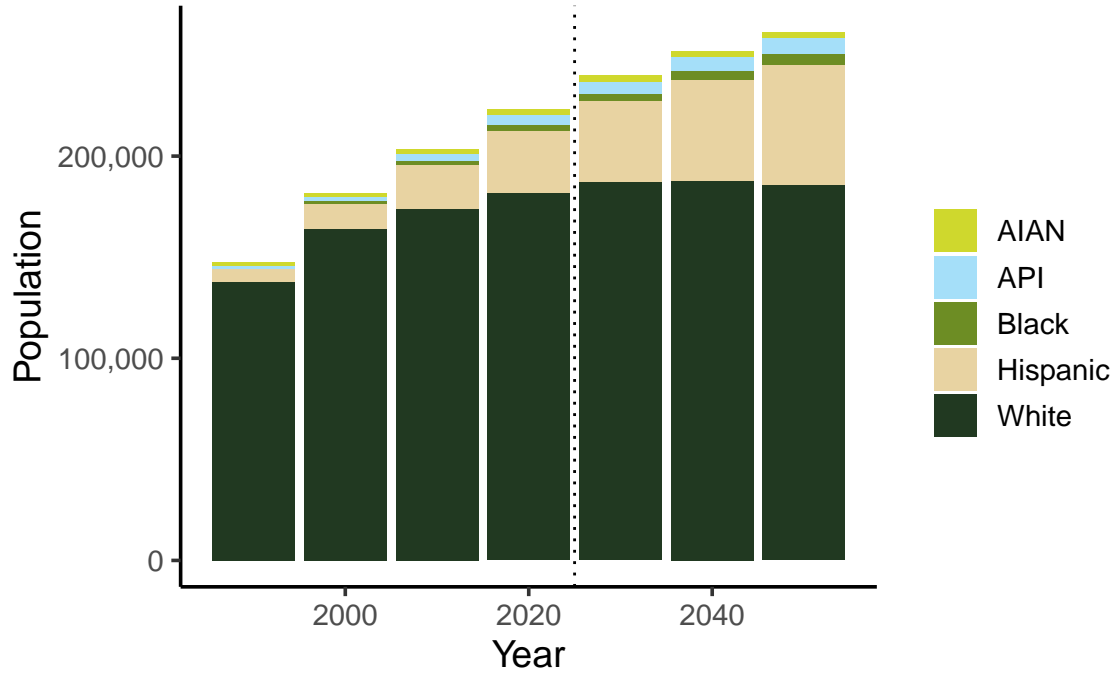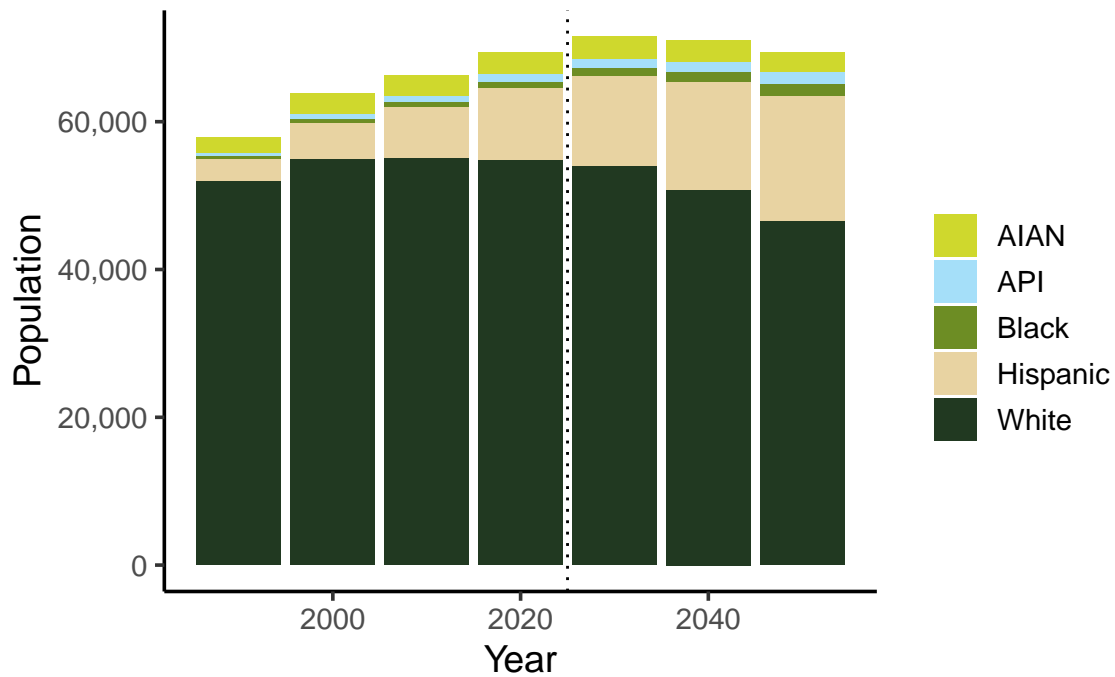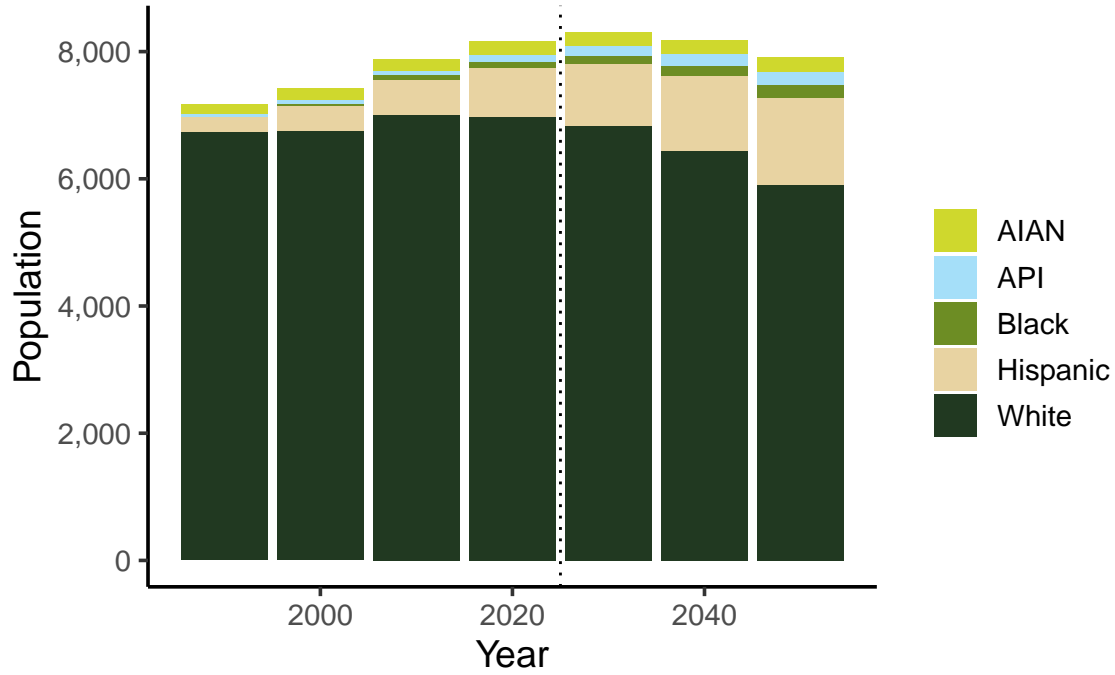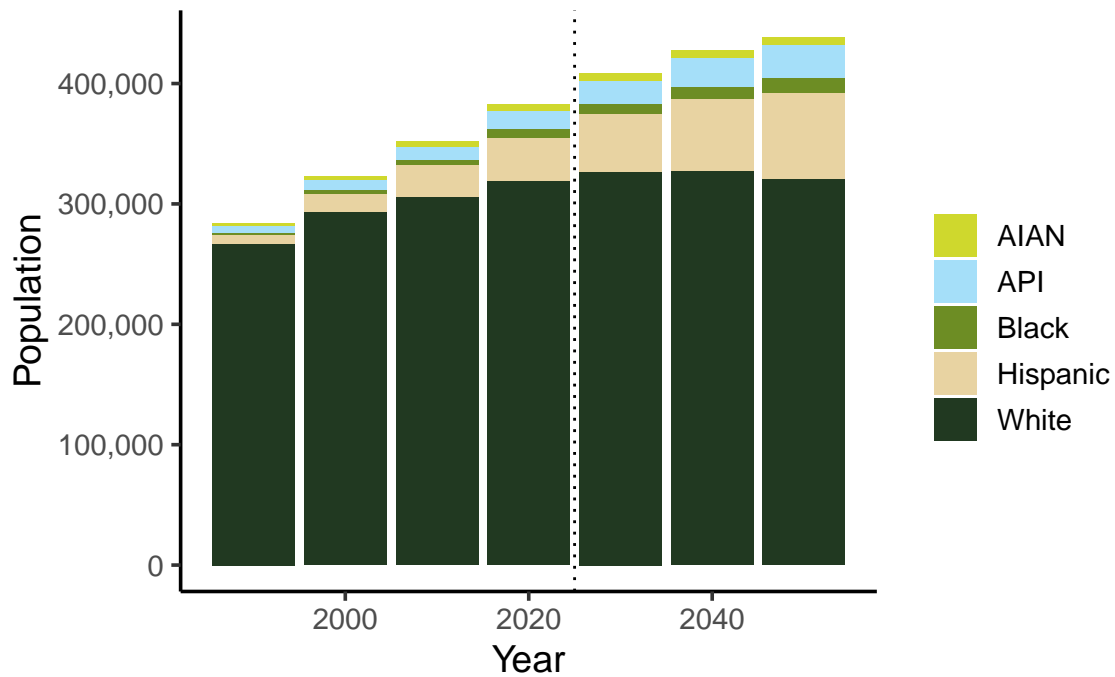## Baker Race & Ethnicity Projections
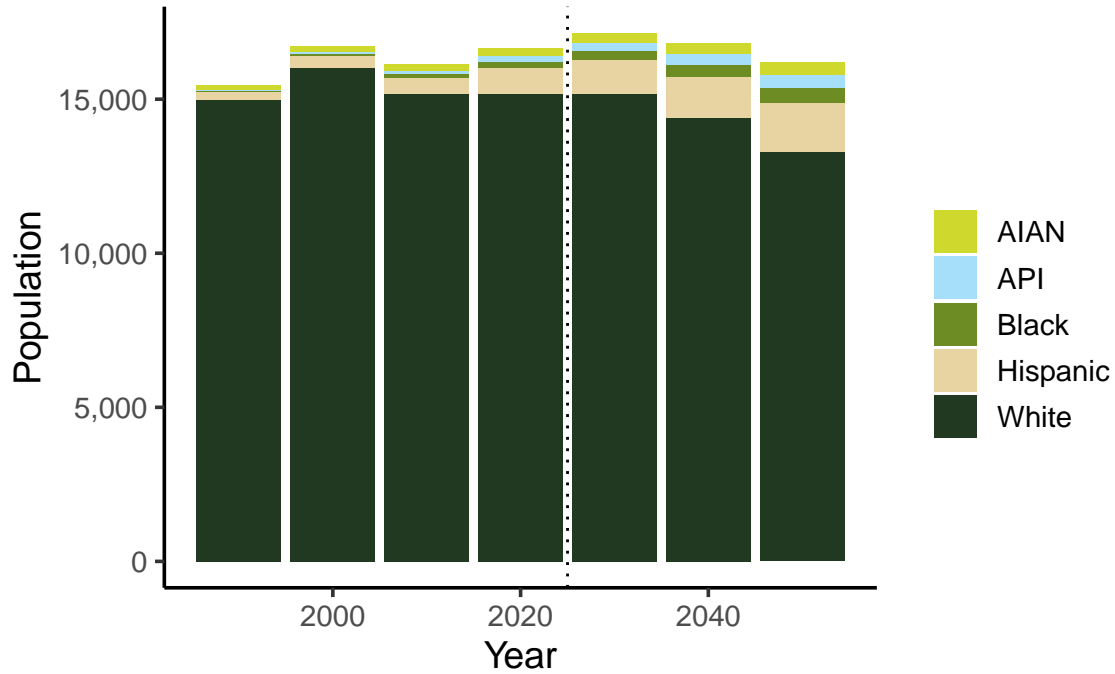
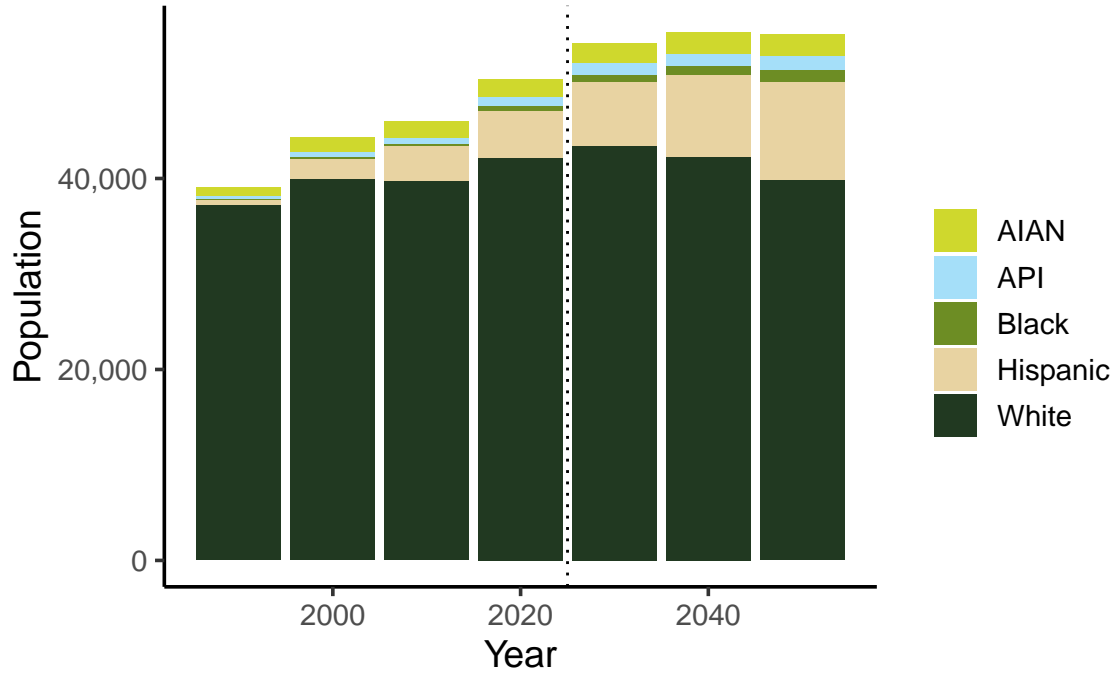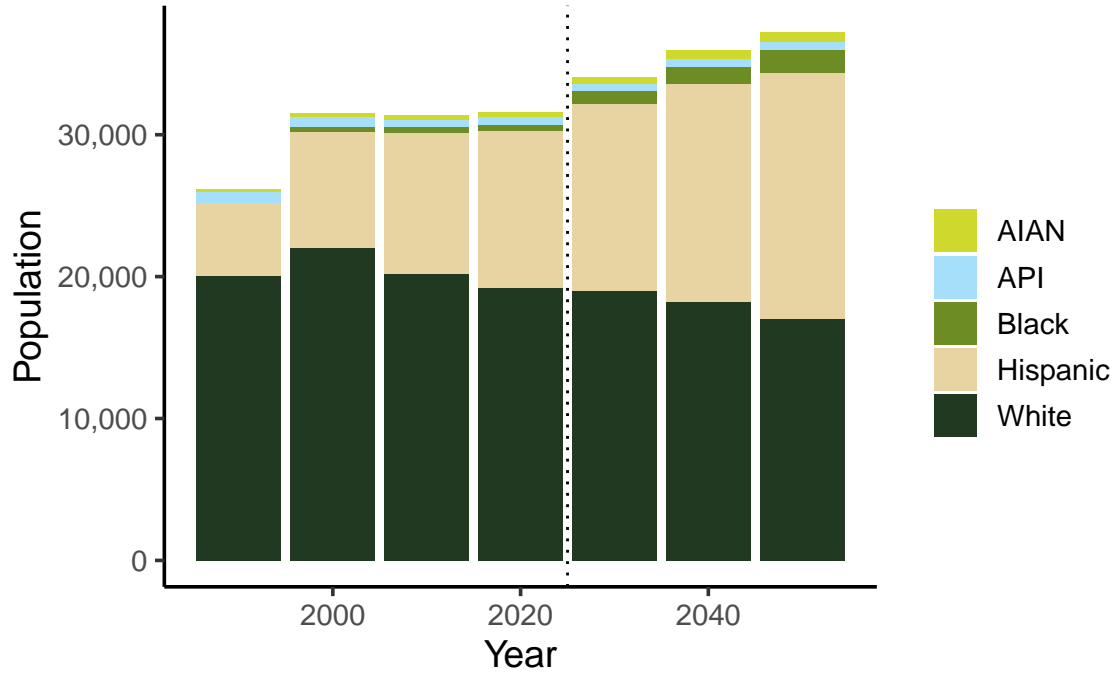## Benton Race & Ethnicity Projections
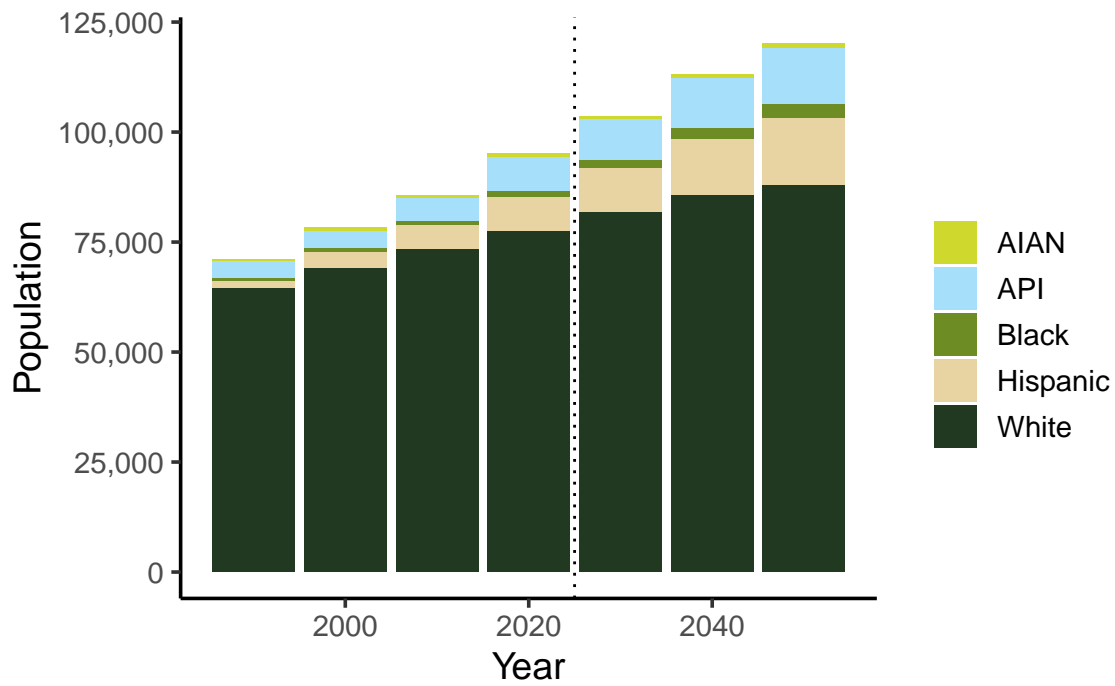
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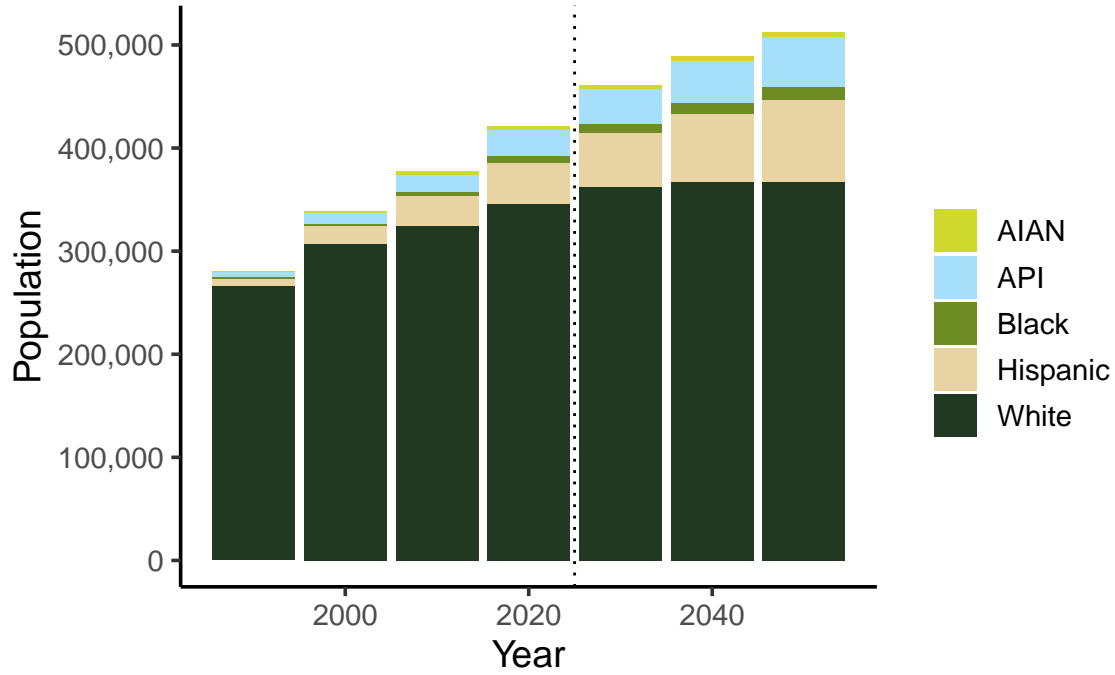
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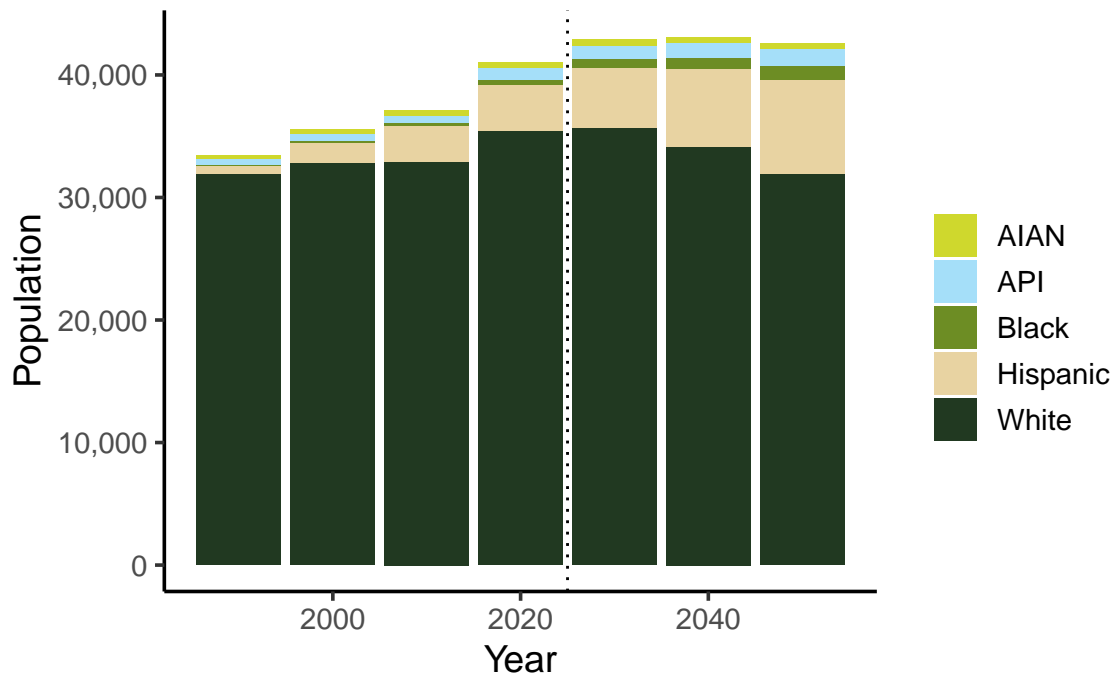
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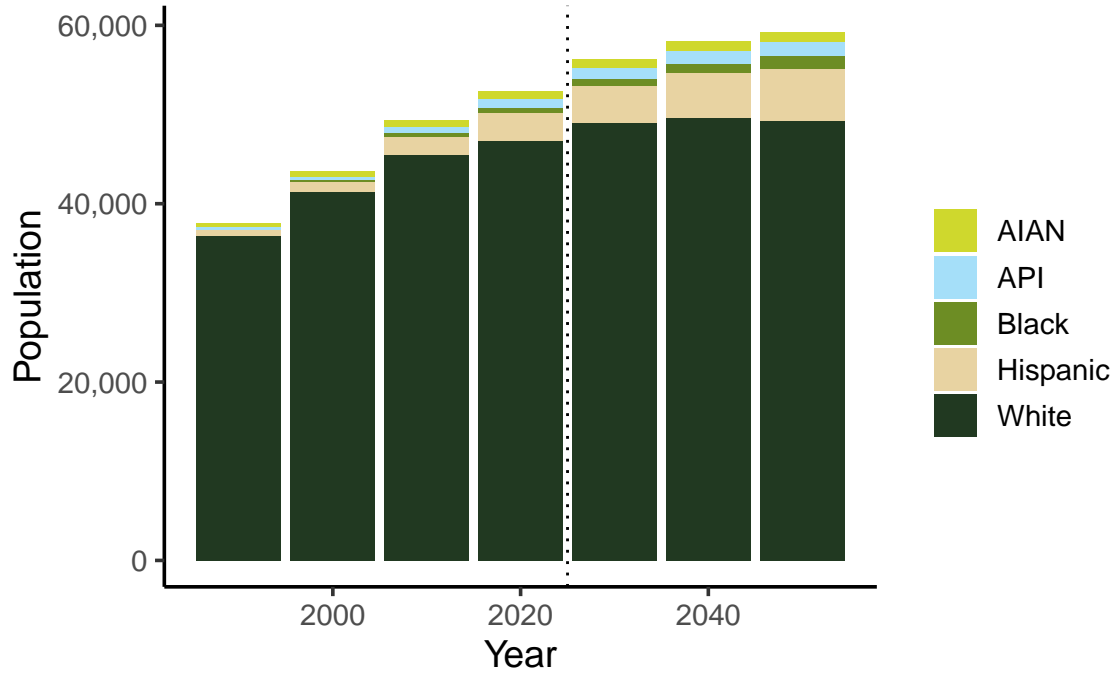
Legend: AIAN, API, Black, Hispanic, White

Coos Race & Ethnicity Projections

Legend: AIAN, API, Black, Hispanic, White

Crook Race & Ethnicity Projections

Population

30,000

20,000

10,000

0

2000   2020   2040

Year

AIAN
API
Black
Hispanic
White

Curry Race & Ethnicity Projections

Population

25,000

20,000

15,000

10,000

5,000

0

2000   2020   2040

Year

AIAN
API
Black
Hispanic
White
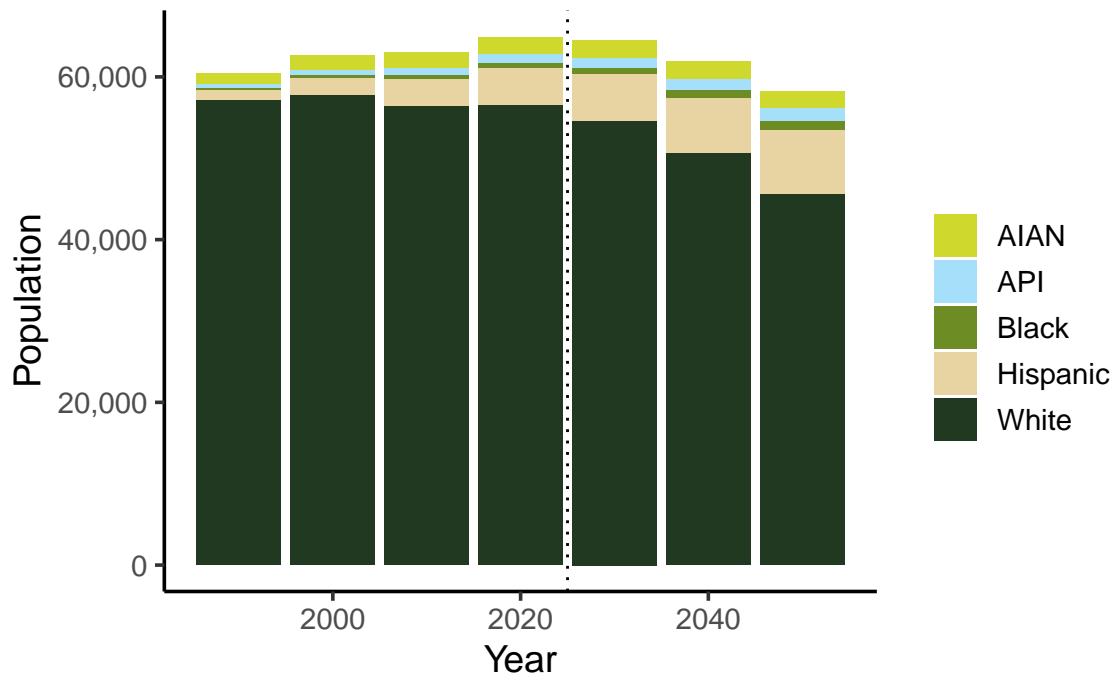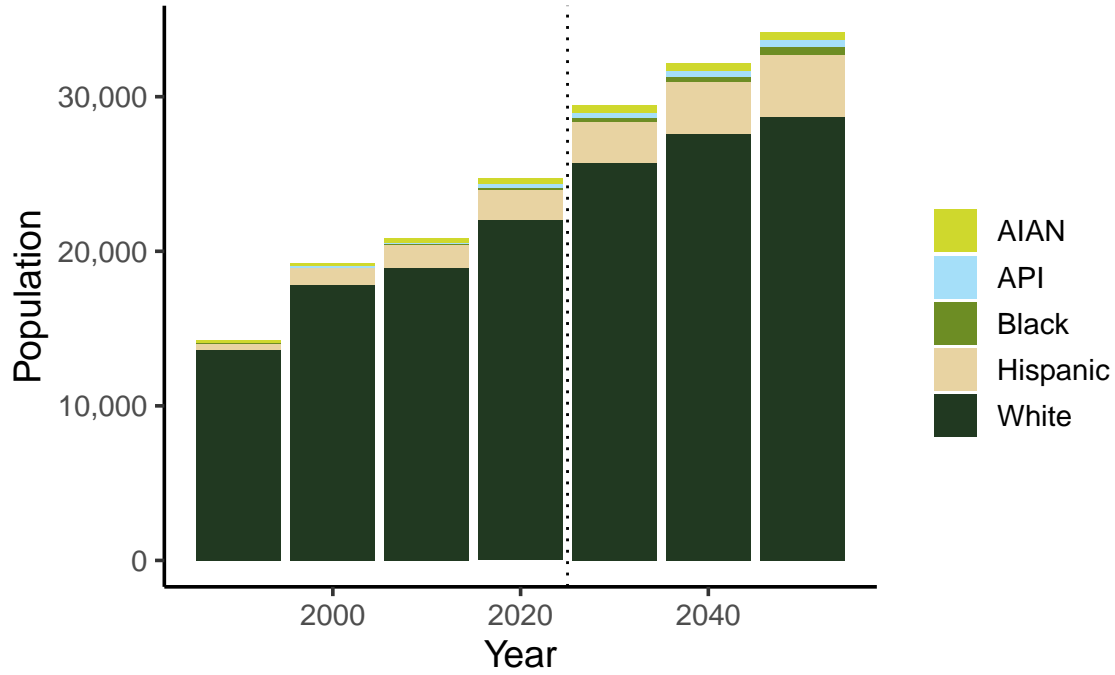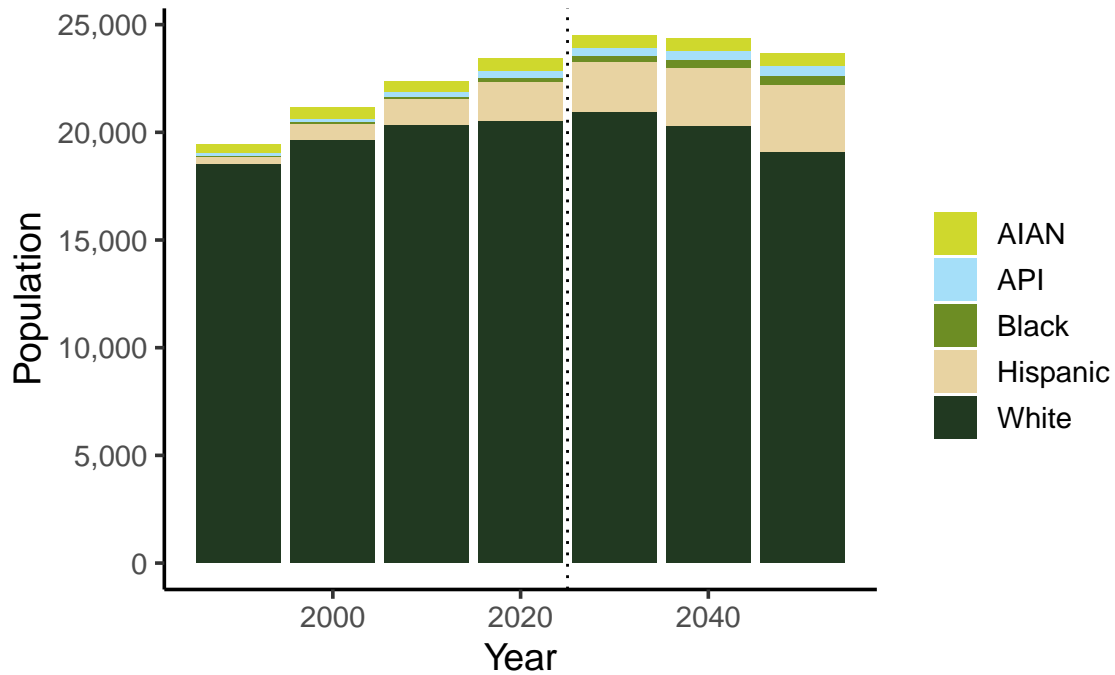
Deschutes Race & Ethnicity Projections

Population

- AIAN
- API
- Black
- Hispanic
- White
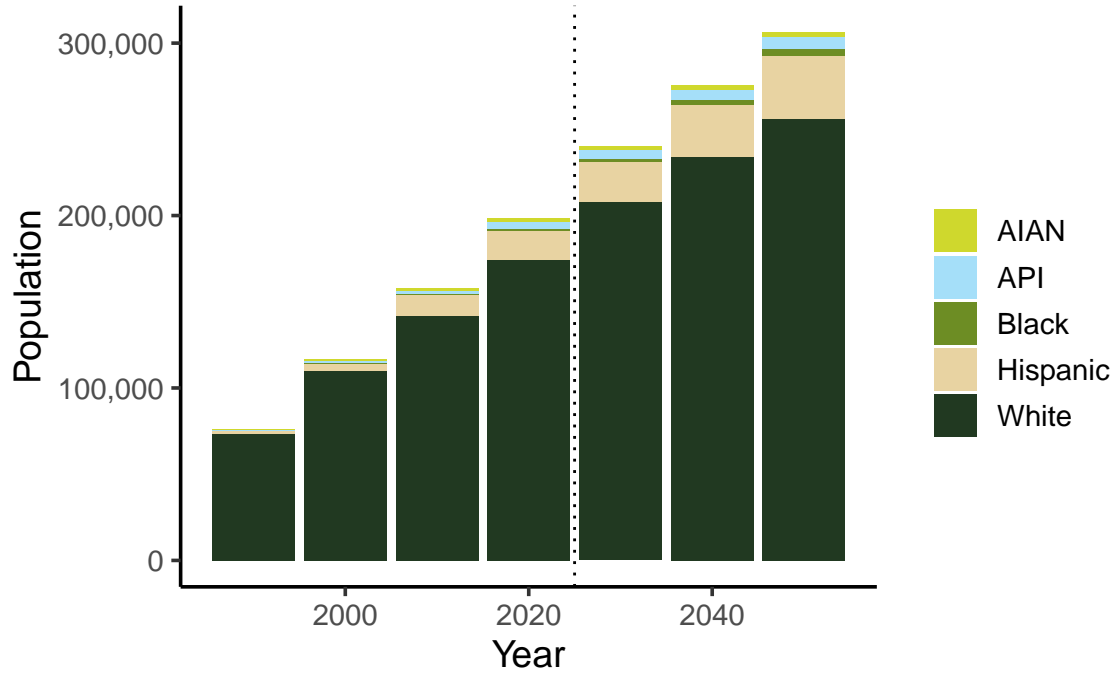
Douglas Race & Ethnicity Projections

Population

- AIAN
- API
- Black
- Hispanic
- White
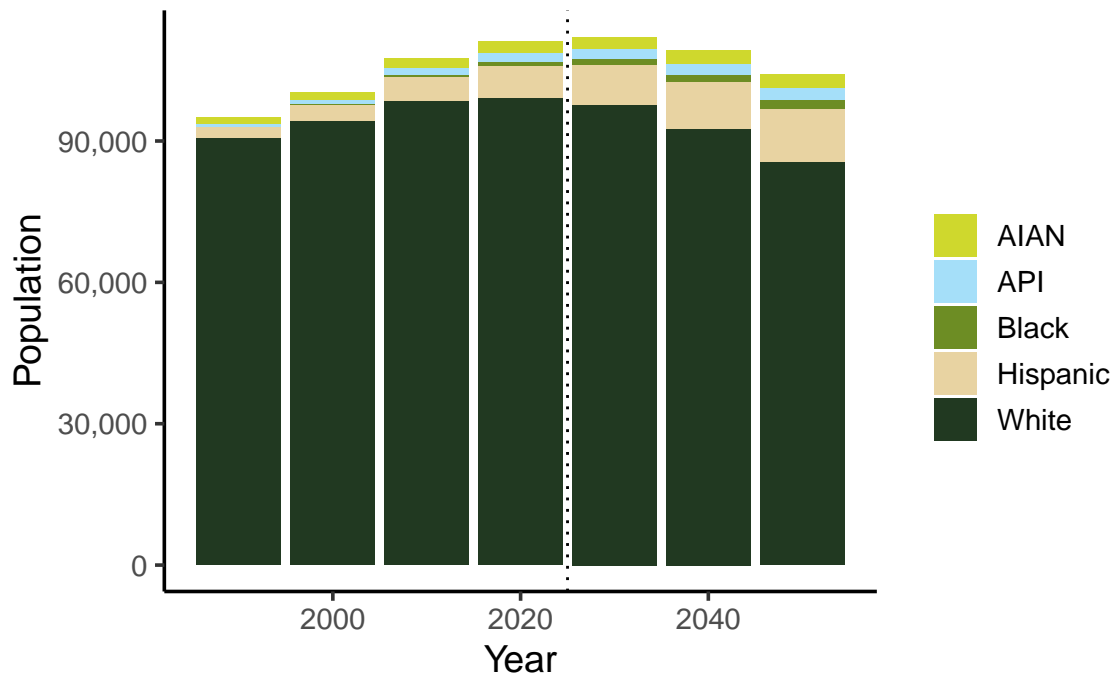
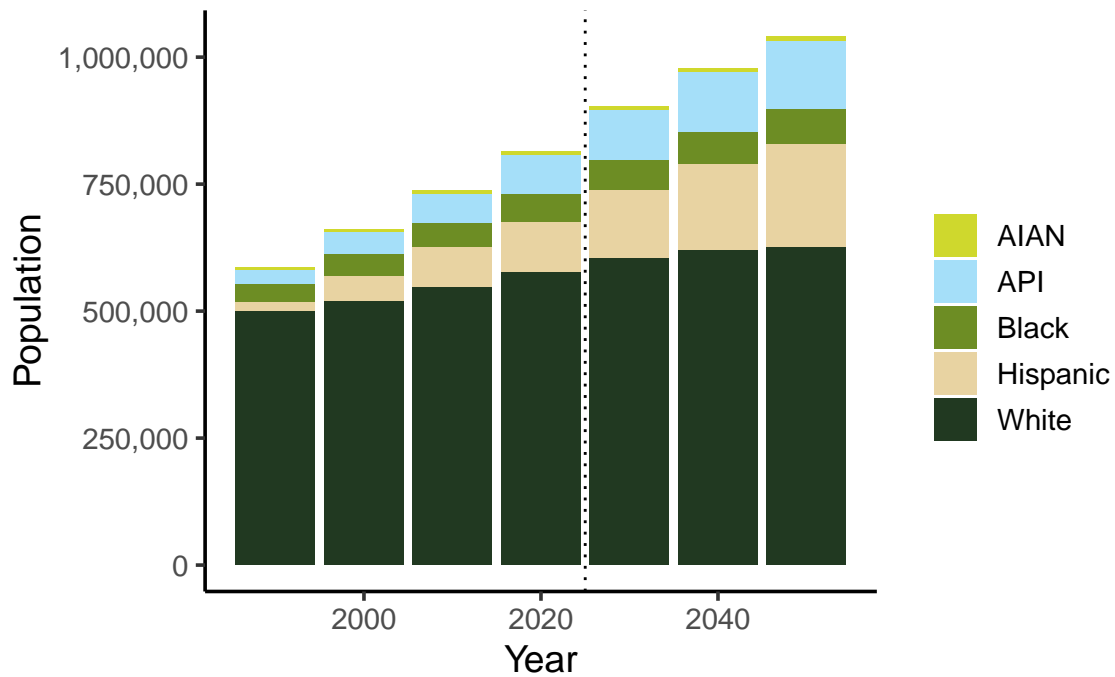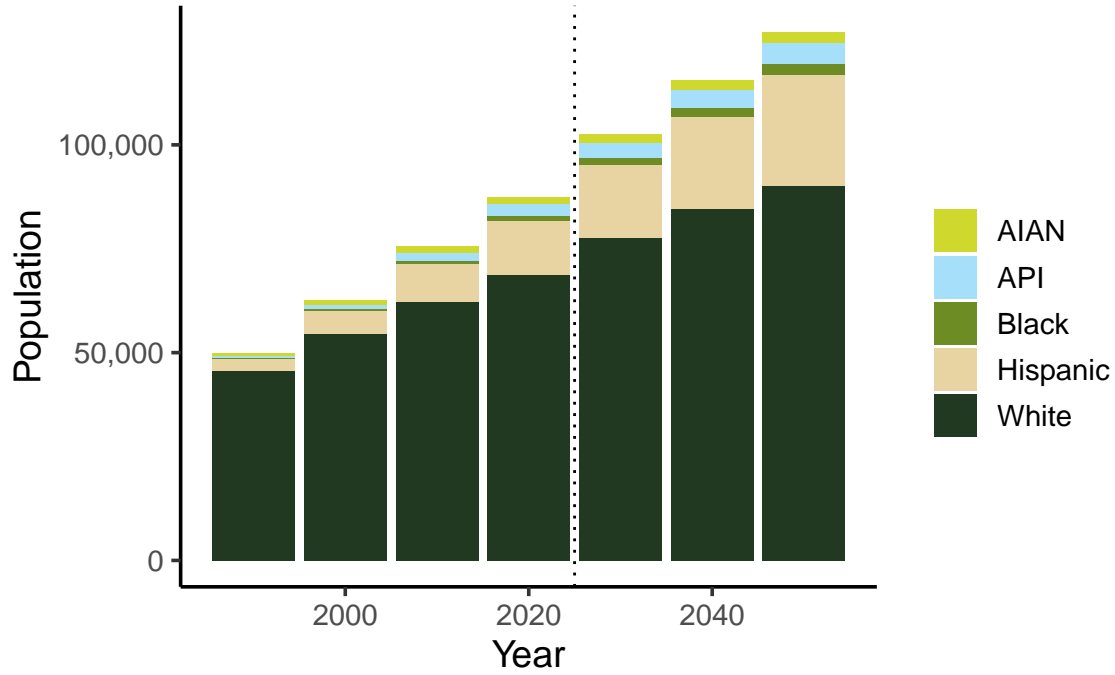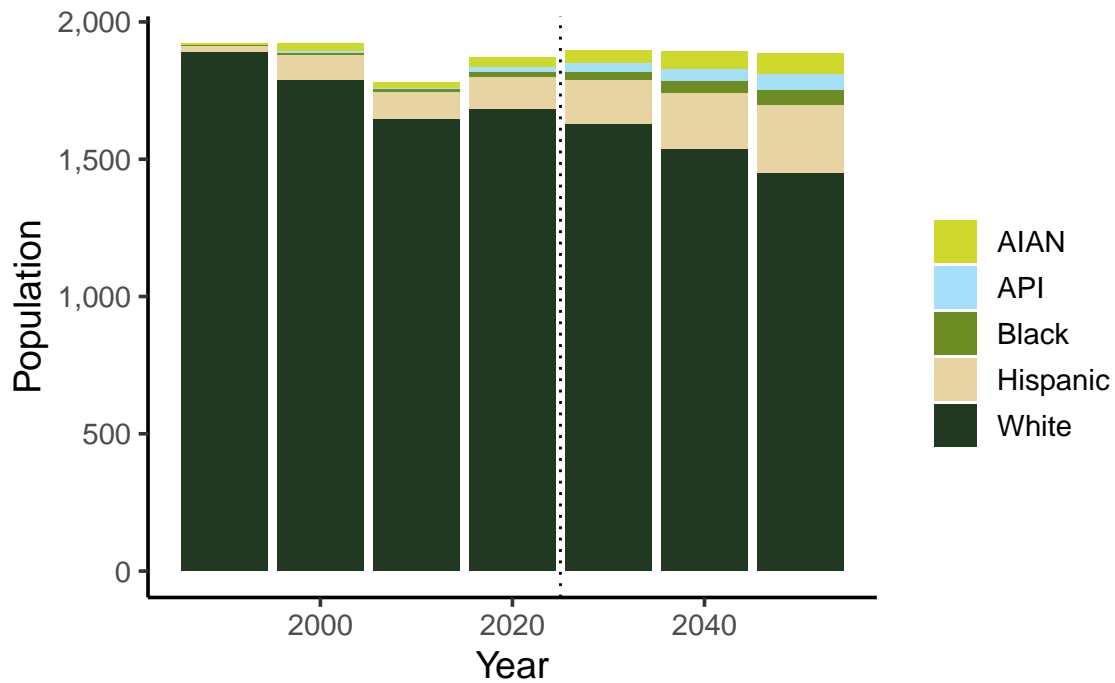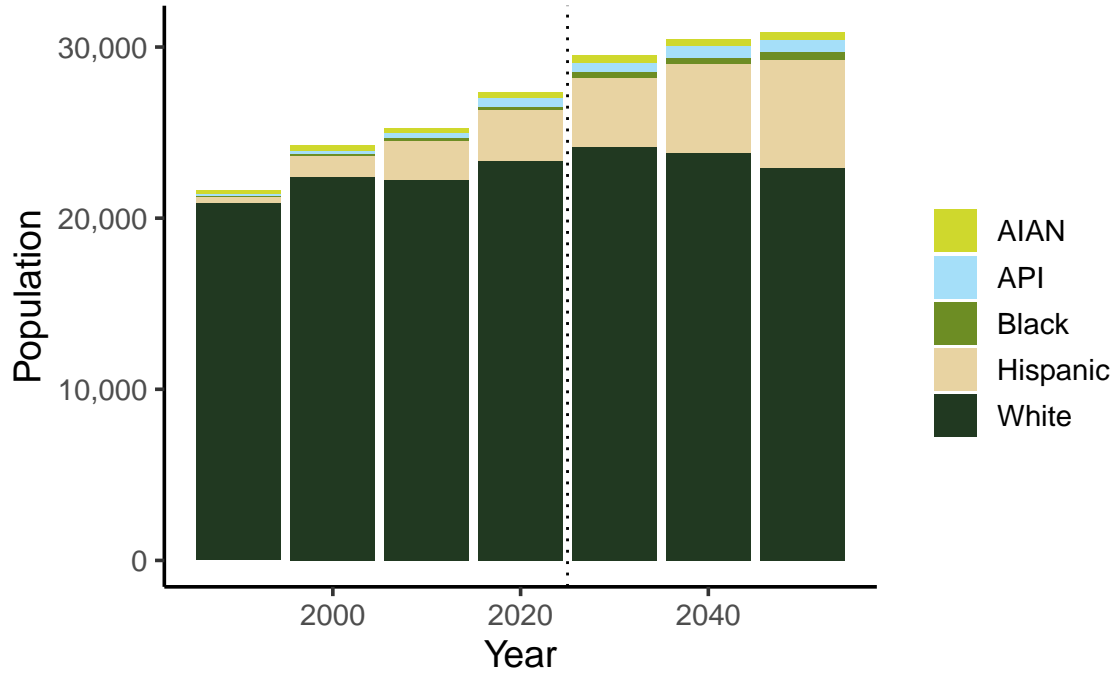# Gilliam Race & Ethnicity Projections
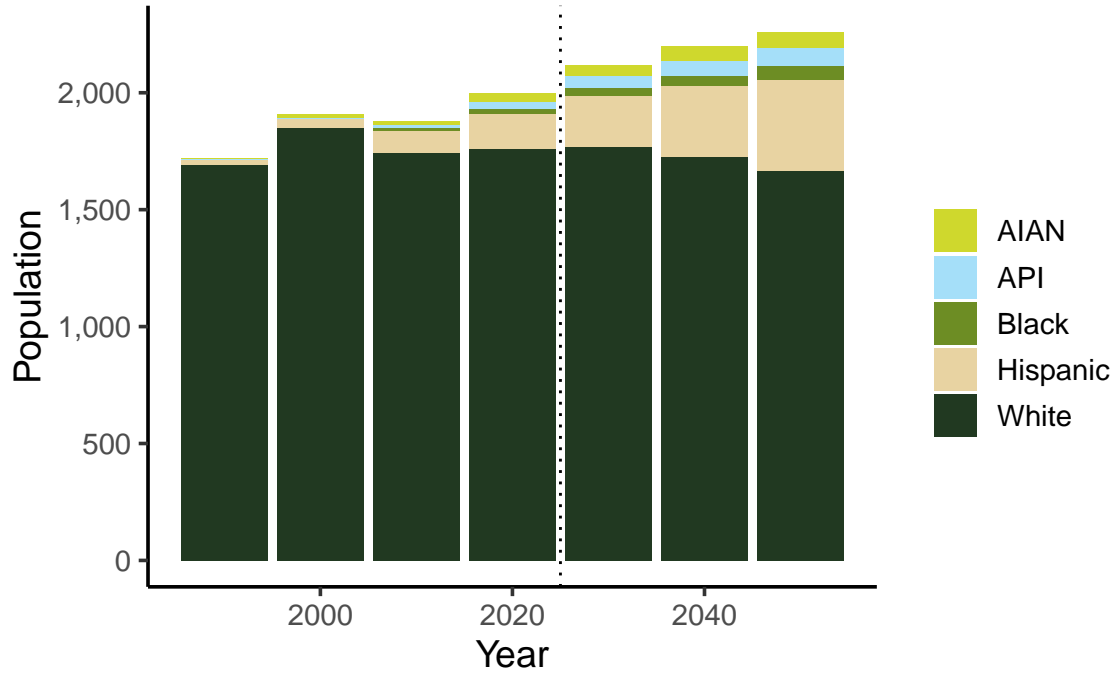
Grant Race & Ethnicity Projections

Harney Race & Ethnicity Projections
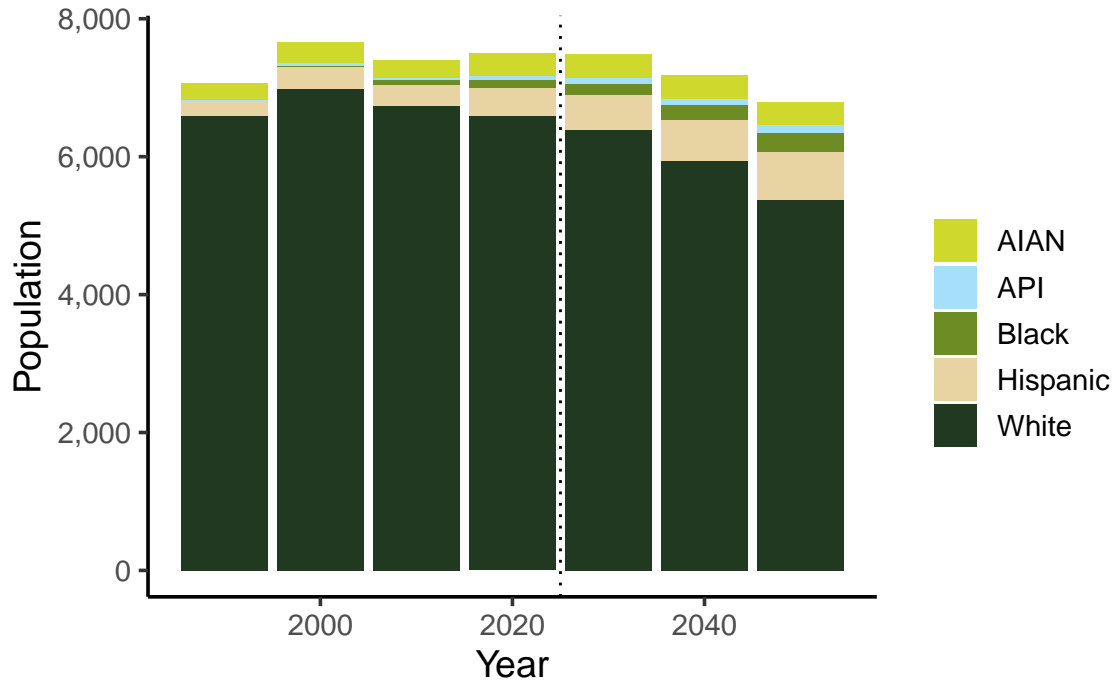
Hood River Race & Ethnicity Projections

Jackson Race & Ethnicity Projections

Legend:
- AIAN
- API
- Black
- Hispanic
- White
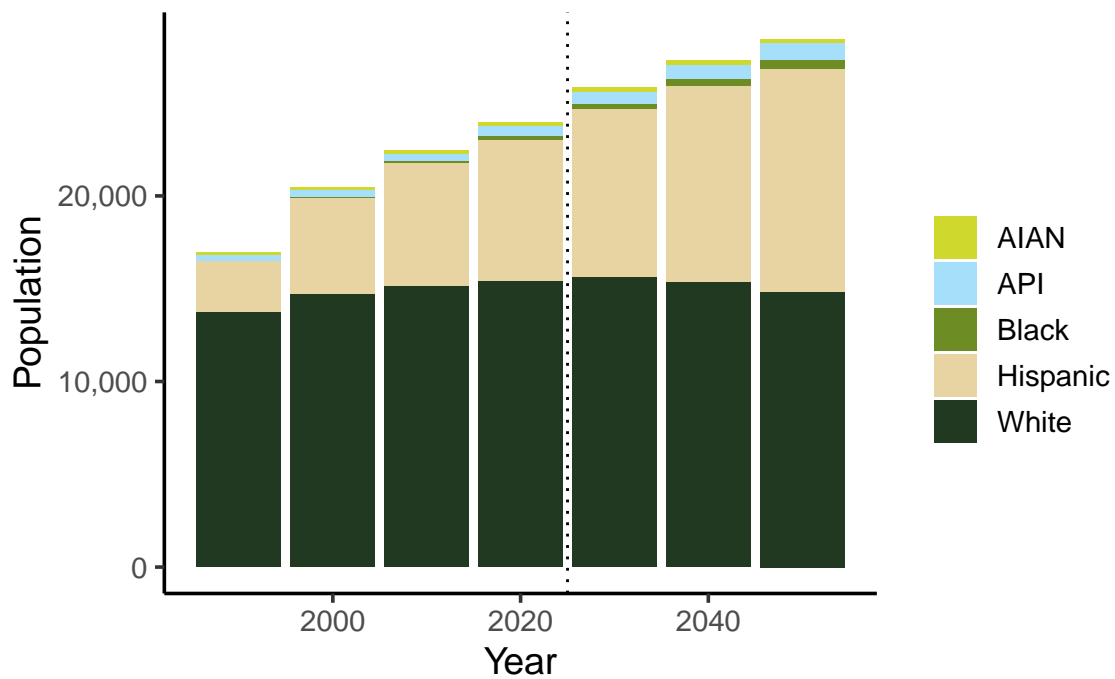
Jefferson Race & Ethnicity Projections


Legend:
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- API
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- Hispanic
- White
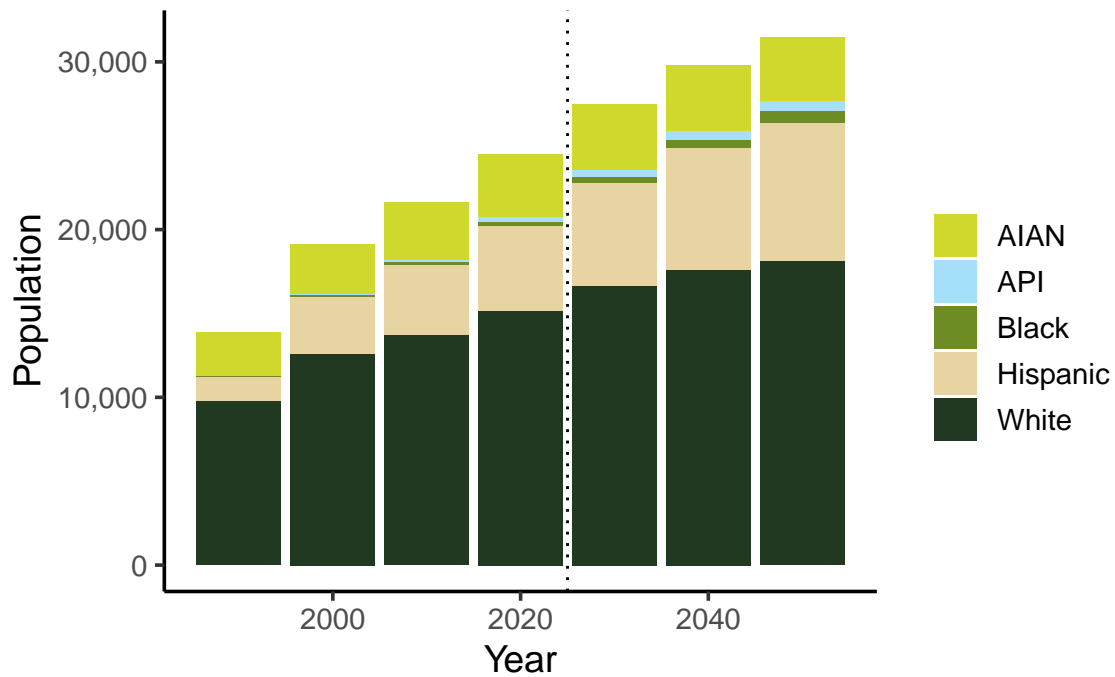
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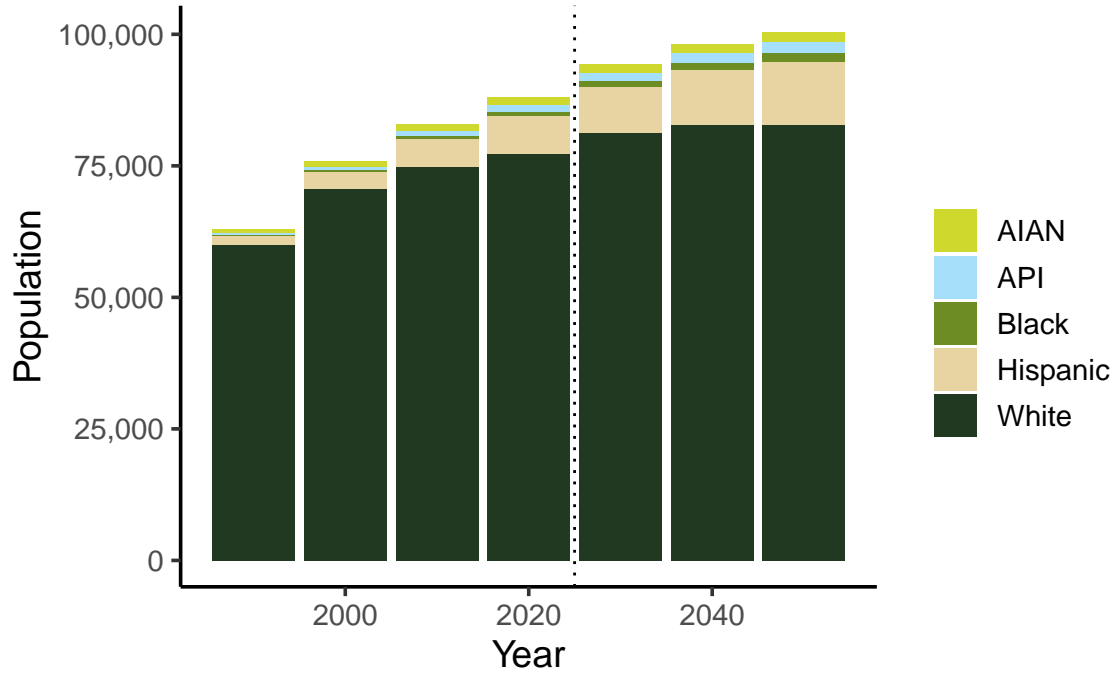
Klamath Race & Ethnicity Projections

Lake Race & Ethnicity Projections

Legend:
- AIAN
- API
- Black
- Hispanic
- White

Lane Race & Ethnicity Projections

Legend:
- AIAN
- API
- Black
- Hispanic
- White

Lincoln Race & Ethnicity Projections

Legend:
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- API
- Black
- Hispanic
- White

Linn Race & Ethnicity Projections


Legend:
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- API
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- Hispanic
- White
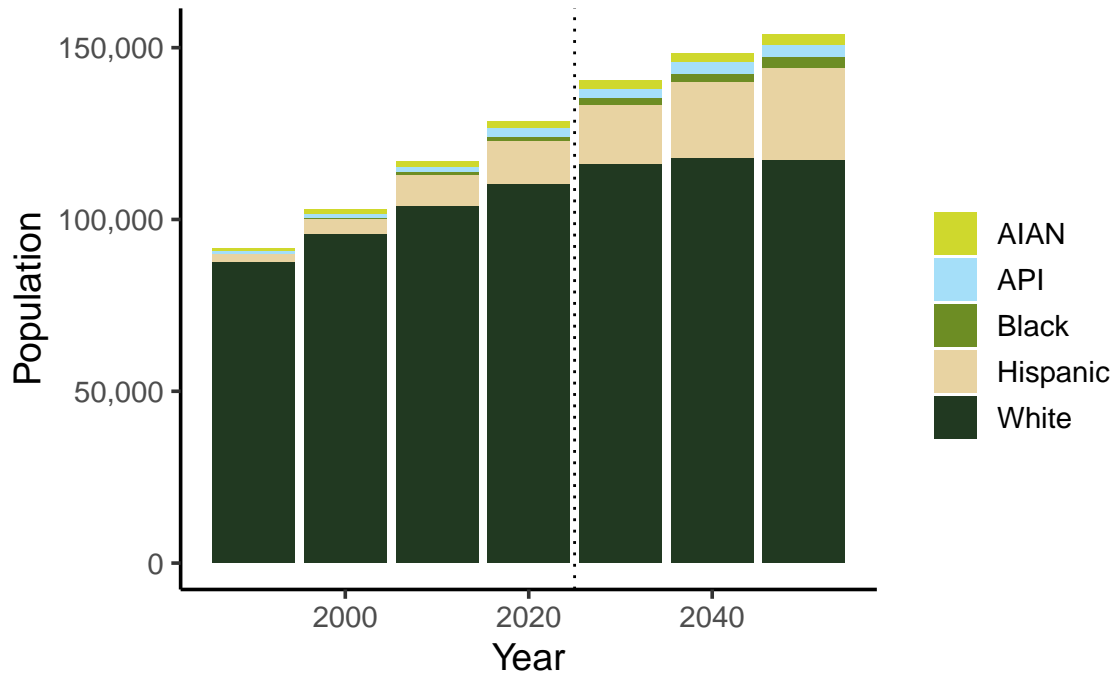
Malheur Race & Ethnicity Projections

Marion Race & Ethnicity Projections
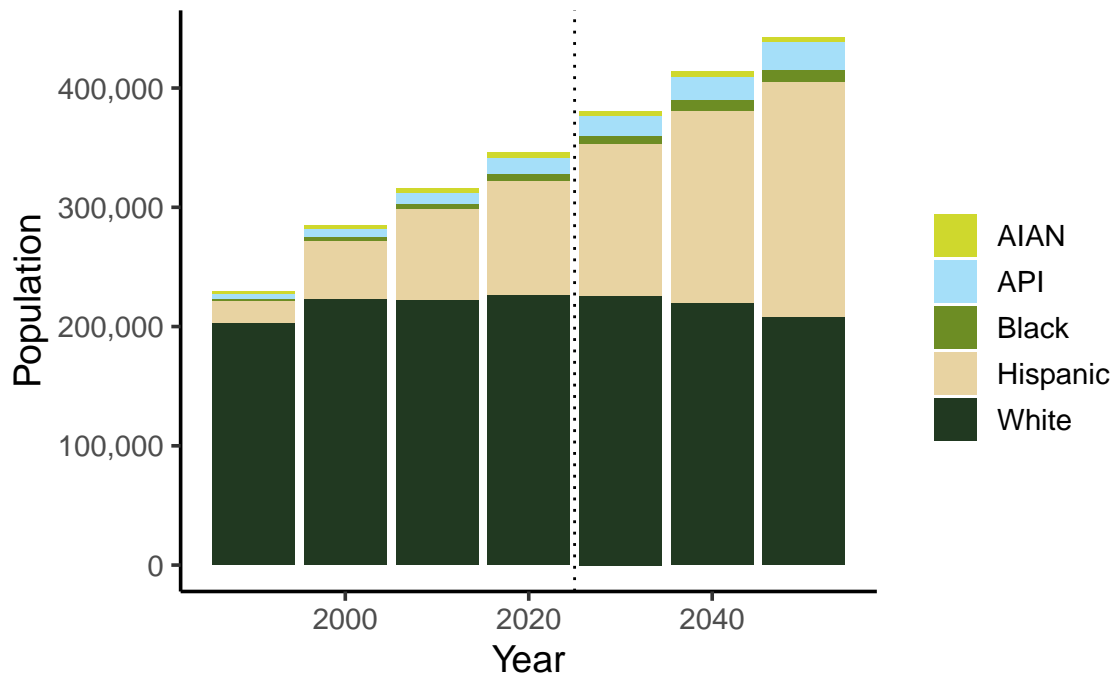
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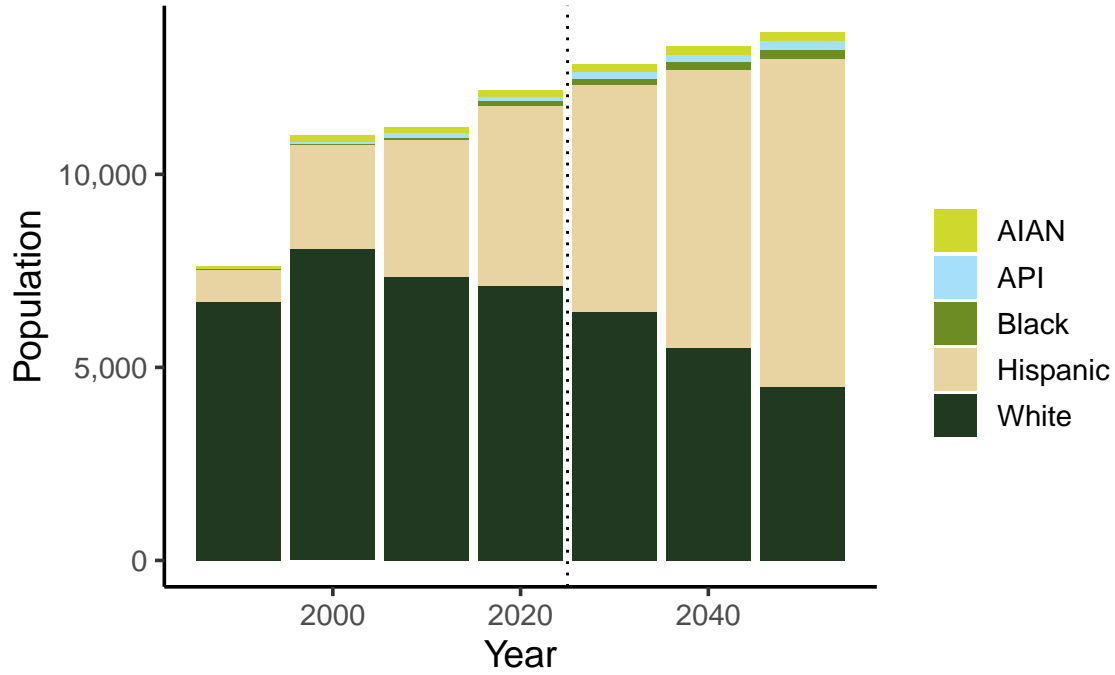
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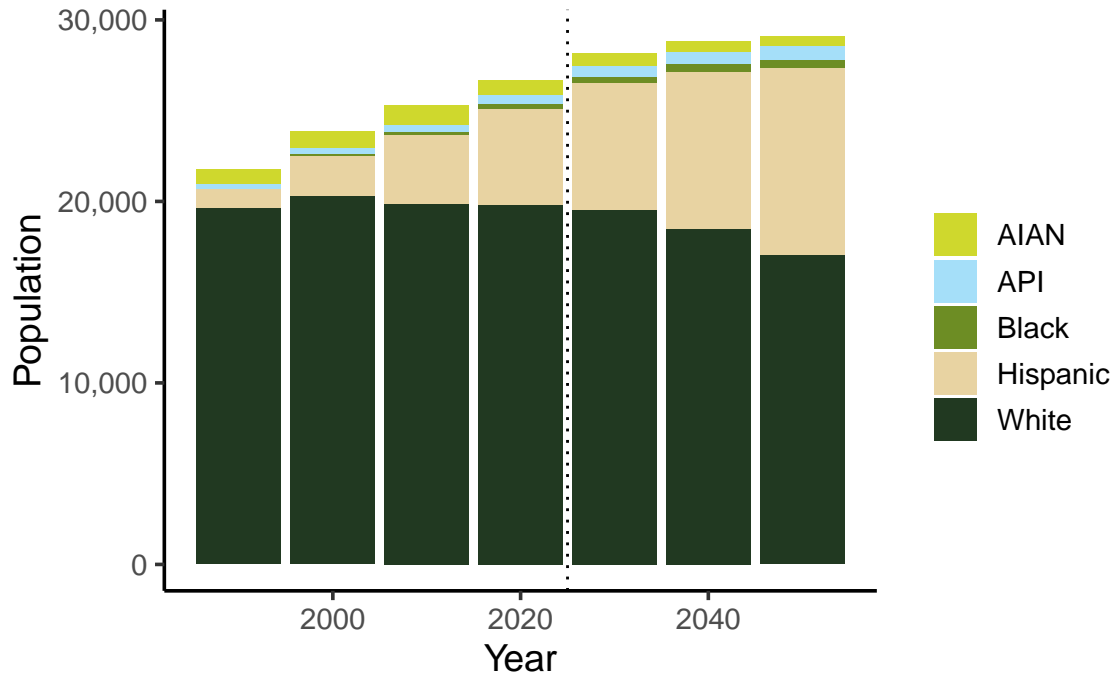
Polk Race & Ethnicity Projections

Sherman Race & Ethnicity Projections

Tillamook Race & Ethnicity Projections

Umatilla Race & Ethnicity Projections

Union Race & Ethnicity Projections

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- API
- Black
- Hispanic
- White
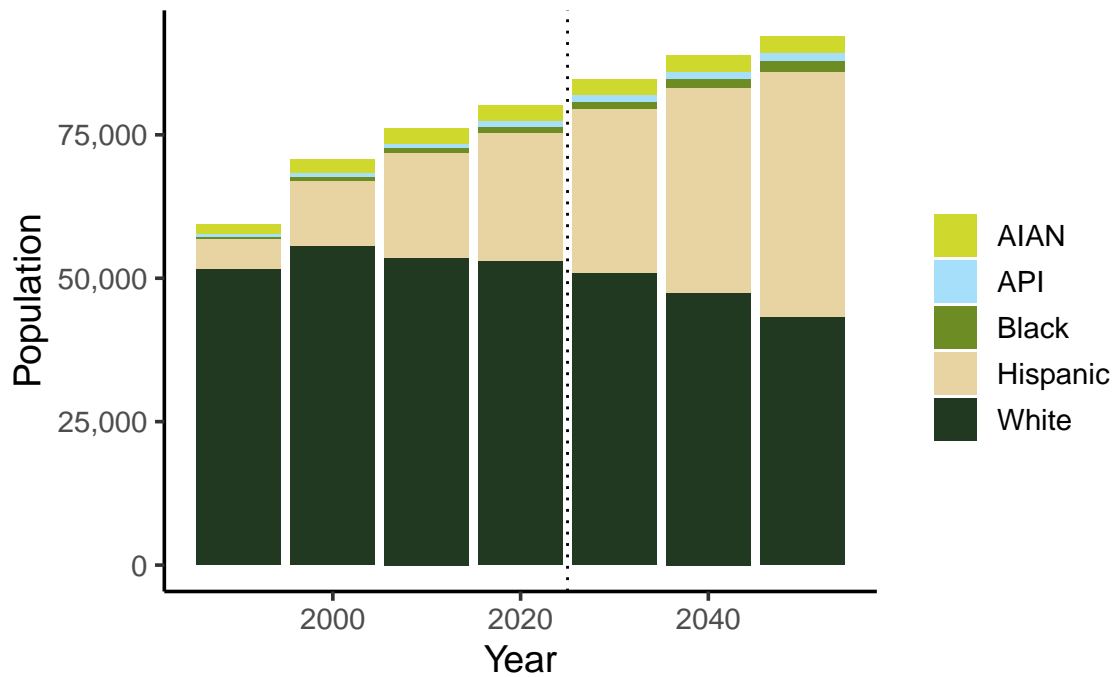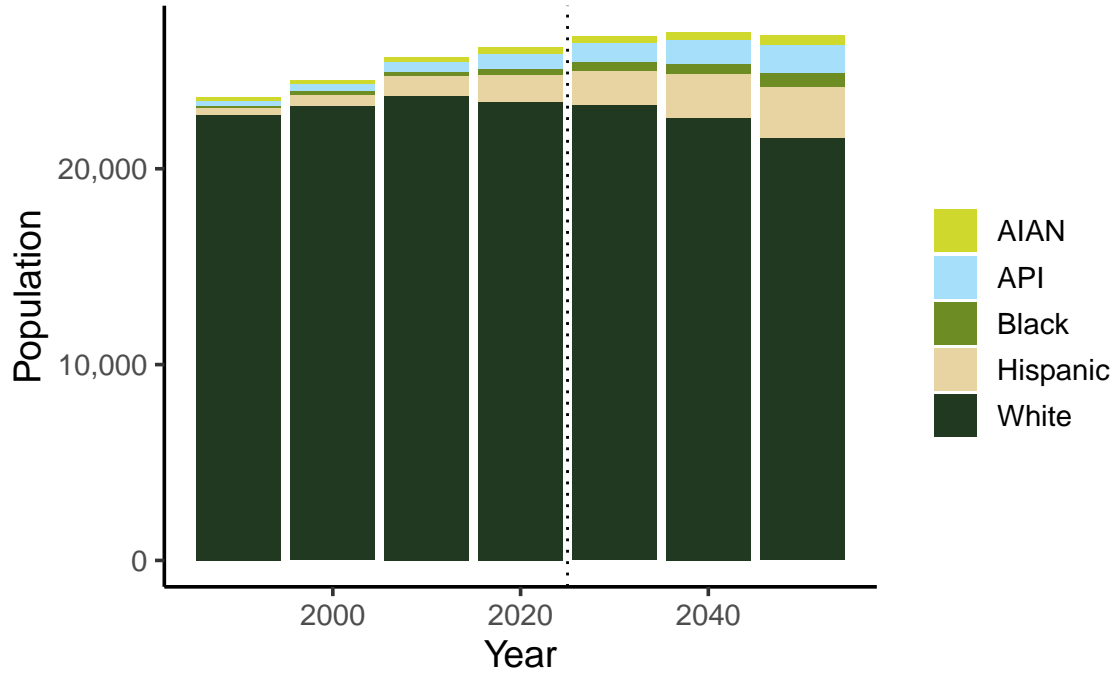
Wallowa Race & Ethnicity Projections

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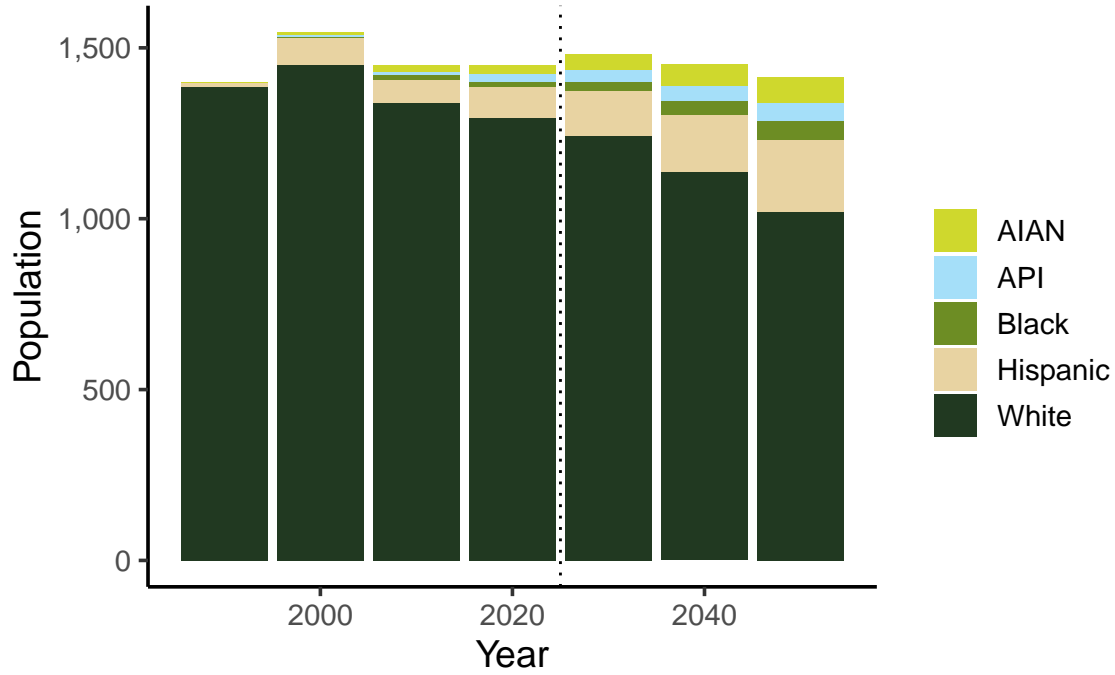- AIAN
- API
- Black
- Hispanic
- White
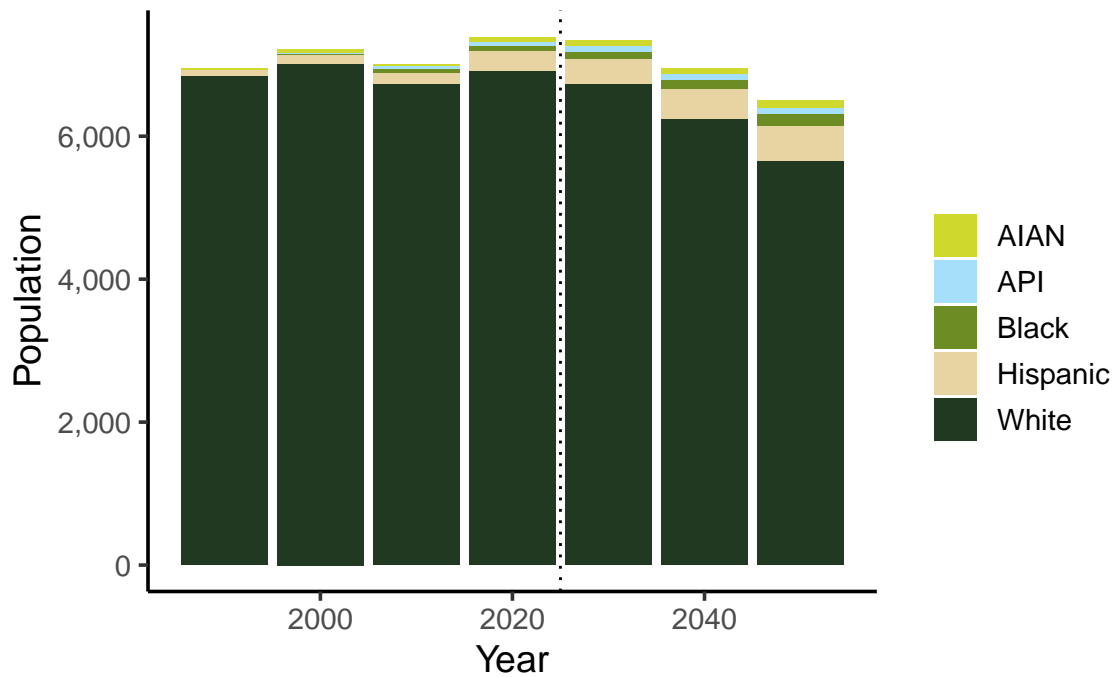
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Washington Race & Ethnicity Projections
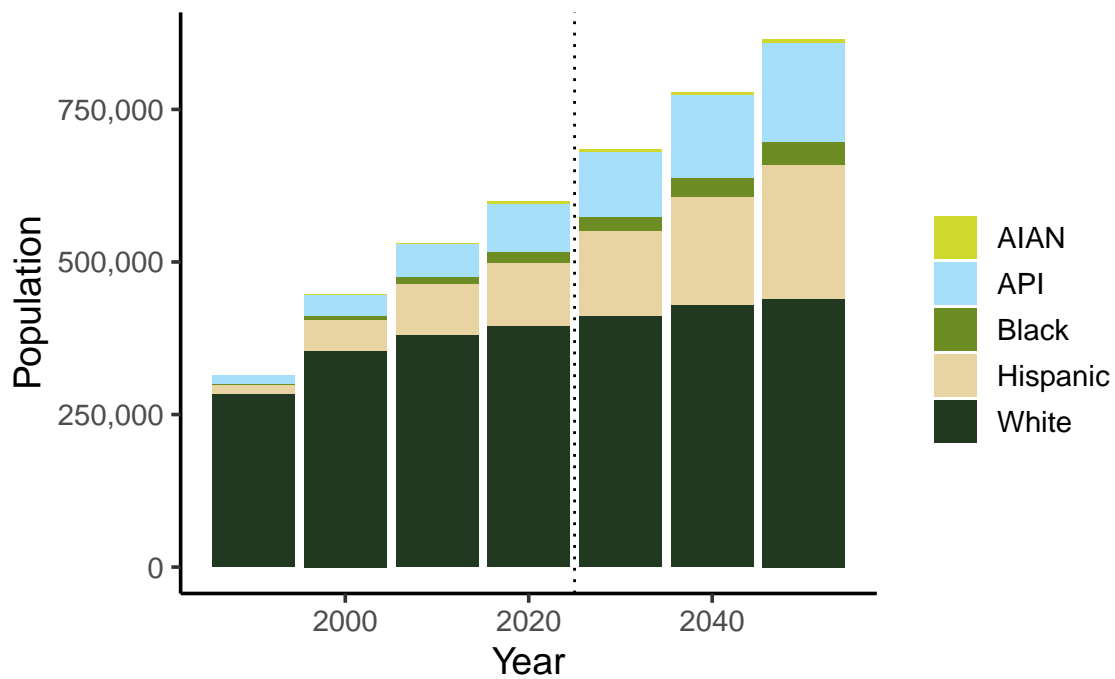
Wheeler Race & Ethnicity Projections

Yamhill Race & Ethnicity Projections