

2020 CENSUS RESULTS FOR ARIZONA: PART 2

A Report from the Office of the University Economist

June 2023

Tom R. Rex, MBA

Associate Director, Center for Competitiveness and Prosperity Research;
and Manager of Research Initiatives, Office of the University Economist

Center for Competitiveness and Prosperity Research
L. William Seidman Research Institute
W. P. Carey School of Business
Arizona State University
Box 874011
Tempe, Arizona 85287-4011

(480) 965-5362

EMAIL: Tom.Rex@asu.edu
ccpr.wpcarey.asu.edu
economist.asu.edu



TABLE OF CONTENTS

Summary	1
Introduction	2
Age	3
Household Type	9
Homeownership	10

LIST OF TABLES

1. Percentage of Households by Type, 2020	9
---	---

LIST OF CHARTS

1. Percentage of the Population by Five-Year Age Group, 2020	4
2. Number of Births in the United States	5
3. Percent Change in Population by Five-Year Age Group, 2010 to 2020	6
4. Numeric Change in Population by Five-Year Age Group, Arizona, 2010 to 2020	7
5. Approximate Net Migration by Ten-Year Age Group, Arizona, 2010 to 2020	8

SUMMARY

Arizona's median age in 2020 of 38.9 was nearly identical to the national average, but the state's increase in median age between 2010 and 2020 tied for the highest in the country. Arizona's larger-than-average increase can be traced to strong net in-migration at early retirement and traditional retirement ages.

Arizona experienced a large increase between 2010 and 2020 in the number of residents between the ages of 55 and 79. This resulted from a combination of strong net in-migration and the aging of the large baby-boom generation from the 46-to-64 age group in 2010 into the 56-to-74 age group in 2020.

Despite this rapid growth in the older population, the share of Arizona's populace in the 55+ age bracket was not that different from the national average in 2020. Arizona's share of the population was less than the national average in the 55-to-64 age bracket and equal to the U.S. average in the 85-or-older age group. The share was above average in the 65-to-84 age bracket, particularly among those 70-to-79 years of age.

The share of the total population in Arizona was lower than the U.S. average in 2020 in each of the working-age groups from 25-to-64 years of age but above average among those 5-to-19 years of age. Between 2010 and 2020, the share decreased in Arizona in every age group younger than 55. Arizona's numeric change in population between 2010 and 2020 was 759,485. The increase among those younger than 55 was only 135,054, just 18 percent of the overall increase.

Net natural increase (births minus deaths) accounted for 302,745 of the total increase in Arizona's population between the 2010 and 2020 censuses. The remaining 456,740 increase resulted from net migration, including both international and domestic net migration. Those born from 1945 to 1965 — those of preretirement and retirement age between 2010 and 2020 — accounted for 56 percent of the state's total net in-migration.

The median age in 2020 varied widely across Arizona's counties. The figure was less than 35 in Coconino, Graham, and Greenlee counties but more than 50 in Gila, Mohave, La Paz, and Yavapai counties. In the state's populous counties, the median was 37.2 in Maricopa, 40.4 in Pinal, and 41.2 in Pima.

Comparing household types in Arizona to the nation in 2020, Arizona had a somewhat lesser share of female householders with no spouse or partner present and slightly higher shares in each of the other three categories: married couples, cohabiting couples, and male householders with no spouse or partner present.

The homeownership rate in Arizona in 2020 was greater than the national average and fourth highest among 10 states in the West. Arizona's rate did not drop as much as the national average between 2010 and 2020.

INTRODUCTION

The U.S. Census Bureau released the initial results from the 2020 decennial census in late summer 2021. The analysis of these data for Arizona and its counties and places was published in the University Economist's October 2021 report *2020 Census Results for Arizona: Part 1*, available at <https://economist.asu.edu/reports>. That report focused on total population and change, along with racial/ethnic data and some housing data.

In past decennial censuses, the remaining data were released promptly by the Census Bureau. However, it was not until late May of 2023 that additional results from the 2020 census were released. This long delay was due to the U.S. Census Bureau's implementation of a new method of ensuring the privacy of all respondents ("disclosure avoidance"), known as "differential privacy."¹ This process infuses statistical noise, altering the decennial census counts.

In this paper, census counts by age for 2020 and the change by age between the 2010 and 2020 censuses is the primary focus. Household type and homeownership are also addressed. Arizona is compared to the national average, to all states, and to 10 states in the West: Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah, and Washington. Results for Arizona's counties also are summarized.

¹ For more information, go to https://www.census.gov/about/policies/privacy/statistical_safeguards.html.

AGE

In May 2023, the Census Bureau released population counts by five-year age group (through age 84) and the median age, for the entire population and by sex.

Median Age

In 2010, the median age in Arizona was less than the national figure, ranking 43rd among the states. By 2020, the median age in Arizona (38.9) had slightly surpassed the U.S. average (38.8) and ranked 27th. The 10-year change in the median age in Arizona (3.0) tied for the largest in the nation with Mississippi. The national increase was 1.6.

Nationally and in Arizona, the median age was higher for females than males. Arizona's figure was slightly higher than the national average for each sex: 37.7 versus 37.5 for males and 40.2 versus 39.9 for females.

In 2020, the median age of the total population was highest in Maine (45.1), followed by New Hampshire (43.6), Vermont (43.5), Florida (43.0), and West Virginia (42.9). The median age was lowest in Utah (31.3), followed by the District of Columbia (33.9). The figure exceeded 35.5 in all of the other states. Of the 10 states in the West, the median age was higher than in Arizona only in New Mexico and Oregon. Between 2010 and 2020, the median age increased in every state except North Dakota.

Within Arizona, the median age in 2020 varied widely, from 32.5 in Coconino County, 33.8 in Graham County, and 34.2 in Greenlee County to 51.7 in Gila County, 53.8 in Mohave County, 54.6 in La Paz County, and 55.5 in Yavapai County. The median was 37.2 in Maricopa County, 40.4 in Pinal County, and 41.2 in Pima County. The median age increased between 2010 and 2020 in each county except Greenlee, with increases of more than five years in Apache, Mohave, Pinal, and Yavapai counties. The increase was 2.6 years in Maricopa County, and 3.5 years in Pima County.

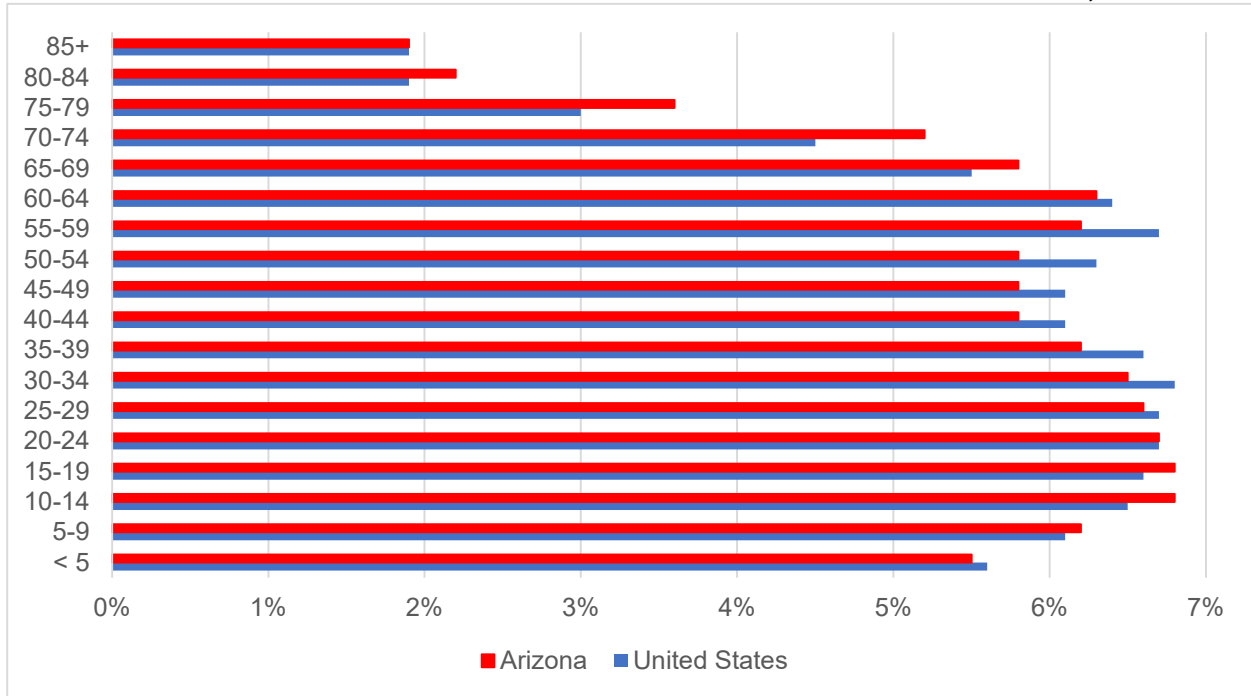
Age Distribution

The age distribution in Arizona in 2020 is compared to the national average in Chart 1. While the share of the total population was not much different in Arizona than the national average in any age group, the share in Arizona was lower than the U.S. average in each of the working-age groups from 25 to 64 years of age and above average in the 65-to-84 and 5-to-19 age groups.

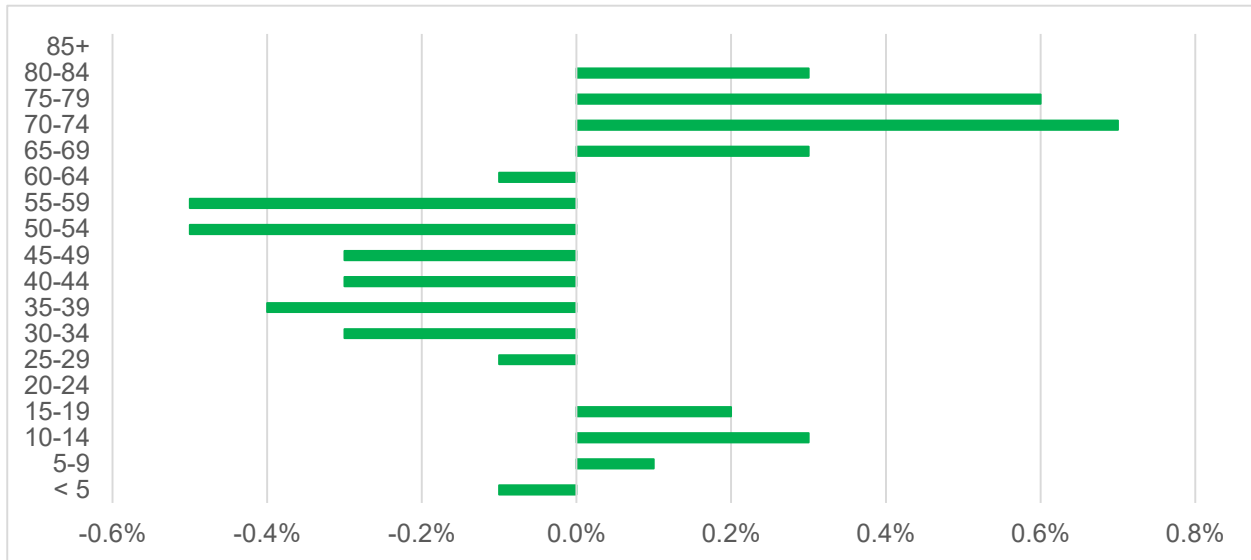
In 2020, Arizona's share of the population ranked in the top 10 of the states in each of the five-year age groups from 70-to-84 years of age. However, the share in the 85-or-older age group was the same in Arizona as the nation, ranking 27th among the states. Arizona's lowest ranks of between 39th and 44th occurred in each of the five-year age groups from 50-to-64 years of age.

Between 2010 and 2020, the share of the total population decreased nationally in each five-year age group younger than 30 and between 40 and 54. Large gains in share occurred in the 60-to-79 age groups. In Arizona, the share decreased in every age group younger than 55.

**CHART 1
PERCENTAGE OF THE POPULATION BY FIVE-YEAR AGE GROUP, 2020**



ARIZONA MINUS THE NATIONAL AVERAGE



Source: Calculated from U.S. Department of Commerce, Census Bureau, 2020 decennial census.

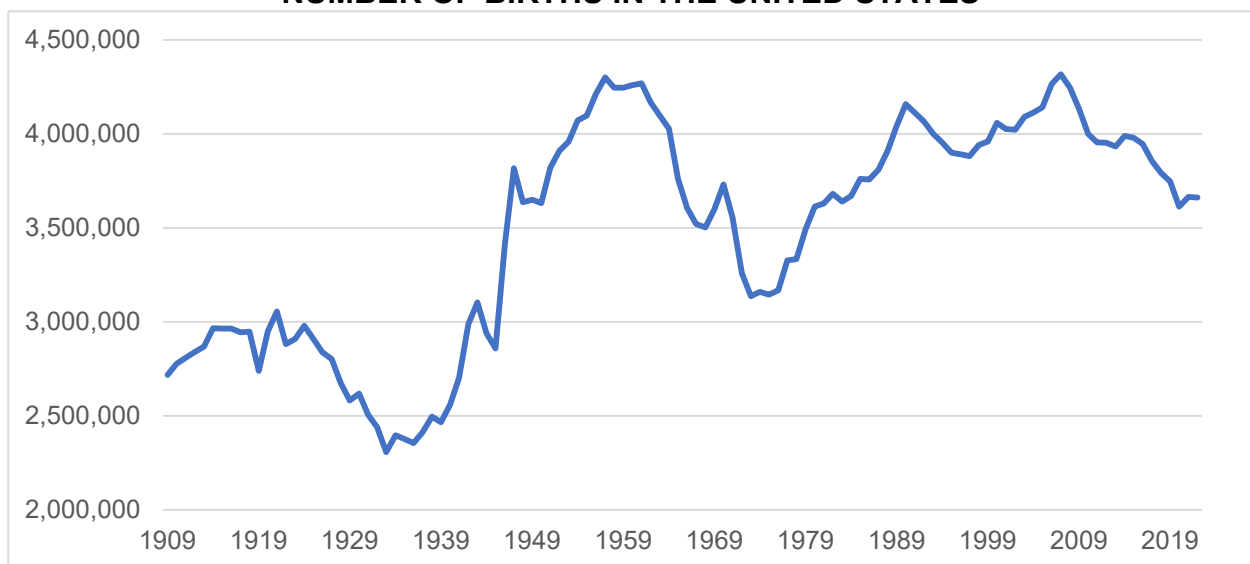
The change in population in any age group is a result of three factors: differences over time in the number of births, age-group net migration, and age-group deaths. The number of births nationally has fluctuated, as seen in Chart 2. The baby-boom generation includes those born from 1946 through 1964. A generally agreed-upon definition of the baby-bust generation does not exist, but it generally includes those born from 1965 through the mid-1980s.

Nationally, the most rapid percentage population growth between 2010 and 2020 occurred in the 60-to-79 age bracket. In 2020, three of these five-year age groups consisted entirely of the baby-boom generation; the 75-to-79 age group included those born during World War II, when births increased from the lows of the Great Depression. In contrast, the population decreased in the 40-to-54 age bracket, corresponding to the baby-bust generation replacing the baby-boom generation in this age bracket. A decrease also occurred in the younger-than-5 age group, due to a decline in the number of births. The pattern generally was similar in Arizona, but net migration to Arizona by age group resulted in differences from the national average.

Between 2010 and 2020, Arizona’s population increased 11.9 percent, greater than the national figure of 7.4 percent. As seen in Chart 3, Arizona’s percent change was much higher than the national average in each age group 70 or older. In younger age groups, Arizona’s percent change ranged from higher to somewhat lower than the national average.

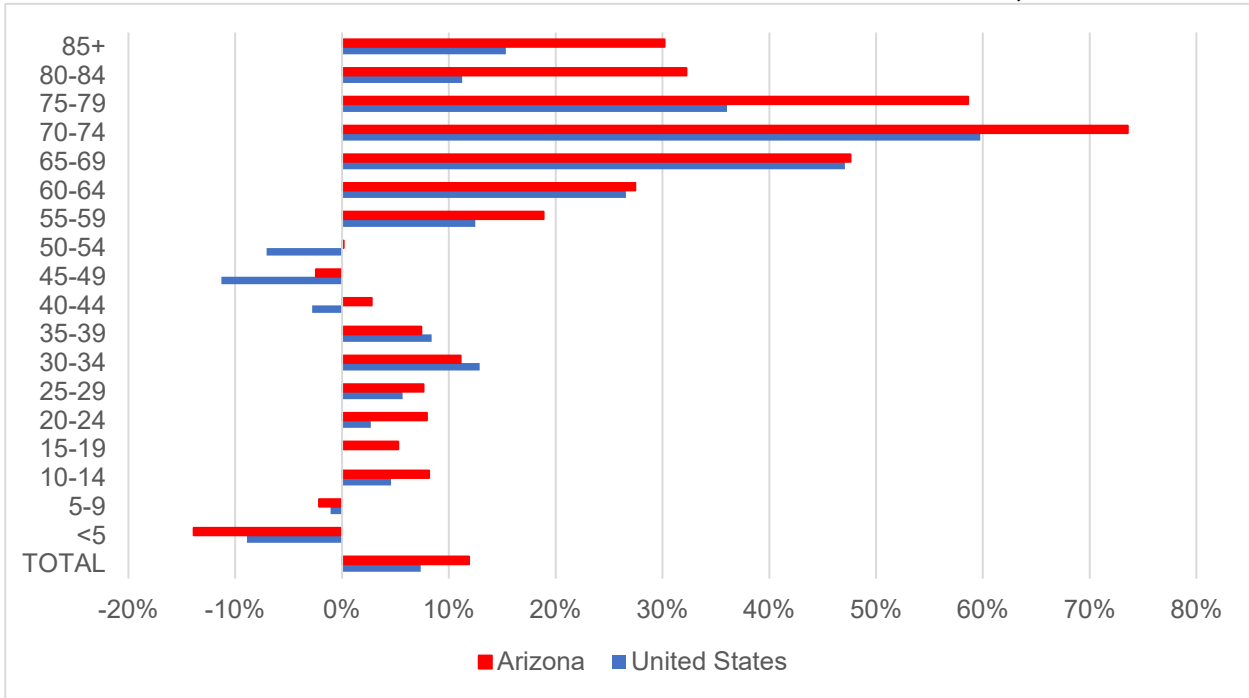
Arizona’s overall population growth rate between 2010 and 2020 ranked 10th among the states. Arizona ranked in the top 10 in the 20-to-24, 45-to-59, and 75-or-older age groups. In contrast, Arizona ranked below the middle of the states in the less-than-10, 30-to-39, and 65-to-69 age groups.

**CHART 2
NUMBER OF BIRTHS IN THE UNITED STATES**

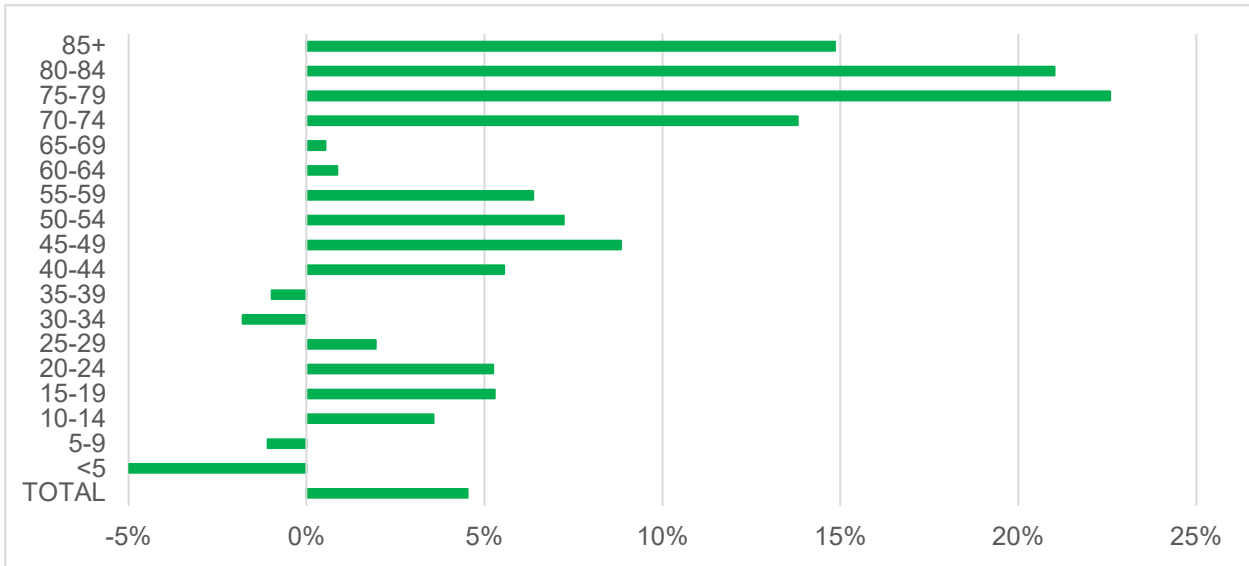


Source: Centers for Disease Control and Prevention, National Center for Health Statistics.

**CHART 3
PERCENT CHANGE IN POPULATION BY FIVE-YEAR AGE GROUP, 2010 TO 2020**



ARIZONA MINUS THE NATIONAL AVERAGE



Source: Calculated from U.S. Department of Commerce, Census Bureau, 2020 and 2010 decennial censuses.

Arizona’s numeric change in population by age group is displayed in Chart 4. The overall increase was 759,485. The increase among those younger than 55 was only 135,054, just 18 percent of the overall increase.

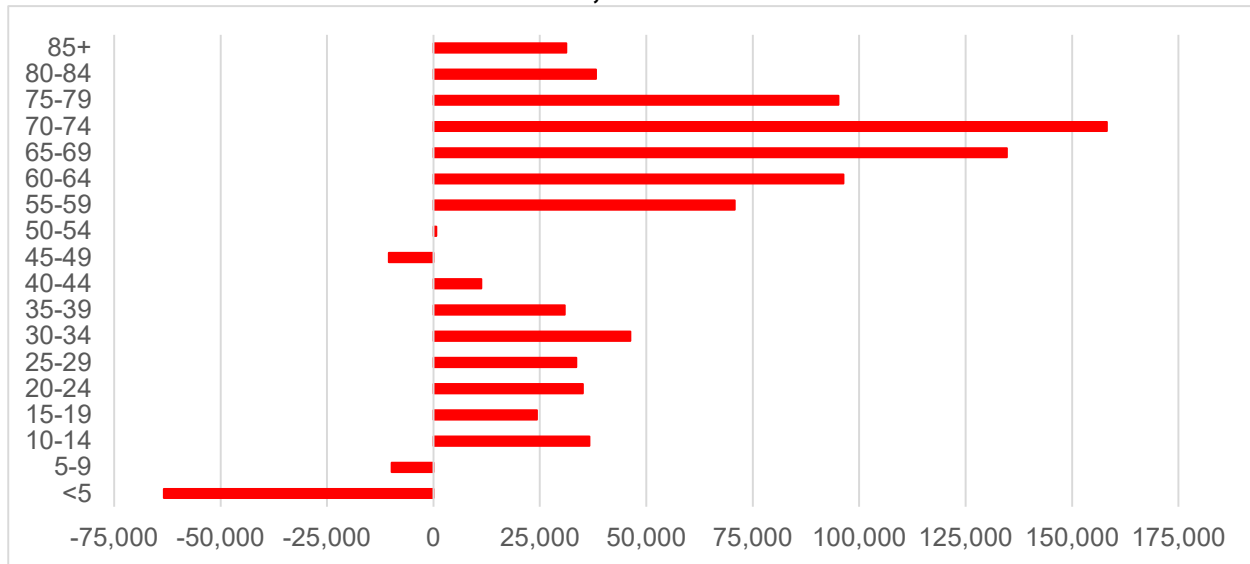
Change in Cohort Size

Another way to look at population change by age is to follow age cohorts over time. For example, the number younger than 5 in 2010 is compared to the number 10-to-14 years old in 2020. The cohort’s 2010-to-2020 population change added to the number of deaths in the cohort results in an estimate of net migration by age group.² Since 2012, annual deaths in Arizona have been reported by the Arizona Department of Health Services, primarily in 10-year age groups. Thus, it is possible to calculate a rough estimate of the number of deaths by 10-year cohort and therefore net migration by cohort.

Arizona’s population increased by 759,485 between the 2010 and 2020 censuses. Net natural increase (births minus deaths) accounted for 302,745 of the total increase. The remaining 456,740 therefore is net migration, including both international and domestic net migration.

Using the change in cohort size and births and deaths between 2010 and 2020 by age allows for the 456,740 net migrants to be distributed by age. Numeric net in-migration to Arizona between

**CHART 4
NUMERIC CHANGE IN POPULATION BY FIVE-YEAR AGE GROUP,
ARIZONA, 2010 TO 2020**

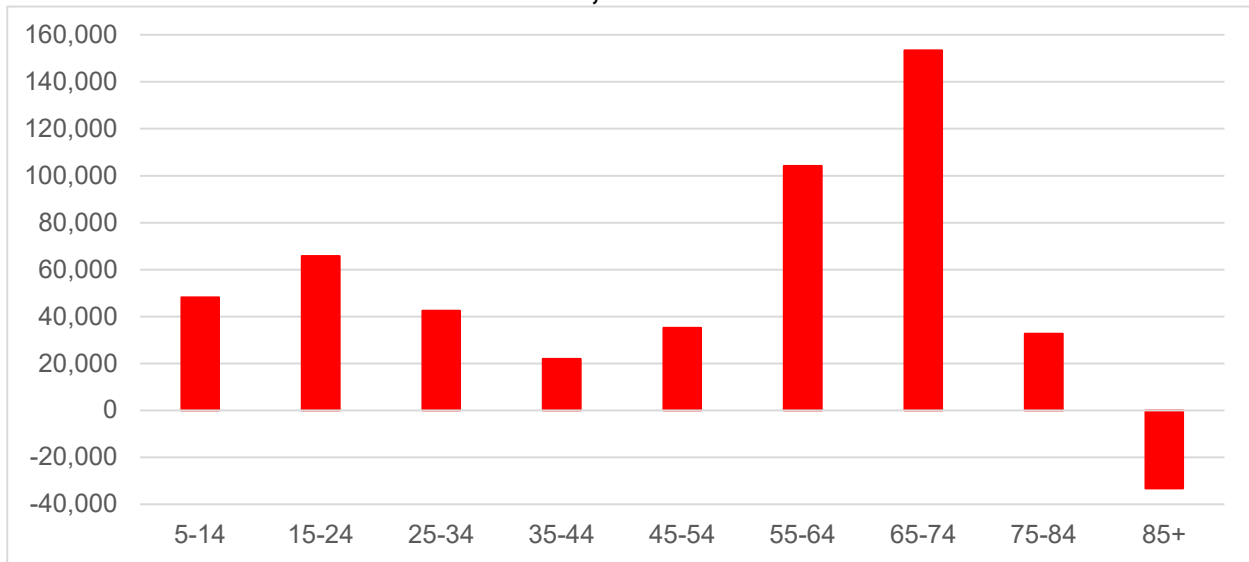


Source: Calculated from U.S. Department of Commerce, Census Bureau, 2020 and 2010 decennial censuses.

² For those younger in 10 in 2020, the calculation is the number counted in 2020 plus the number of deaths less the number of births.

2010 and 2020 was the greatest among those born between 1945 and 1955: those 55 to 64 years of age in 2010 and 65 to 74 years of age in 2020. Substantial net in-migration also occurred among those born between 1955 and 1965: those 45 to 54 years of age in 2010 and 55 to 64 years of age in 2020. Those born from 1945 to 1965 — those of preretirement and retirement age between 2010 and 2020 — accounted for 56 percent of the state’s total net in-migration. As seen in Chart 5, net migration was much less in each of the other 10-year cohorts, including net out-migration among those born before 1935: those 75 or older in 2010 and 85 or older in 2020.³

**CHART 5
APPROXIMATE NET MIGRATION BY TEN-YEAR AGE GROUP,
ARIZONA, 2010 TO 2020**



Source: Calculated from U.S. Department of Commerce, Census Bureau, 2020 and 2010 decennial censuses, and Arizona Department of Health Services, births and deaths by age group.

³ Net migration for those younger than 5 in 2020 is not shown in Chart 5. The calculation yields a negative figure, but this most likely is due to the undercount of young children in the decennial censuses rather than net out-migration.

HOUSEHOLD TYPE

The Census Bureau places households into one of four categories: married couple, cohabiting couple, male householder with no spouse or partner present, and female householder with no spouse or partner present. Each category is subdivided based on whether own children younger than 18 are present; the male and female householder categories also are subdivided based on whether the person is living alone, and if so, whether they are 65 or older. The result is 12 subcategories, as shown in Table 1. Since households were classified differently in 2010, it is not possible to compare the 2020 results to those from 2010.

Within Arizona, married couples in 2020 accounted for 54.4 percent of all households in Pinal County, but the share was only 38.4 percent in Apache County. Cohabiting couples accounted for 9.0 percent of all households in Coconino County, but only 5.2 percent in Santa Cruz County. The male householder share ranged from 27.0 percent in Greenlee County to 14.5 percent in Santa Cruz County. The female householder share ranged from 32.6 percent in Apache County to 18.5 percent in Greenlee County.

**TABLE 1
PERCENTAGE OF HOUSEHOLDS BY TYPE, 2020**

	United States	Arizona	Arizona Less U.S.
Married Couple	46.3%	46.5%	0.2
Cohabiting Couple	6.9	7.8	0.9
Male Householder, No Spouse or Partner Present	18.8	19.3	0.5
Female Householder, No Spouse or Partner Present	28.0	26.4	-1.6
Subcategories:			
Married Couple, Without Own Child Younger Than 18	28.7	30.0	1.3
Married Couple, With Own Child Younger Than 18	17.6	16.5	-1.1
Male Householder Living Alone, Younger Than 65	8.8	8.3	-0.5
Female Householder, Other*	7.8	7.6	-0.2
Female Householder Living Alone, Younger Than 65	7.7	6.9	-0.8
Female Householder Living Alone, 65 or Older	7.3	7.2	-0.1
Female Householder, With Own Child Younger Than 18	5.2	4.7	-0.5
Male Householder, Other*	4.6	4.9	0.3
Cohabiting Couple, Without Own Child Younger Than 18	4.6	5.3	0.7
Male Householder Living Alone, 65 or Older	3.8	4.2	0.4
Cohabiting Couple, With Own Child Younger Than 18	2.3	2.5	0.2
Male Householder, With Own Child Younger Than 18	1.6	1.9	0.3

* Not living alone or with own children younger than 18.

Source: Calculated from U.S. Department of Commerce, Census Bureau, 2020 decennial census.

HOMEOWNERSHIP

Nationally, the share of households who owned their home dropped 2.0 percentage points between the 2010 and 2020 censuses, from 65.1 percent in 2010 to 63.1 percent in 2020. The homeownership rate in Arizona was higher than the U.S. figure in each census and did not drop as much between 2010 and 2020, from 66.0 percent to 65.3 percent.

In 2020, the homeownership rate exceeded 70 percent in Delaware, Idaho, Iowa, Maine, Michigan, Minnesota, New Hampshire, and West Virginia. It was less than 60 percent in California, the District of Columbia, Hawaii, Nevada, and New York. Arizona's rank among the states rose from 36th in 2010 to 27th in 2020; the 2010-to-2020 change ranked 10th. Only five states experienced an increase in the homeownership rate between 2010 and 2020: Alaska, Hawaii, Idaho, South Carolina, and Wyoming. The rate dropped by more than 3.0 percentage points in Connecticut, the District of Columbia, New Jersey, and North Dakota.

Among the 10 states in the West, Arizona ranked fourth on homeownership in both 2010 and 2020, behind, Idaho, Utah, and New Mexico. California and Nevada had the lowest rates of homeownership. Arizona's 2010-to-2020 change ranked third, behind Idaho and Oregon. Only Nevada and Texas had a change equal to or worse than the national average.

Among Arizona's 15 counties, the homeownership rate in 2020 ranged from 44.3 percent in Greenlee County to 79.6 percent in Pinal County. Maricopa County (63.0 percent) ranked 13th and Pima County (63.6 percent) ranked 12th. Between 2010 and 2020, the homeownership rate increased in five counties, led by a 3.5 percentage-point gain in Pinal County. In contrast, the rate dropped by more than 5 percentage points in Greenlee and La Paz counties. The percentage-point change was -1.5 in Maricopa County and -0.5 in Pima County.