

## 2. Population Projections

### 2.1. Introduction

Two essential tasks involved in planning health policy and social services for Arizona's aging adults are the assessment of Arizona's current population age structure and the development of projections describing the characteristics of Arizona's future population. In 2010, about 14 percent of Arizonans were 65 years of age or older, with about 83 percent of these residents being White non-Hispanic. Changes in aspects of fertility, mortality, and immigration will affect the age-structure of Arizona's population, placing increasing stress on welfare systems designed to care for older adults. For example, the entire population of Arizona is projected to increase by more than 80 percent from the 6,401,568 residents estimated to have lived in Arizona on July 1<sup>st</sup>, 2010 to a projected 11,562,584 by 2050. The number of Arizonans age 65 and older is expected to increase 174 percent from 883,014 in 2010 to 2,422,186 in 2050. The age structure of our population also will shift, increasing the proportion of adults age 65 and older in the population to an estimated 21 percent of the entire population. This will be accompanied by a decrease in the proportion of working-age Arizonans who help support older adults in numerous ways including paying taxes on wages that help fund Social Security and Medicare. Along with an increase in the overall number and proportion of residents represented by adults age 65 and older, Arizona's population will become more heterogeneous and diverse in terms of race/ethnicity. The interplay of these factors presents a difficult scenario for those tasked with planning health policy to accommodate the changing characteristics of Arizona's older adult population.

### 2.2 Methodology

The population projections used in this report were developed by the Arizona Department of Administration's Office of Employment and Population Statistics (<http://azstats.gov/population-estimates.aspx>). Using adjusted 2010 census counts as a baseline, the cohort-component method was used to create population projections by age, sex, race, and ethnic group for each year from 2011 through 2050. The cohort-component method of population projection is designed to estimate projected populations by taking into account multiple inputs to population change including current population, rates of fertility, mortality, and migration, as well as special populations such as military and college students.

The ADOA population projections were aggregated every 10 years to create projected population estimates by age and racial/ethnic group. These estimates were used to compare the racial/ethnic distribution of Arizona's total population to the population of adults age 65 and older. Population pyramids were created to visually compare the population distribution of Arizonans by 5-year age group and sex for 2010 and 2050, and dependency ratios were used to compare the number of economically inactive residents to the number of economically active residents (calculated as the sum of Arizona residents age 0 – 14 and age 65 and older divided by the number of Arizona residents age 15 – 64).