

2024

NEEDS AND ASSETS REPORT



 **FIRST THINGS FIRST**

Navajo/Apache Region

NAVAJO/APACHE REGIONAL PARTNERSHIP COUNCIL 2024 NEEDS AND ASSETS REPORT

Funded by the
First Things First Navajo/Apache Regional Partnership Council

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INTRODUCTION

Ninety percent of a child's brain growth occurs before kindergarten and the quality of a child's early experiences impacts whether their brain will develop in positive ways that promote learning. First Things First (FTF) was created by Arizonans to help ensure that Arizona children have the opportunity to start kindergarten prepared to be successful. Understanding the critical role the early years play in a child's future success is crucial to our ability to foster each child's optimal development and in turn, impact all aspects of well-being in our communities and our state.

This Needs and Assets Report for the Navajo/Apache Region helps us in understanding the needs of young children, the resources available to meet those needs and gaps that may exist in those resources. An overview of this information is provided in the Executive Summary and documented in further detail in the full report.

The report is organized by topic areas pertinent to young children in the region, such as population characteristics or educational indicators. Within each topic area are sections that set the context for why the data found in the topic areas are important (Why it Matters), followed by a section that includes available data on the topic (What the Data Tell Us).

The FTF Navajo/Apache Regional Partnership Council recognizes the importance of investing in young children and ensuring that families and caregivers have options when it comes to supporting the healthy development and education of young children in their care. It is our sincere hope that this information will help guide community conversations about how we can best support school readiness for all children in the Navajo/Apache Region. To that end, this information may be useful to local stakeholders as they work to enhance the resources available to young children and their families and as they make decisions about how best to support children birth to age 5 in communities throughout the region.

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We also want to thank parents and caregivers, local service providers and members of the public who attended regional council meetings and voiced their opinions, as well as all the organizations working to transform the vision of the regional council into concrete programs and services for children and families in the Navajo/Apache Region.

Lastly, we want to acknowledge the current and past members of the FTF Navajo/Apache Regional Partnership Council whose vision, dedication and passion have been instrumental in improving outcomes for young children and families within the region. As we build upon those successes, we move ever closer to our ultimate goal of creating a comprehensive early childhood system that ensures children throughout Arizona are ready for school and set for life.

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EXECUTIVE SUMMARY

The Navajo/Apache Region. The First Things First (FTF) Navajo/Apache Region encompasses the central areas of Navajo and Apache counties, excluding the lands belonging to the Navajo Nation and Hopi Tribe in the north and the land belonging to the White Mountain Apache Tribe in the south. The region also includes the Forest Lakes community, located in Coconino County west of Heber-Overgaard, and excludes the town of Winslow, which is located in Navajo County but assigned to the FTF Coconino Region. Major towns in the region include Show Low, Pinetop-Lakeside, Snowflake, Taylor, Holbrook, Springerville, Eagar and St. Johns.

Population Characteristics. According to the U.S. Census, the Navajo/Apache Region had a population of 73,563 in 2020, a 1% increase from 2010, when 73,083 people resided in the region. Conversely, the population of young children birth to age 5 decreased by 24% over the same period from 6,166 in 2010 to 4,714 in 2020. This increase in the total population in the region (+1%) was much less than that seen across the state, which experienced a 12% increase in the total population from 2010 to 2020. The decrease in the population of young children of -24% in the region was greater than the 12% decrease seen across the state during those years. Fewer than one in eight households (12%) in the region included a young child in 2020, a slightly lower proportion of households than across the state (13%).

There is evidence of a possible 2020 Census undercount of young childrenⁱ in the Navajo/Apache Region, as the number of live births in the region between 2015 and 2020 (n=5,268) is 12% higher than the number of young children birth to age 5 in the 2020 Census (n=4,714). Across the state, a 1% difference is seen comparing the same indicators.

Most Navajo/Apache Region residents identify as Non-Hispanic White (78% of all age population, 69% of children birth to age 4). Young children in the region are more likely to be identified as Hispanic or Latino (21%) than all residents (14%), although both are lower than the population of young children (44%) and all ages (31%) identifying as Hispanic or Latino across the state. The Navajo/Apache Region has a higher proportion of the total population and children birth to age 4 identified as American Indian (9% and 14%, respectively) than in Arizona overall (6% and 8%, respectively). In contrast, lower proportions of the total population and children birth to age 4 identified as Black or African American (1% and 2%, respectively), Asian or Pacific Islander (2% and 3%) or Multiracial (8% and 13%) than the state across those categories.

Only 6% of children birth to age 5 in the region live with foreign-born parents, a lower proportion than across the state overall (24%) but higher than the share seen in Apache County (3%) or Navajo County (2%). A smaller proportion of individuals speak Spanish at home (9%) or another language (4%) in the Navajo/Apache Region compared to the state overall (20% and 6%, respectively). Use of languages other than English or Spanish, mostly Native North American languages, is much more common in

ⁱ See “2020 Census data and its limitations” at the beginning of the Population Characteristics section for fuller context on the 2020 Census undercount of young children.

Apache County (52%) and Navajo County (30%) than in the region. Of those who speak a language other than English at home, a much smaller proportion of individuals do not speak English “very well” in the region (3%) compared to the state (8%), and 7% of individuals in the region are multilingual (7%), again a smaller share than in the state (18%). Similarly, the percentage of limited-English-speaking households in the region (1%) is a quarter of the share seen statewide (4%), and much lower than the proportions in Apache County (18%) and Navajo County (5%). The number of English Language Learners (ELL) decreased in the Navajo/Apache Region between 2020-21 and 2021-22, with 305 ELL students enrolled in preschool through 12th grade in the region in the 2021-22 school year. This represents 2% of students enrolled in all grades in the region that school year. This was a lower share of students than seen in Apache County (5%), Navajo County (3%) and Arizona overall (8%) in the 2021-22 school year.

Most young children in the Navajo/Apache Region (60%) live with two married parents or stepparents, which is slightly higher than in Arizona overall (59%) and much higher than in Apache County (36%) or Navajo County (45%). The same proportion of young children in the region live in a household with one parent as in the state (37%). Of grandparents who live with and are responsible for their grandchildren under age 18 in the Navajo/Apache Region, most are 60 years old or older (59%) and female (57%), while a minority are in the labor force (35%) or in poverty (12%). Nearly half (47%) do not have the child’s parent in the household, higher than the proportion across the state (33%). Overall, in the region, 19% of grandparents have grandchildren under age 18 in their household with no parent present, much higher than the proportion across the state (11%). This indicates that the prevalence of grandparents raising grandchildren is likely higher in the region compared to the state and that the prevalence of multigenerational households (where grandparents, parents and children all live together) is lower.

Economic Circumstances. Median family incomes for families with children in Apache County (\$37,200) and Navajo County (\$46,400) are much lower than for families in Arizona (\$75,100). The median incomes for married couple families with children in Apache County (\$54,700) and Navajo County (\$70,900) are lower than for married couple families across Arizona (\$100,000), however these median incomes are about double the median income for single-male-headed families (Apache County: \$29,700; Navajo County: \$31,300) and two to three times those of single-female-headed families in Apache County (\$25,300) and Navajo County (\$21,800).

According to 2017-2021 American Community Survey (ACS) estimates, rates of poverty in the region across the entire population (17%) and for children birth to age 5 (30%) are higher than those across the state (13% and 20%, respectively) but lower than in Apache County (34% and 51%) or Navajo County (26% and 36%). Rates of poverty for young children increased by 3% in the region (2012-2016: 27%; 2017-2021: 30%), while statewide rates of poverty for young children decreased by 8% in the same period (2012-2016 28%; 2017-2021 20%). More than half of young children in the Navajo/Apache Region (55%) live below 185% of the federal poverty level (FPL), higher than across the state (39%). However, even this relatively higher income category for a family of four (185% = \$50,836) equates to

less than the self-sufficiency standardⁱⁱ for two parents with one infant and one preschooler in 2022 in Apache County (\$70,428) or Navajo County (\$70,576), indicating that many families across the region may have less income than needed to fully support themselves. A higher proportion of young children live in “deep poverty” (defined as 50% FPL) in the Navajo/Apache Region (15%) compared to across the state (9%). This again suggests that many families do not have enough cash income to meet their needs.

Between state fiscal years (SFY) 2018 and 2022, both the number of families with children birth to age 5 and the number of children birth to age 5 receiving Temporary Assistance for Needy Families (TANF) Cash Assistance steadily increased in the region, from 77 young children in SFY 2018 to 133 in SFY 2022. In contrast, both the number of families and young children receiving TANF decreased between SFY 2018 and 2022 across the state. In SFY 2022, the percentage of young children participating in TANF in the region (2.8%) was the same as in the state overall (2.8%) for the first time in five years, increasing from 1.6% in SFY 2018.

Participation in the Supplemental Nutrition Assistance Program (SNAP) by households with young children declined in the Navajo/Apache Region between SFY 2018 (n=1,793) and 2022 (n=1,622), as did participation across the state. The number of young children birth to age 5 participating in SNAP also decreased during those years in both the region and state. The percentage of young children participating in SNAP was higher in the region than across the state in all years between SFY 2018 and 2022, with 52% of children birth to age 5 participating in the region in SFY 2022, compared to 40% across the state.

The number of children birth to age 4 enrolled in and participating in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) in the Navajo/Apache Region and across the state generally declined in recent years. However, while the state saw a slight uptick in enrollment and participation between 2021 and 2022, the region hit a five-year low in 2022, with 1,992 children enrolled and 1,879 participating. WIC participation rates were high in 2022, with 96% of enrolled women, 99% of enrolled infants and 93% of enrolled children receiving benefits that year in the Navajo/Apache Region, generally comparable to statewide rates.

The number of lunches served through the National School Lunch Program (NSLP), Summer Food Service Program (SFSP), and Child and Adult Care Food Program (CACFP) varied substantially between program years 2019-20 and 2021-22. After the change in school meal policy following the start of the COVID-19 pandemic, meal service through SFSP increased approximately fivefold in both Apache County and Navajo County between 2019-20 and 2020-21, while meal service through NSLP fell by about 80%. In the 2021-22 school year, NSLP meal service increased and SFSP meal service decreased in both counties, though neither program has yet returned to pre-pandemic levels. Compared to 2019-20, the number of lunches served through CACFP more than doubled in both Apache County

ⁱⁱ For more information on the Arizona 2022 Self-sufficiency standard, please see https://womensgiving.org/wp-content/uploads/2022/12/AZ2022_SSS_Web.pdf

and Navajo County in 2021-22, indicating higher ongoing participation in CACFP following the onset of the pandemic.

Unemployment rates in Apache County and Navajo County have followed the same trend as Arizona's but have been substantially higher. Despite the spike in rates during the beginning of the COVID-19 pandemic in 2020, unemployment rates fell to their lowest level in six years in 2022 with a 7.7% unemployment rate in Apache County, 5.2% in Navajo County and 3.8% across Arizona. The labor force participation rateⁱⁱⁱ is lower in the Navajo/Apache Region (46%) than across Arizona (61%). The region has a higher proportion of adults who are not in the labor force (54%) compared to Arizona as a whole (39%). An estimated 86% of young children in the Navajo/Apache Region live in families with at least one parent in the labor force, lower than the proportion across the state (90%). More than half of children birth to age 5 in the region (57%) live with all parents in the labor force, making it likely that these families need some form of child care.

Traditionally, housing has been deemed affordable for families if it costs less than 30% of annual household income. More than one in five households (22%) in the region spend 30% or more of their income on housing, lower than the share seen statewide (29%) but higher than the share in Apache County (13%) or Navajo County (20%). Housing costs do differ by home ownership status, with fewer homeowners in the region (18%) and state (21%) spending 30% or more of household income on housing, compared to 38% of renter-occupied households in the region and 45% across the state. The McKinney-Vento Act definition of homelessness includes children living in shelters, transitional housing, campgrounds, motels, trailer parks and cars, as well as children whose families are temporarily living within another family's household. The number of students enrolled in public and charter schools in the region experiencing homelessness increased from 114 in the 2020-21 school year to 130 in 2021-22, mirroring increases in Apache County, Navajo County and Arizona schools in the same period.

More than four out of five households (82%) in the Navajo/Apache Region have both a computer (including smartphones) and broadband internet connectivity, lower than the proportion across the state overall (88%). Looking at individuals, most people (of all ages) (87%) in the Navajo/Apache Region live in households with both a computer and internet connection. Children are slightly more likely to live in a household with a computer and an internet connection, with 92% of those under age 18 with this access in the region.

Educational Indicators. In the 2021-22 school year, 178 children were enrolled in preschool in public and charter schools in the Navajo/Apache Region. Kindergarten through 3rd grade enrollments for the region were all much higher, ranging from a low of 888 in 2nd grade to a high of 928 children enrolled in kindergarten. Across the state as well as both Apache County and Navajo County, kindergarten through 3rd grade chronic absence rates more than tripled from 2019-20 (Arizona 8%; Apache County 16%;

ⁱⁱⁱ The "labor force" is all persons who are working (employed) or looking for work (unemployed). The "labor force participation rate" is the fraction of the population who are in the labor force, whether employed or unemployed. Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The "unemployment rate" is the fraction of the civilian labor force which are unemployed.

Navajo County 11%) to 2021-22 (Arizona 34%; Apache County 51%; Navajo County 35%). However, in the Navajo/Apache Region, these chronic absence rates decreased from 17% in the 2020-21 school year to 10% in the 2021-22 school year (data was not available at the region level for the 2019-20 school year)

In the 2021-22 school year, 42% of 3rd grade students in the Navajo/Apache Region were meeting or exceeding proficiency expectations for 3rd grade English Language Arts, slightly higher than the proportion across the state (41%). A slightly higher percentage (46%) were meeting or exceeding proficiency expectations for Math, much higher than students across the state (40%). In the region, passing rates for the 3rd grade English Language Arts assessment increased from 41% in 2020-21 to 42% in 2021-22. During the same period, passing rates increased from 35% to 41% across the state. Third grade Math passing rates also increased from 41% in 2020-21 to 46% in 2021-22 and were higher than across the state during both periods, where passing rates increased from 36% to 40%. Passing rates on both assessments in both the region and the state remained lower than pre-pandemic passing rates on AzMERIT assessments.

Four- and five-year graduation rates in the Navajo/Apache Region have remained above state rates in recent years. In 2021 (the most recent year of data available for both rates), the four-year graduation rate for the region was 81% and the five-year graduation rate was 83%. Both rates were higher than state four- and five-year graduation rates that year (76% and 79%, respectively). The 7th-12th grade dropout rate in the Navajo/Apache Region more than doubled between 2019-20 (2%) and 2020-21 (5%) before decreasing to 3% in 2021-22. Dropout rates statewide steadily increased over the same period.

Nearly two-thirds of adults (65%) in the Navajo/Apache Region have more than a high-school education, the same proportion seen across the state (65%). The share of the population with an Associate's or Bachelor's degree in the region (32%) is lower than that seen statewide (40%). In 2020, 86% of births in the Navajo/Apache Region were to mothers who had at least a high school diploma, GED or higher educational attainment, decreasing slightly to 85% in 2021, similar to proportions across Arizona in 2020 (84%) and 2021 (85%).

Early Learning. In the Navajo/Apache Region, 25% of children (ages 3 and 4) were estimated to be enrolled in preschool^{iv} or kindergarten, which is a much lower proportion than across the state (37%). Preschool enrollment in the region decreased substantially in recent years from 46% to 35%, whereas only a minimal decrease was seen statewide (from 37% to 36% during the same period). In 2021, preschool enrollment in Arizona hit a 10-year low, which makes the Navajo/Apache Region's decrease in enrollments not inconsistent with statewide trends, but much more severe.^v

Most licensed child care capacity in the region is provided by child care centers (98%), with a small proportion provided by family child care providers (2%). Given there are 2,856 children with all parents

^{iv} The American Community Survey uses the terms nursery school and preschool interchangeably.

^v For more information, see <https://www.firstthingsfirst.org/wp-content/uploads/2023/12/State-Needs-and-Assets-Report-2023.pdf>

in the labor force in the region according to the 2017-2021 ACS, an availability of only 793 child care slots suggests that many of these parents face challenges in finding quality child care for their children. An area is labeled a child care desert if the ratio of children to child care slots is three to one or more. Looking collectively across all children birth to age 5, the Navajo/Apache Region is considered a desert, with a ratio of 4.7 children to each licensed slot. For 1 year-olds, the ratio is a bit lower, with 4.1 children per slot. However, regulated infant care in the region is very scarce, with about 37 infants per available infant child care slot. While this pattern is similar across the state, the limited availability of infant care is notable in the Navajo/Apache Region. There were only 19 slots for infants in Arizona Department of Health Services (ADHS)-licensed child care providers in July 2023 in the region. Given that there were 802 babies born in 2022 in the region, this regulated child care capacity suggests that parents must turn to informal or unlicensed care providers if they need infant care.

The median monthly costs of child care show that care provided by certified family homes in Navajo and Apache counties is the lowest priced type of care in the area at \$525 per month for infants to 5-year-olds for full-time care. For other types of care, care for infants is the most expensive in both counties and the state, with the median monthly cost for infant care in licensed centers (\$945) and public schools (\$1,050) in the counties similar to the costs of that care across the state (\$949 and \$1,011, respectively). Licensed centers and public schools providing child care in Navajo and Apache counties are notably more expensive than home-based care, and there are relatively few slots with these more budget-friendly providers. Child care costs as a percentage of income are elevated in Apache County and Navajo County compared to the state overall. In 2022, sending an infant to a licensed center cost nearly one-third (30%) of a family's income in Apache County and a quarter (24%) in Navajo County, compared to 15% for families across the state. The percentage of income spent on older children's care was lower in comparison in both counties but still substantially more expensive in terms of income than seen statewide. Median child care costs have also been increasing in the counties and state since 2018. For example, the cost of care in the most available type of care in Navajo and Apache counties, licensed centers, increased 25% for one infant, 20% for one 1–2-year-old and 15% for one 3–5-year-old between 2018 and 2022. However, unlike the state, costs in certified family homes in the counties remained stable in this period.

The number of children eligible for and receiving Department of Economic Security (DES) child care assistance in the Navajo/Apache Region has differed from the pattern seen across the state in recent years. The number of children eligible for and receiving assistance increased in the region from 2017 to 2019, mirroring the increase seen statewide. However, the number of eligible children in the region has steadily fallen in 2020 through 2022, while statewide this number only substantially dropped in 2022. The proportion of eligible families not using DES child care assistance decreased in both the region and state from 2020 (region 24.7%; Arizona 18.3%) to 2022 (region 5.9%; Arizona 9.2%). Children are automatically eligible for DES child care assistance when they are involved with Department of Child

Safety (DCS).^{vi} For DCS-involved children, the number of children eligible for child care assistance in the region has decreased in recent years, from a high of 124 young children in 2019, to 49 in 2022, mirroring the pattern seen across the state. Again, like the pattern seen with non-DCS-involved children, the number of children receiving assistance substantially declined, falling by about two-thirds between 2019 (n=97) and 2022 (n=36).

The 13 Quality First child care providers in the Navajo/Apache Region enrolled 435 young children in state fiscal year (SFY) 2023. The majority of children (79%) in Quality First sites in the region were enrolled at a site with a 3-5-star rating, indicating a quality provider. This was notably higher than across the state, where 68% of children enrolled in Quality First sites were at a site with a 3-5-star rating. About one in 10 children enrolled in a Quality First provider site in the region (47 of 435; 11%) were served by Quality First Scholarships in SFY 2023. In May 2023, three licensed or registered child care providers in the region were nationally accredited, representing 15% of providers in the region. These accredited providers had the capacity to serve 195 children, which represents 25% of child care capacity in the region. DES defines quality environments as child care providers with a 3-, 4-, or 5-star Quality First rating, a national accreditation or a Child Development Associate (CDA) credential for family child care providers. At the regional level in 2022, 54% of non-DCS involved young children and 53% of DCS-involved children receiving DES child care assistance were enrolled in quality environments, lower proportions than across the state as a whole (68% non-DCS; 72% DCS).

Children birth to age 2 are most frequently referred to the Arizona Early Intervention Program (AzEIP) by physicians in both the Navajo/Apache Region and across the state. Family referrals have been consistently lower in the region than across the state in recent years, with 20% of referrals from families in federal fiscal year (FFY) 2022 in the region compared to 21% across the state. Referrals from “other” sources make up a large proportion of AzEIP referrals in the region, and the largest proportion of these originate from DCS. More than half of young children (54%) referred to AzEIP in FFY 2022 were found eligible (18%) or received services (36%) in the Navajo/Apache Region, much higher than the 37% referred across the state who were found eligible (16%) or received services (21%). Children referred were less likely to be screened out (1%) or assessed and found not eligible (18%) than across the state (7% and 22%, respectively).

In the Navajo/Apache Region, the number of children birth to age 2 receiving services from AzEIP varied from a low of 45 in October 2020 to a high of 55 in October 2021. There were 51 children receiving services as of October 1, 2022. In contrast to relatively stable AzEIP caseload numbers in the region, the number of children birth to age 5 receiving services from the Division of Developmental Disabilities (DDD) decreased sharply from a high of 40 in SFY 2018 to a low of 14 in SFY 2020; service numbers have since increased to 20 in SFY 2022. Large decreases have also been seen statewide, with service numbers falling by nearly half between SFY 2017 and 2021 before increasing somewhat in

^{vi} Children involved with DCS include children who have been removed by DCS and placed with a foster family or kinship caregiver as well as children who are residing with their own family but receiving services from DCS (such as in-home family support and counseling). Families of these children are not required to pay a co-pay for child care.

2022. Qualifying children may receive services from AzEIP and/or DDD, a number which can be used to estimate the total number of young children receiving early intervention services in a region. The total number of children birth to age 2 receiving AzEIP and/or DDD services^{vii} decreased overall between SFY 2019 and SFY 2022 in the region, compared to a slight decrease seen across the state. Following a high of 53 children served in the region in SFY 2020, numbers fell to a four-year low of 31 young children receiving AZEIP and/or DDD services in the region in SFY 2022. Based on 2020 Census population counts, 1.4% of children birth to age 2 were receiving AzEIP and/or DDD services in the region, compared to 2.6% across the state in SFY 2022.

The number of preschoolers with disabilities served by Local Education Agencies (LEAs) decreased in the region from a high of 113 in SFY 2018 to a low of 77 in SFY 2021 before increasing to 93 in SFY 2022. By contrast, in the state, numbers of preschoolers served increased between SFY 2018 and 2020 before sharply declining in SFY 2021 and 2022. Forty-six percent of preschoolers with disabilities receiving LEA services in the region had a development delay, 44% had a speech or language impairment and another 10% had a preschool severe delay. A larger share of children in the region had speech or language impairments (44%) than seen statewide (30%), and a smaller share had a preschool severe delay (region: 10%; state: 24%).

The pattern of kindergarten through 3rd grade student enrollment in special education in public and charter schools between SFY 2018 and SFY 2022 also differed between the region and the state. After a high of 522 students enrolled in special education in the Navajo/Apache Region in SFY 2020, enrollments declined to a five-year low of 434 in SFY 2022. In contrast, while statewide enrollments also peaked in SFY 2020, enrollments in SFY 2022 are higher than those seen in SFY 2018. In SFY 2022, 36% of students (K-3rd) enrolled in special education in the region were diagnosed with a speech or language impairment, 25% with a developmental delay, 20% with a specific learning disability and 7% with autism. There were slightly lower proportions of students with autism and higher proportions with specific learning disabilities in the region compared to the state

Child Health. In the Navajo/Apache Region, more than one in 10 people (12%) do not have health insurance coverage, slightly higher than the proportion across the state of Arizona overall (11%) but lower than in Apache County (26%) or Navajo County (16%). Health insurance coverage for young children specifically is the same as the overall population in the region, with 12% of children birth to age 5 not having health insurance, much higher than the proportion seen across the state (7%). The proportion of young children without health insurance has increased in the region (+3%), Apache County (+8%) and Navajo County (+6%) in recent years, counter to a 1% decrease statewide. The proportion of births in the region paid for by the Arizona Health Care Cost Containment System (AHCCCS, also known as Medicaid) or the Indian Health Service (IHS, which covers about 1% of births in the region each year) has remained steady around 60% between 2018 and 2022, notably higher

^{vii} Please note that this is a unique count of children receiving AzEIP services, DDD services, or both AzEIP and DDD.

than the state proportion across those years. This proportion has decreased in the state, from 51% in 2018 to 47% in 2022.

Rates of timely prenatal care have been increasing in the Navajo/Apache Region in recent years. The region consistently had a higher proportion of births to mothers who began prenatal care in the first trimester compared to Arizona as a whole between 2018 and 2022, with 77% in that category in the region in 2022, compared to 71% across the state, the widest gap between the region and state across those five years. The region has had varied rates of inadequate prenatal care in the past five years, with a high of 6% of births to mothers with fewer than five prenatal care visits in 2020 which then fell to a low of 3% in 2022. Between 0.6% and 2.4% of births have been to mothers with no prenatal care in the region. Statewide in 2022, 4.7% of births were to mothers with fewer than five prenatal visits and 2.3% with no prenatal care.

The region has seen a decrease in the proportion of births to teenaged mothers overall between 2018 and 2022, a pattern similar to what was seen across the state. Births to mothers under age 20 fell from 7.9% in 2018 to 6.4% in 2022 in the region, higher than the proportions across the state (5.8% in 2018; 4.6% in 2022). Births to mothers under age 18 have been highly similar in the region and state, declining from 1.6% to 1.1% in the Navajo/Apache Region and 1.5% to 1.1% in Arizona overall between 2018 and 2022.

The Navajo/Apache Region had a substantially higher percentage of births to mothers who smoked cigarettes while pregnant than the state in all years; however, the share of births to mothers who smoked has steadily declined from a high of 11.5% in 2018 to 6.9% in 2022. The region has not met the Healthy People 2030 target of 4.3% or less in any year. Statewide rates met this target in 2020 and 2021. Between 2018 and 2022, 258 newborns in the region were hospitalized because of maternal drug use during pregnancy, with an average length of stay of 4.6 days. In the region this equates to 6.2 newborns hospitalized due to maternal drug use during pregnancy per 100 live births, nearly double the rate of 3.3 per 100 births statewide. Taken together with cigarette smoking, this suggests that substance use during pregnancy is more prevalent in the region than in Arizona overall.

More than a quarter of births in the region and state in recent years were to mothers with pre-pregnancy obesity, with this proportion increasing in the region from 25.8% in 2018 to 32.3% in 2022. In contrast, the proportion of births to mothers with gestational diabetes decreased in the region from 8.3% in 2018 to 5.9% in 2022, running counter to a statewide increase from 8.5% in 2018 to 9.9% in 2021 (the latest year that statewide data were available). More than one in 10 mothers in Arizona (13.7%) reported experiencing post-partum depression in 2020 according to the Pregnancy Risk Assessment Monitoring System.

The proportion of babies born at low birth weight has been similar in the region and the state across most years, with 7.9% of births at low birth weight in the Navajo/Apache Region and 7.8% in Arizona in 2022. The only substantial difference between the region and the state was seen in 2021, when 8.8% of regional births were at low birth weight compared to 7.9% statewide. The proportion of preterm births (less than 37 weeks gestation) decreased in the region from a high of 11% in 2020 to 7% in 2022. In 2021 (the most recent year that both data points are available), the rate of preterm birth in the region

(9.7%) was slightly under the statewide rate (10%). The region met the Healthy People 2030 target of 9.4% or fewer births before 37 weeks gestation in 2018 (9.4%), 2019 (8.8%) and 2022 (7%). The proportion of births with an admission to a Neonatal Intensive Care Unit (NICU) in the region have remained consistent between 9% and 10% over the last five years, notable higher than the proportion statewide (7.6-7.9%). In 2022, 9.0% of births in the region had a NICU admission. In the Navajo/Apache Region, rates of breastfeeding were higher than those across the state in all years from 2018 through 2022. In 2022, 85% of WIC-enrolled infants were ever breastfed, compared to 79% statewide.

Childhood immunizations protect against many diseases, including diphtheria, tetanus and pertussis (DTaP); polio; and measles, mumps and rubella (MMR). Across all required immunizations, children in child care in the Navajo/Apache Region had lower vaccination rates (DTaP 87.6%; Polio 91.2%; MMR 92.1%) than the state as a whole (DTaP 90.6%; Polio 92.2%; MMR 93.0%) in the 2022-23 school year. The Navajo/Apache Region also failed to meet the Healthy People 2030 DTaP immunization target of 90%, which the state met. Immunization exemptions among children in child care peaked in the region in 2019-20 for religious exemptions (7.1%) and 2020-21 for exemptions from all immunizations (6.3%), but rates of exemptions have since declined in the region, with both rates of religious exemptions and exemptions from all immunizations at 5.1% in the 2022-23 school year. Statewide, rates of exemptions have steadily increased to 5.7% of children with a religious exemption in 2022-23 and 4% with an exemption from all immunizations.

The Navajo/Apache Region also had very low kindergarten immunization rates in the 2022-23 school year (DTaP 68.7%; Polio 66.7%; MMR 69.7%) compared to the state (DTaP 89.6%; Polio 90.3%; MMR 89.9%). Both the region and state failed to meet the Healthy People 2030 kindergarten MMR immunization target of 95%. The Navajo/Apache Region also had notably higher rates of children in kindergarten receiving personal belief exemptions and exemptions from all required immunizations between the 2018-19 and 2022-23 school years than across the state. In the region, rates of personal belief exemptions and exemptions from all vaccines fell to their lowest in 2020-21 (9.9% and 5.7%, respectively), before sharply increasing to 16.3% for personal belief exemptions and 10% for exemptions from all immunizations in 2022-23, more than double the rates seen statewide.

The pattern of confirmed and probable cases of RSV and influenza in young children birth to age 5 were similar in both the region and state with an increase in RSV cases since 2020, but a marked decrease in influenza in 2021, followed by a steep increase. In 2022, there were 241 cases of RSV and 149 cases of influenza in young children in the region, the highest numbers in the last four years.

Falls were the most common unintentional injuries that led to emergency department visits for children under 5 in both the region and the state between 2018 and 2022, followed by 'other' injuries or being 'struck by or against' an object or person. During those years, there were 936 emergency department visits due to falls in the region, 374 for other reasons and 241 due to being struck. The pattern of injuries prompting inpatient hospitalizations was also similar for the region and state, with falls being most common followed by poisoning or 'other' injuries. Between 2018 and 2022, 10 young children in the region were hospitalized due to falls, 8 for poisoning and 6 for other reasons.

Between 2019 and 2021, the infant mortality rate was lower in the Navajo/Apache Region (4.7), compared to Apache County (5.1), Navajo County (6.5) and the state (5.4); only the regional rate met the Healthy People 2030 target of 5.0 or less. Overall, 283 children birth to age 17 died in the region between 2018 and 2021. Nearly one in three deaths (30%) were due to accidents, with congenital malformations (birth defects) being the second most common cause of death (15%). No other single cause led to more than six deaths in the region. The share of deaths due to accidents in the region (30%) was higher than that in the state (20%) while the proportion of deaths due to congenital malformations was the same in the region and state.

Family Support and Literacy. The number of non-fatal opioid-related overdoses nearly tripled in Navajo and Apache counties combined since 2017, from 29 that year to 86 in 2021. Overdose-related deaths also more than tripled between 2017 (n<10) and 2020 (n=35) before declining slightly to 21 in 2021. By contrast, deaths statewide climbed continuously in this time period, more than doubling from 923 in 2017 to 2,019 in 2021. To help address opioid addiction, the state of Arizona has made three resources available in recent years; the Opioid Assistance and Referral^{viii} line launched in 2018, no cost availability of naloxone (also called Narcan, a medication that rapidly reverses opioid overdose) to many organizations across the state through the Arizona Department of Health Services (ADHS)^{ix} and access to naloxone without a prescription at pharmacies.

The number of child abuse and neglect reports assigned for investigation by DCS peaked in Apache and Navajo counties combined in the first half of 2021 (n=401), while the highest number of reports statewide occurred in the latter half of 2021. In the last half of 2022 there were 354 child abuse and neglect reports assigned for investigation in Apache and Navajo counties combined. The number of children under 18 removed by DCS varied in Navajo and Apache counties combined between January 2020 and December 2022, ranging from a high of 59 in the first half of 2020 to a low of 40 in the first half of 2022. By contrast, the number of children removed statewide steadily declined from 4,967 in the latter half of 2020 to 3,274 in the latter half of 2022. Neglect was the most common type of substantiated maltreatment during this period in Apache County (57%), Navajo County (77%) and Arizona overall (71%), followed by physical abuse. Physical abuse was much more prevalent in Apache County (43%) compared to Navajo County (15%) and the state (24%).

In the last six months of 2022, more than half (55%) of young children birth to age 5 placed in out-of-home care by DCS across Arizona were able to remain with family through a kinship placement. Children in DCS custody most often exited out-of-home care to be reunified with their parents (55%) or adopted (39%). The number of licensed kinship foster homes in Arizona steadily declined between January 2018 and June 2022, though there was an uptick again in the latter half of 2022. Generally, fewer than one in five kinship homes are licensed, and the number of unlicensed kinship homes

^{viii} For more information, please see <https://www.azdhs.gov/oarline/>

^{ix} For more information, please see <https://www.azdhs.gov/opioid/index.php#naloxone>

increased slightly overall during the same period and exceeded the number of community foster homes during the most intense years of the pandemic.

ABOUT THIS REPORT

There is growing acknowledgement of the role our physical, social, and economic environments play in our day-to-day health and wellbeing.¹ These factors, known as the social determinants of health, have an especially strong effect on the development of young children ages birth to 5 and accumulate over time.^{2, 3} Measuring and addressing these conditions can significantly impact not only early health and education outcomes, but also health and economic circumstances later in life.^{4, 5, 6} It is important to acknowledge that structural inequities in access to quality health care, schools, and education as well as living, working and leisure conditions lead to disparate outcomes within and between groups of people.⁷ For example, the U.S.'s history of segregation, discriminatory policy and differential investment across communities has created generational disparities in outcomes for people of color.⁸ Native communities have additionally experienced periods of genocide, forced relocation and assimilation leading to systemically poorer economics and health compared with other groups.^{9, 10} This Needs and Assets Report covers many structural and social determinants of health including population characteristics, economic characteristics, early learning and educational indicators, child health, and family support and literacy for the First Things First (FTF) Navajo/Apache Region.

The data in this report come from a variety of sources including federal and state agencies and local agencies or service providers. Federal government sources include publicly available data from the 2020 Census and the 2017-2021 American Community Survey (ACS) 5-Year Estimates. Data in this report from the ACS summarize the responses from samples of residents taken between 2017 and 2021. Because these estimates are based on samples rather than the entire population, ACS data should not be considered exact. Estimates for smaller geographies, such as regions, are less accurate than estimates for larger geographies, such as the state, because they are based on smaller sample sizes.

Data were provided to FTF by state agencies including the Arizona Department of Health Services, the Arizona Department of Education and the Arizona Department of Economic Security. In most cases, the data in this report were calculated specifically for the Needs and Assets process and are more detailed than the data that are published by these agencies for the general public. Whenever possible, this report will use data tailored to the region, but in some cases, there are only county-level or statewide data available to report. This report also includes publicly available data for the state and counties to supplement data received through specific requests, including from state agencies such as the Arizona Department of Commerce's Office of Economic Opportunity and the Arizona Department of Child Safety semi-annual child welfare reports.

In most tables in this report, the top rows of data correspond to the FTF Navajo/Apache Region. Not all data are available at the FTF regional level because not all data sources analyze their data based on FTF regional boundaries. The other table rows present data that are useful for comparison purposes, including Navajo County, Apache County, the state of Arizona and national estimates or targets where available. Data tables and graphs are as complete as possible. Data which are not available for a particular geography are indicated by the abbreviation "N/A." State agencies have varying policies about reporting small values. Entries such as "<11" are used when the count is too small to be reported and has

been suppressed to protect privacy. In some cases, table entries will indicate a range of values such as "1 to 9" because the suppression policy prevented the vendor from knowing the exact value, but comparison of these ranges of possible values to other values in the table or figure may still be useful. Table entries of "DS" indicate that data have been suppressed and we are unable to provide a useful range of possible values. Additional data tables not included in the body of the report can be found in Appendix 1.

THE NAVAJO/APACHE REGION

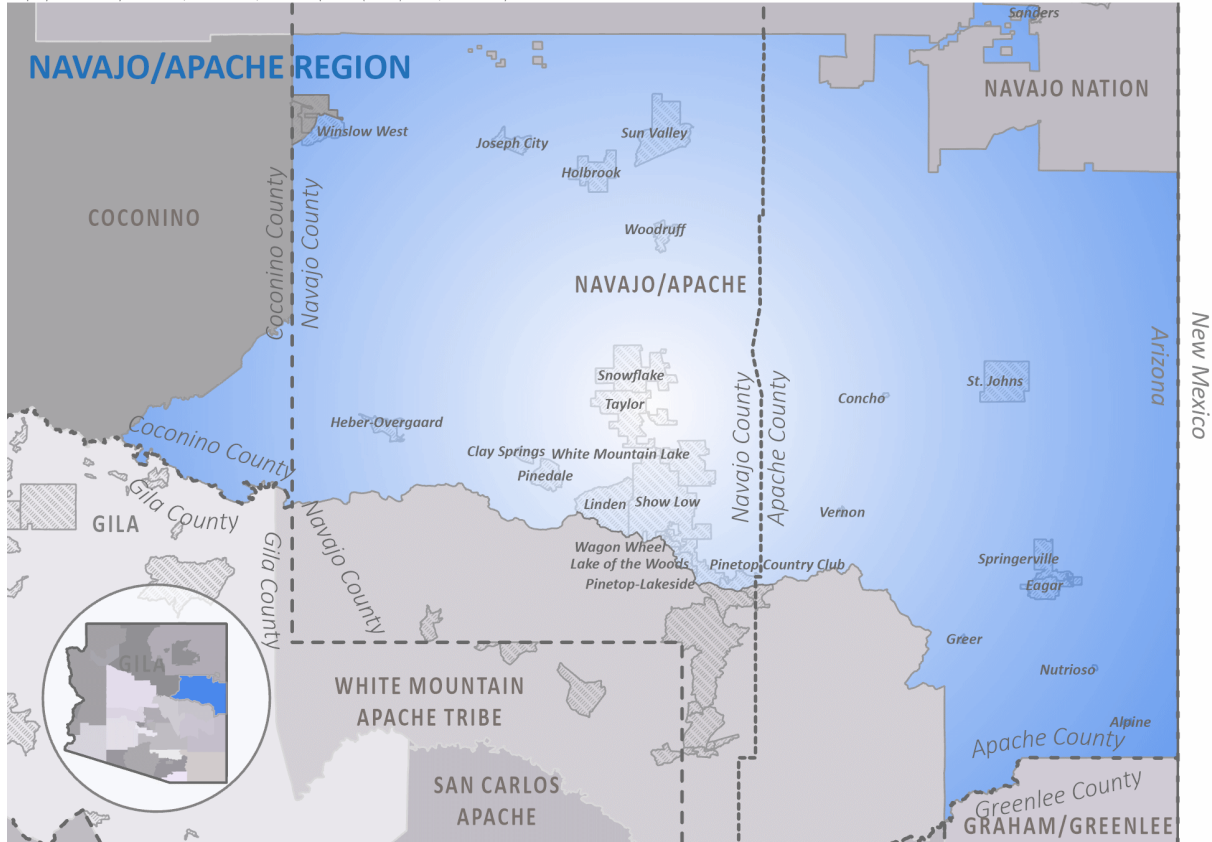
The First Things First regional boundaries were established to create regions that (a) reflect the view of families in terms of where they access services, (b) coincide with existing boundaries or service areas of organizations providing early childhood services, (c) maximize the ability to collaborate with service systems and local governments, (d) facilitate the ability to convene a Regional Partnership Council, and (e) allow for the collection of demographic and indicator data.

The First Things First (FTF) Navajo/Apache Region encompasses the central areas of Navajo and Apache counties, excluding the lands belonging to the Navajo Nation and Hopi Tribe in the north and the land belonging to the White Mountain Apache Tribe in the south. The region also includes the Forest Lakes community, located in Coconino County west of Heber-Overgaard, and excludes the town of Winslow, which is located in Navajo County but assigned to the FTF Coconino Region. Major towns in the region include Show Low, Pinetop-Lakeside, Snowflake, Taylor, Holbrook, Springerville, Eagar and St. Johns.

Figure 1 shows the geographical area covered by the Navajo/Apache Region. Additional information available at the end of this report includes a map of the region by zip code and a table listing zip codes for the region in Appendix 3, and a map and a list of school districts in the region in Appendix 4.

Figure 1. The First Things First Navajo/Apache Region

Map by Community Research, Evaluation, & Development (CRED) Team, University of Arizona



Source: 2020 TIGER/Line Shapefiles prepared by the U.S. Census. Map produced by CRED.



POPULATION CHARACTERISTICS

POPULATION CHARACTERISTICS

Why It Matters

Accurate information about the number and characteristics of families allows policymakers and program providers to understand what resources are needed in their communities, including where services should be located and how to tailor offerings to the specific needs of those who are likely to use them.^{11, 12, 13, 14} For example, identifying which communities have high numbers of families with young children can facilitate strategic investments in libraries, playgrounds, health care facilities, social services and educational systems, which can help families with young children thrive.^{15, 16} Program and policy decisions that are informed by data on the composition of children's home and community environments help ensure more effective supports for families and have a greater chance to improve well-being, economic security and educational outcomes for children.

2020 Census data and its limitations

The release of 2020 Census data in 2023 provided updated information on the population of Arizona and the nation as a whole. However, the 2020 Census faced unprecedented challenges in conducting an accurate count of the population, the foremost of which included the COVID-19 pandemic and its related disruptions to institutions such as local and tribal governments, schools and health care facilities.^{17, 18, 19, 20, 21} Overall, data quality reviews of the 2020 Census have concluded that the data are generally reliable and accurate for the overall population; however, specific groups that have been undercounted in the past were again undercounted, often more severely.²² Young children birth to age 4 were undercounted by 3-5% nationwide (meaning that as many as one in 20 children birth to age 4 were missed by the Census).²³ Nationwide, American Indians living on reservations and Hispanic or Latino individuals were also undercounted by 5.6% and 5.0%, respectively, marking notable increases in undercounting rates compared to the 2010 Census (4.9% and 1.5%, respectively). These undercounts are important to keep in mind when using Census data, particularly data for young children and for communities with substantial American Indian and Hispanic or Latino populations. Undercounted communities risk receiving fewer resources for at least the next decade since the decennial census counts are the basis of many federal funding allocations.^{24, 25}

What the Data Tell Us

Population, race and ethnicity

While young children make up a small proportion of the overall population, their well-being has wide-reaching impacts on families, social service systems and the state's future population. Continued investment in children's well-being and the well-being of their families was deemed by the National Academy of Sciences as "the most efficient strategy" for strengthening the future workforce and supporting a thriving community.^{26, 27}

Knowing the racial-ethnic composition of communities can inform efforts to ensure equitable access to services and resources. Many racial and ethnic minority groups in the U.S. experience reduced access to health care services, more poverty and housing inequality, poorer living conditions and increased rates of homelessness in comparison to non-Hispanic White Americans.^{28, 29, 30, 31} These inequities result in disproportionately worse overall health as indicated by higher rates of disease and illness, untreated mental and physical health conditions and lower life expectancies within these groups.³² Understanding a community's racial-ethnic composition is also critical for identifying communities facing higher risks from environmental and public health hazards due to historic underinvestment and other factors—as the COVID-19 pandemic made woefully clear.³³

How the Navajo/Apache Region is faring

- According to the U.S. Census, the Navajo/Apache Region had a population of 73,563 in 2020 (Table 1), a 1% increase from 2010, when 73,083 people resided in the region (Table 2). Conversely, the population of young children birth to age 5 decreased by 24% over the same period from 6,166 in 2010 to 4,714 in 2020. This increase in the total population in the region (+1%) was much less than that seen across the state, which experienced a 12% increase in the total population from 2010 to 2020. The decrease in the population of young children of -24% in the region was greater than the 12% decrease seen across the state during those years (Figure 2).
- Fewer than one in eight households (12%) in the region included a young child in 2020, a slightly lower proportion of households than across the state (13%) (Table 1).
- The 2020 Census undercount of young children^x appears more pronounced in the Navajo/Apache Region than that seen across the state, as the number of live births in the region between 2015 and 2020 (n=5,268) is 12% higher than the number of young children birth to age 5 in the 2020 Census (n=4,714). Across the state, a 1% difference is seen comparing the same indicators (Figure 3).
- Most Navajo/Apache Region residents identify as Non-Hispanic White (78% of all age population, 69% of children birth to age 4). Young children in the region are more likely to be identified as Hispanic or Latino (21%) than all residents (14%), although both are lower than the population of young children (44%) and all ages (31%) identifying as Hispanic or Latino across the state. The Navajo/Apache Region has a higher proportion of the total population and children birth to age 4 identified as American Indian (9% and 14%, respectively) than in Arizona overall (6% and 8%, respectively). In contrast, lower proportions of the total population and children birth to age 4 identified as Black or African American (1% and 2%, respectively), Asian or Pacific Islander (2% and 3%) or Multiracial (8% and 13%) than the state across those categories (Figure 4 & Figure 5).

^x See “2020 Census data and its limitations” at the beginning of the Population Characteristics section for fuller context on the 2020 Census undercount of young children.

Table 1. Population and households in the 2020 U.S. Census

Geography	Total population	Population (ages 0-5)	Total number of households	Number and percent of households with one or more children (ages 0-5)	
Navajo/Apache Region	73,563	4,714	29,001	3,513	12%
Apache County	66,021	4,765	22,103	3,398	15%
Navajo County	106,717	7,932	36,836	5,602	15%
Arizona	7,151,502	480,744	2,705,878	345,601	13%
United States	331,449,281	22,401,565	126,817,580	16,429,111	13%

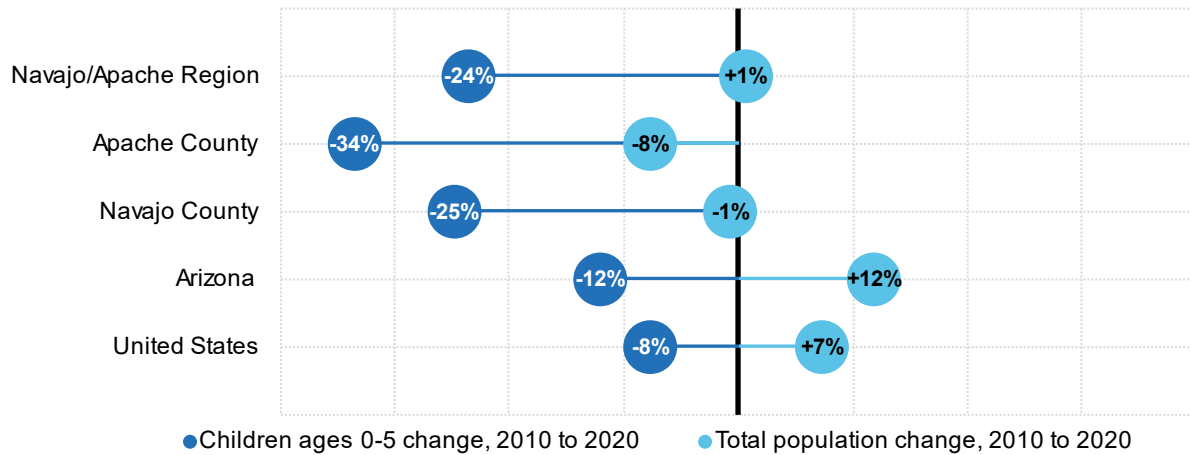
Source: U.S. Census Bureau. (2023). 2020 Decennial Census, Demographic & Housing Characteristics (DHC), Tables P1, P14, P20 & HCT3

Table 2. Change in the total population and population of children birth to age 5, 2010 to 2020 Census

Geography	Total population			Population (Ages 0-5)		
	2010	2020	% Change 2010 to 2020	2010	2020	% Change 2010 to 2020
Navajo/Apache Region	73,083	73,563	+1%	6,166	4,714	-24%
Apache County	71,518	66,021	-8%	7,171	4,765	-34%
Navajo County	107,449	106,717	-1%	10,550	7,932	-25%
Arizona	6,392,017	7,151,502	+12%	546,609	480,744	-12%
United States	308,745,538	331,449,281	+7%	24,258,220	22,401,565	-8%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14, HCT3. U.S. Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14, P20.

Figure 2. Change in the total population and population of children birth to age 5, 2010 to 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14, HCT3. U.S. Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14, P20.

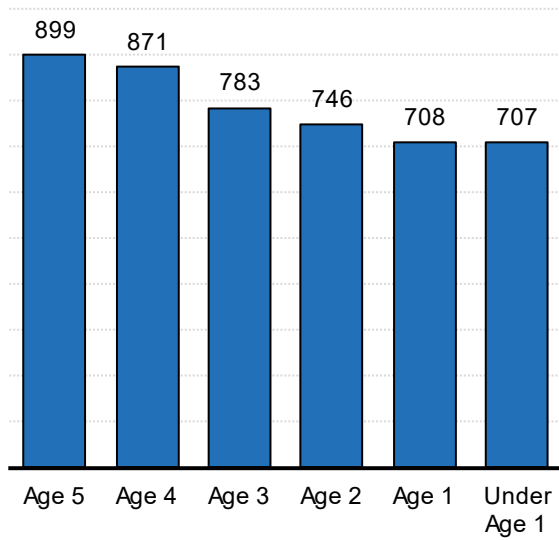
Table 3. Population birth to age 5 by single years of age in the 2020 Census

Geography	Population (Ages 0-5)	Population under age 1	Population age 1	Population age 2	Population age 3	Population age 4	Population age 5
Navajo/Apache Region	4,714	707	708	746	783	871	899
Apache County	4,765	712	713	778	790	868	904
Navajo County	7,932	1,225	1,215	1,305	1,317	1,384	1,486
Arizona	480,744	72,415	75,163	78,159	82,033	84,600	88,374
United States	22,401,565	3,480,117	3,532,512	3,672,703	3,797,741	3,917,162	4,001,330

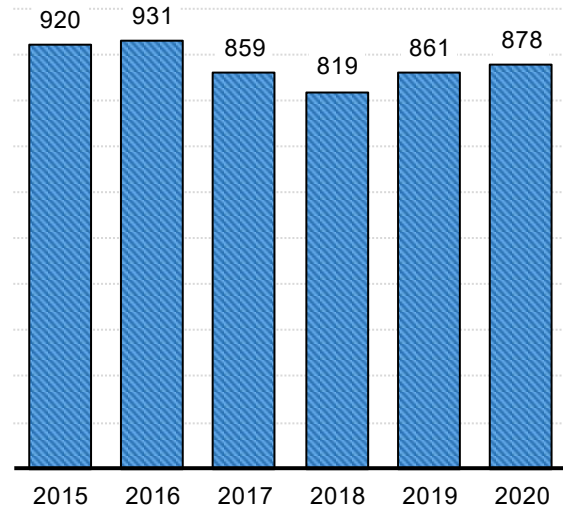
Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14. U.S. Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14.

Figure 3. Children by single year of age in the 2020 Census compared to births (2015 to 2020)

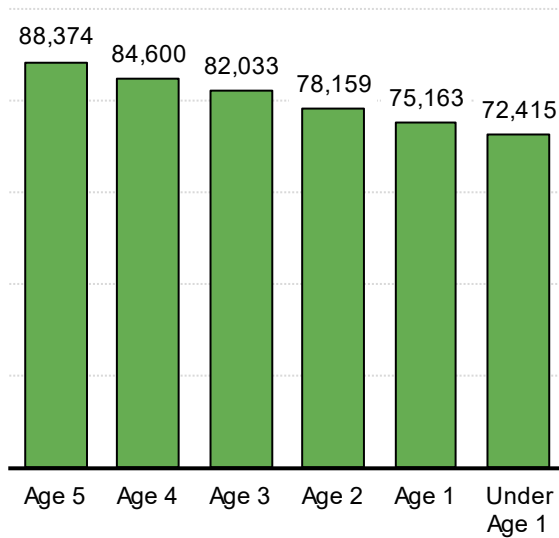
Children by age, Navajo/Apache Region



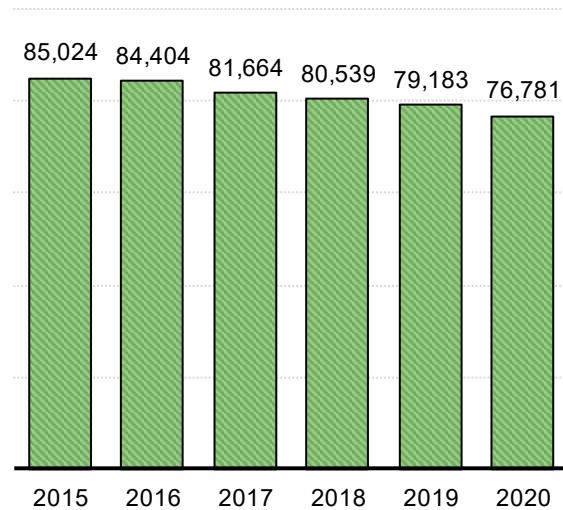
Births by year, Navajo/Apache Region



Children by age, Arizona

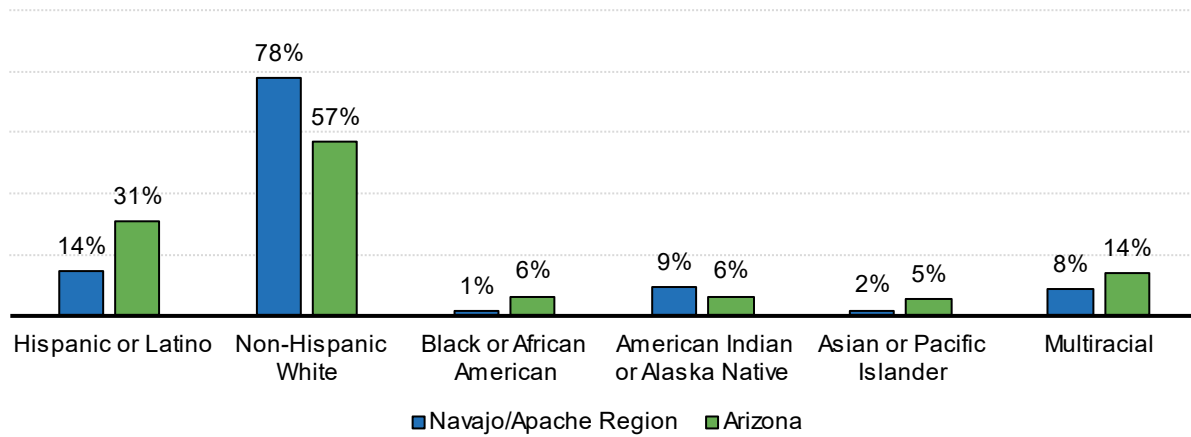


Births by year, Arizona



Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data.

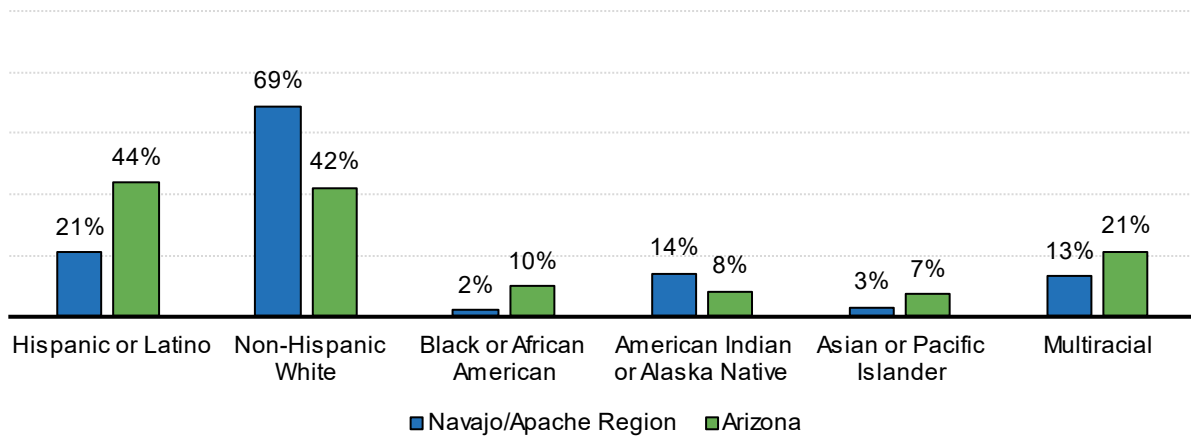
Figure 4. Race and ethnicity of the population of all ages, 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages shown in this figure may sum to more or less than 100% because (a) persons reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) persons reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Figure 5. Race and ethnicity for children birth to age 4, 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages shown in this figure may sum to more or less than 100% because (a) persons reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) persons reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Immigrant families and language use

Both immigrants of all ages and children born to immigrant parents are growing populations in the U.S., and the U.S. is continuing to become an increasingly diverse nation.^{34, 35} Immigrant parents in Arizona have typically lived in the U.S. for at least nine years, and the vast majority of young children of these foreign-born parents are citizens.^{36, 37, 38} Some immigrant parents avoid using social services for which they and their children legally qualify due to fear of deportation or risking their legal status in the country.^{39, 40, 41} This can put immigrant families and children at risk of reduced access to medical care and increased food insecurity, which can lead to long-term impacts on health and educational attainment, as well as community-level economic impacts.^{42, 43, 44, 45} Understanding the needs of immigrant families and their children is essential to ensuring they have access to available resources that can help them thrive.⁴⁶

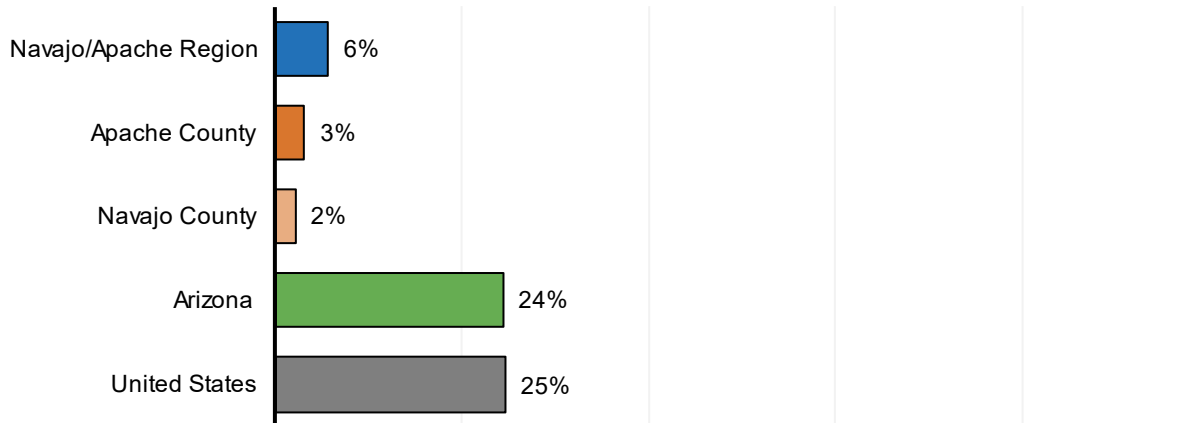
Language provides an important connection to family, community and culture.⁴⁷ Mastery of more than one language is an asset in school readiness and academic achievement and may offer cognitive and social-emotional benefits in early school experiences and across one's lifetime.^{48, 49, 50, 51, 52} However, families with lower English proficiency may face barriers to accessing information about health care and other services or engaging with their children's teachers. Children who do not yet have a full grasp of English may also experience difficulties in school, impeding their academic success and resulting in negative health outcomes.^{53, 54} Knowing the languages spoken and level of English proficiency in a region can inform the development of resources and services in multiple languages, ensuring that they are accessible to all families.^{55, 56}

How the Navajo/Apache Region is faring

- Only 6% of children birth to age 5 in the region live with foreign-born parents, a lower proportion than across the state overall (24%) but higher than the share seen in Apache County (3%) or Navajo County (2%) (Figure 6).
- A smaller proportion of individuals speak Spanish at home (9%) or another language (4%) in the Navajo/Apache Region compared to the state overall (20% and 6%, respectively). Use of languages other than English or Spanish, mostly Native North American languages, is much more common in Apache County (52%) and Navajo County (30%) than in the region (Figure 7).
- Of those who speak a language other than English at home, a much smaller proportion of individuals do not speak English "very well" in the region (3%) compared to the state (8%), and 7% of individuals in the region are multilingual (7%), again a smaller share than in the state (18%) (Figure 8).
- Similarly, the percentage of limited-English-speaking households in the region (1%) is a quarter of the share seen statewide (4%), and much lower than the proportions in Apache County (18%) and Navajo County (5%) (Figure 9).
- The number of English Language Learners (ELL) decreased in the Navajo/Apache Region between 2020-21 and 2021-22, with 305 ELL students enrolled in preschool through 12th grade

in the region in the 2021-22 school year. This represents 2% of students enrolled in all grades in the region that school year. This was a lower share of students than seen in Apache County (5%), Navajo County (3%) and Arizona overall (8%) in the 2021-22 school year (Table 4).

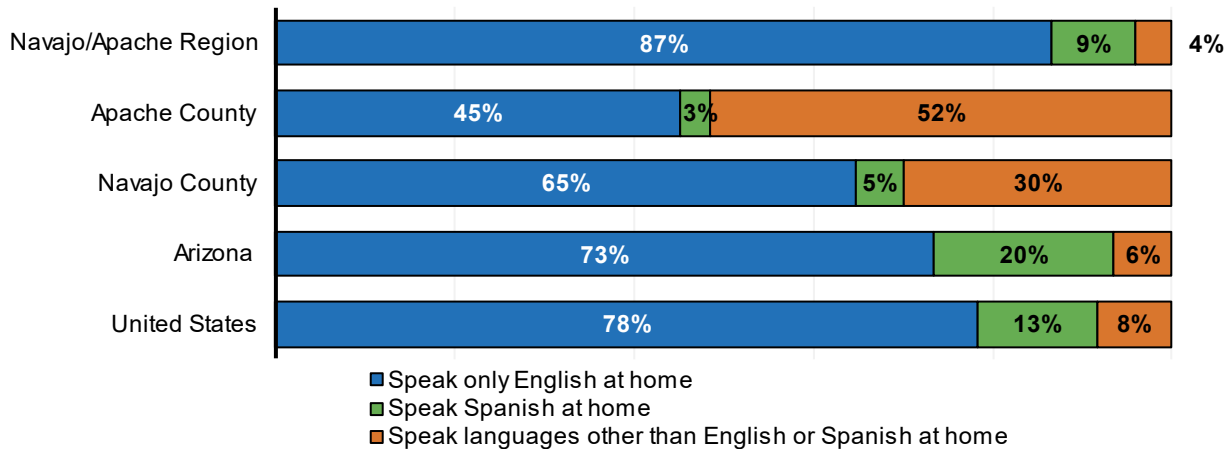
Figure 6. Children birth to age 5 living with parents who are foreign-born, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table B05009

Note: The term "parent" here includes stepparents.

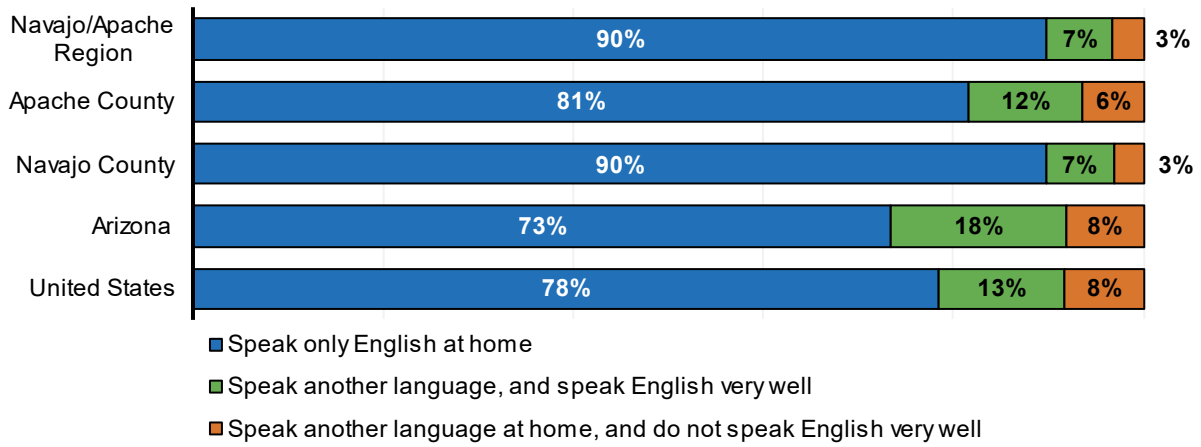
Figure 7. Language spoken at home (by persons ages 5 and older), 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table C16001

Note: The three percentages in each bar may not sum to 100% because of rounding. The American Community Survey (ACS) no longer specifies the proportion of the population who speak Native North American languages for geographies smaller than the state. In Arizona, Navajo and other Native American languages (including Apache, Hopi, and O'odham) are the most commonly spoken (2%), following English (73%) and Spanish (20%).

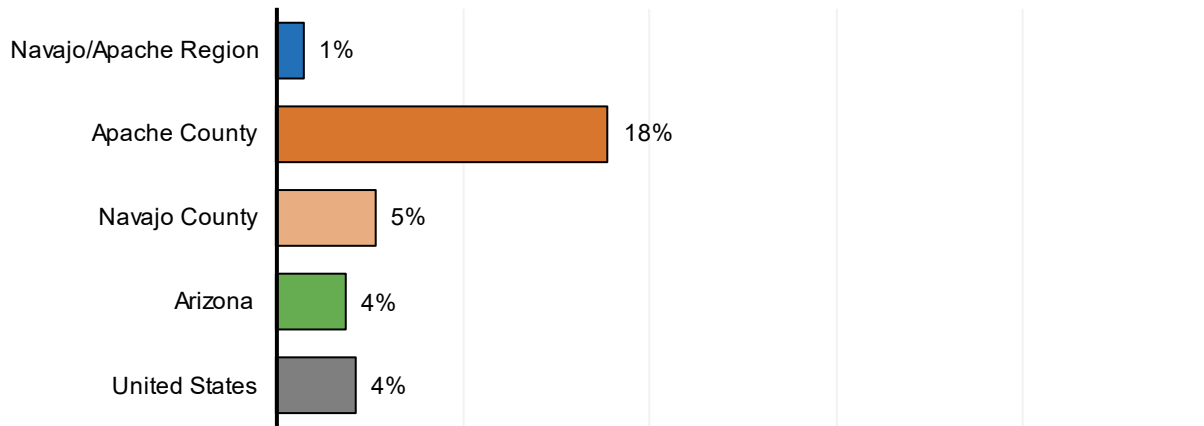
Figure 8. English-language proficiency (for persons ages 5 and older), 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table C16001

Note: The three percentages in the figure should sum to 100% but may not because of rounding.

Figure 9. Share of households that are limited-English-speaking, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table C16002

Note: A "limited-English-speaking" household is one in which no one over the age of 13 speaks English very well.

Table 4. Number of English Language Learners enrolled in all grades, 2020-21 to 2021-22

Geography	Number of PS-12 students who were English Language Learners		Percent of PS-12 students who were English Language Learners	
	2020-21	2021-22	2020-21	2021-22
Navajo/Apache Region schools	336	305	3%	2%
Apache County schools	627	510	6%	5%
Navajo County schools	693	536	4%	3%
Arizona schools	86,405	91,881	8%	8%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Notes: English Language Learners are students who do not score 'proficient' in the English language based on the Arizona English Language Learning Assessment (AZELLA) and thus are eligible for additional supportive services for English language acquisition. Legislation in Arizona requires children in Arizona public schools be taught in English, and English Language Learners to attend English immersion programs. Senate Bill 1014 passed in 2019, increased the flexibility districts have in structuring English Language Learners immersion programs, and lessened the duration required of this instruction. For more information see <https://www.azed.gov/oelas/structured-english-immersion-models>

Family and household composition

Young children in Arizona live in many types of families, each of which has possible implications for child development.⁵⁷ For example, families with two married parents tend to offer stability that promotes child well-being.^{58, 59, 60} Single-parent households tend to be at higher risk for poverty, and can face challenges accessing health and education resources.^{61, 62, 63, 64, 65, 66, 67} Multi-generational living, particularly arrangements where grandparents live in the home with children and parents, has long been practiced in some cultures and communities but is becoming increasingly common in U.S. families of all racial and ethnic groups.^{68, 69, 70, 71} These living arrangements can offer financial and social benefits but also specific stressors, such as managing conflicts in parenting styles and family roles.^{72, 73, 74, 75, 76} It is also increasingly common for children to live in kinship care, defined as the care of children by someone other than their parents, such as relatives or close friends.^{77, 78, 79} These kinship caregivers, especially grandparents who care for their grandchildren, can face unique challenges, including navigating the logistics of informal guardianship (e.g., difficulties in registering children for school), coping with parental absence and addressing the challenges of being an aging caregiver for a young child.^{80, 81, 82, 83} Each of these family structures carries with it a unique set of strengths and challenges that are important to consider in relation to the health and development of children.^{84, 85, 86}

How the Navajo/Apache Region is faring

- Most young children in the Navajo/Apache Region (60%) live with two married parents or stepparents, which is slightly higher than in Arizona overall (59%) and much higher than in Apache County (36%) or Navajo County (45%). The same proportion of young children in the region live in a household with one parent as in the state (37%) (Table 5).
- Fourteen percent of children birth to age 5 in the region live in their grandparent’s household, slightly higher than the proportion of young children in those living situations across the state (13%) but substantially lower than the proportions in Apache County (36%) and Navajo County (29%) (Figure 10).
- Of grandparents who live with and are responsible for their grandchildren under age 18 in the Navajo/Apache Region, most are 60 years old or older (59%) and female (57%), while a minority are in the labor force (35%) or in poverty (12%). Nearly half (47%) do not have the child’s parent in the household, higher than the proportion across the state (33%) (Table 6).
- Overall, in the region, 19% of grandparents have grandchildren under age 18 in their household with no parent present, much higher than the proportion across the state (11%) (Figure 11). This indicates that the prevalence of grandparents raising grandchildren is likely higher in the region compared to the state and that the prevalence of multigenerational households (where grandparents, parents and children all live together) is lower.

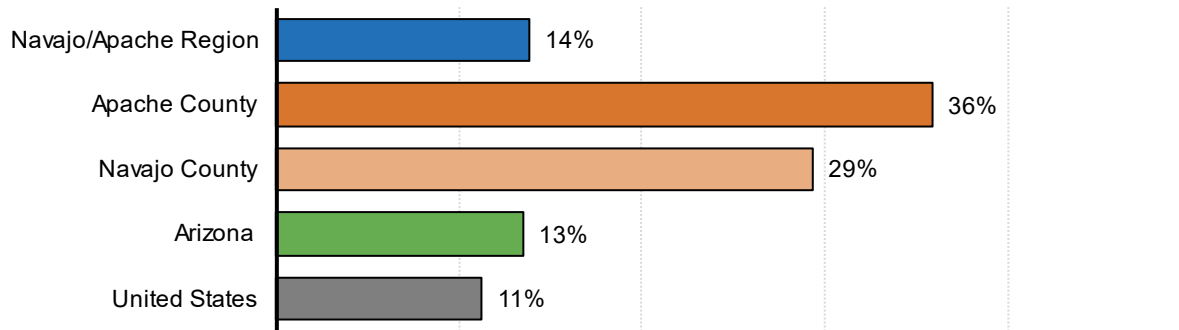
Table 5. Living arrangements for children birth to age 5, 2017-2021 ACS

Geography	Estimated number of children (birth to age 5) living in households	Living with two married parents	Living with one parent	Living not with parents but with other relatives	Living with non-relatives
Navajo/Apache Region	5,172	60%	37%	1%	2%
Apache County	5,128	36%	58%	5%	2%
Navajo County	8,384	45%	50%	3%	2%
Arizona	496,219	59%	37%	3%	2%
United States	23,353,556	64%	32%	2%	2%

Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Tables B05009, B09001, & B17001

Note: The four percentages in each row should sum to 100% but may not because of rounding. The term "parent" here includes stepparents. Please note that due to the way the ACS asks about family relationships, children living with two unmarried, cohabitating parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Figure 10. Grandchildren birth to age 5 living in a grandparent's household, 2020 Census



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P14, PCT11.

Note: This table includes all children (under 6 years old) living in a household headed by a grandparent, regardless of whether the grandparent is responsible for them, or whether the child's parent lives in the same household.

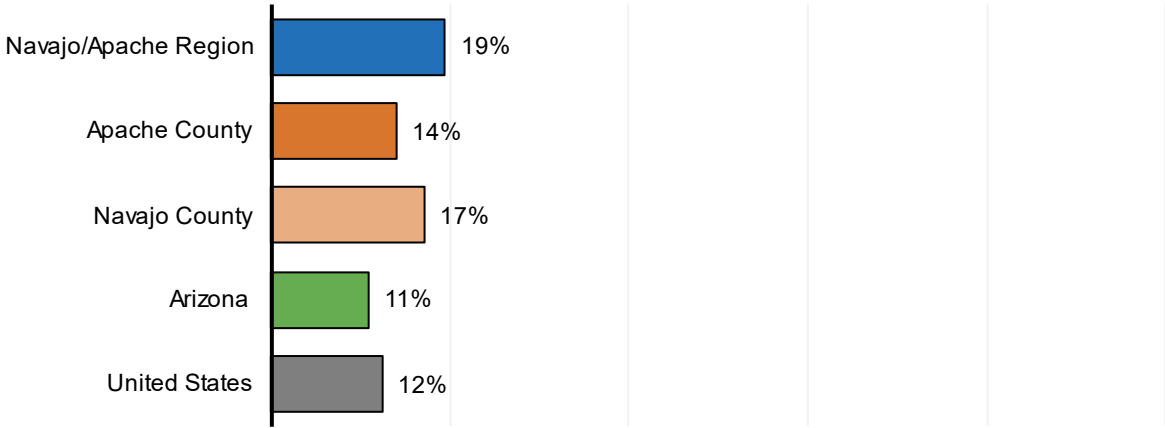
Table 6. Selected characteristics of grandparents who are responsible for one or more grandchildren under age 18 in their households, 2017-2021 ACS

Geography	Estimated number of grandparents who live with and are responsible for grandchildren under 18 years old	Percent of these grandparents who:					
		Do not have the child's parents in the household	Are 60 years old or older	Are female	Do not speak English very well	In labor force	Have an income below the poverty level
Navajo/Apache Region	724	47%	59%	57%	7%	35%	12%
Apache County	1,108	40%	63%	70%	23%	35%	31%
Navajo County	2,447	33%	49%	64%	17%	49%	30%
Arizona	56,079	33%	45%	62%	21%	57%	21%
United States	2,319,443	38%	47%	63%	14%	56%	18%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Tables B10051, B10054, B10056, & B10059

Note: Grandparents are considered responsible for their grandchild or grandchildren if they are "currently responsible for most of the basic needs of any grandchildren under the age of 18" who live in the grandparent's household.

Figure 11. Percent of grandparents who are living with their grandchildren birth to age 17 with no parent present in the household, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Tables B10051, B10054, B10056, & B10059

Note: The denominator in this figure is all grandparents living with grandchildren (including both grandparents who are responsible for their grandchildren and those that are not).

Additional data tables related to *Population Characteristics* can be found in Appendix 1 of this report.



ECONOMIC CIRCUMSTANCES

ECONOMIC CIRCUMSTANCES

Why it Matters

A family's economic stability impacts children's well-being and predicts a variety of health outcomes.⁸⁷ Children who grow up in poverty and unstable economic conditions are more likely to experience negative effects on their cognitive, behavioral, social and emotional development compared to those in stable economic environments.^{88, 89, 90, 91, 92} The challenges they face might continue into adulthood, and such difficulties may be passed on to the next generation.^{93, 94, 95} Poverty also affects children by straining parent well-being and parent-child interactions. Stressors related to poverty, like unemployment, food and housing insecurity and poor mental and physical health, make it difficult for caregivers to provide the necessary support for children's optimal development.⁹⁶ In light of these broad impacts, economic stability is a key social determinant of health and is included as a domain in the Healthy People 2030 Objectives.^{xi}

What the Data Tell Us

Income and poverty

Poverty is associated with reduced access to nutrition, green space and health care and greater exposure to psychosocial stress and environmental toxins, factors that can both directly and indirectly hinder children's growth and brain development.^{97, 98, 99} Children living in poverty are thus at a higher risk of negative impacts including being born at a low birth weight, lower school achievement and poor health.^{100, 101, 102, 103, 104, 105, 106} Economic hardship is included in some definitions of adverse childhood experiences (ACEs) and children living in poverty experience other non-economic ACEs, such as parental divorce or separation, exposure to violence, parental incarceration and living with someone with mental illness or a substance use disorder, at higher rates than children in higher income households.^{107, 108} Given the many negative effects of poverty on child development, programs that alleviate poverty through providing cash assistance or food, housing or health care assistance can improve child well-being.¹⁰⁹

The Temporary Assistance for Needy Families Cash Assistance Program (TANF)^{xii} provides temporary cash benefits and supportive services to children and families. Eligibility is based on citizenship or qualified resident status, Arizona residency and limits on resources and monthly income.¹¹⁰

^{xi} For more information on the Economic Stability Healthy People 2030 Objectives please see <https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability>

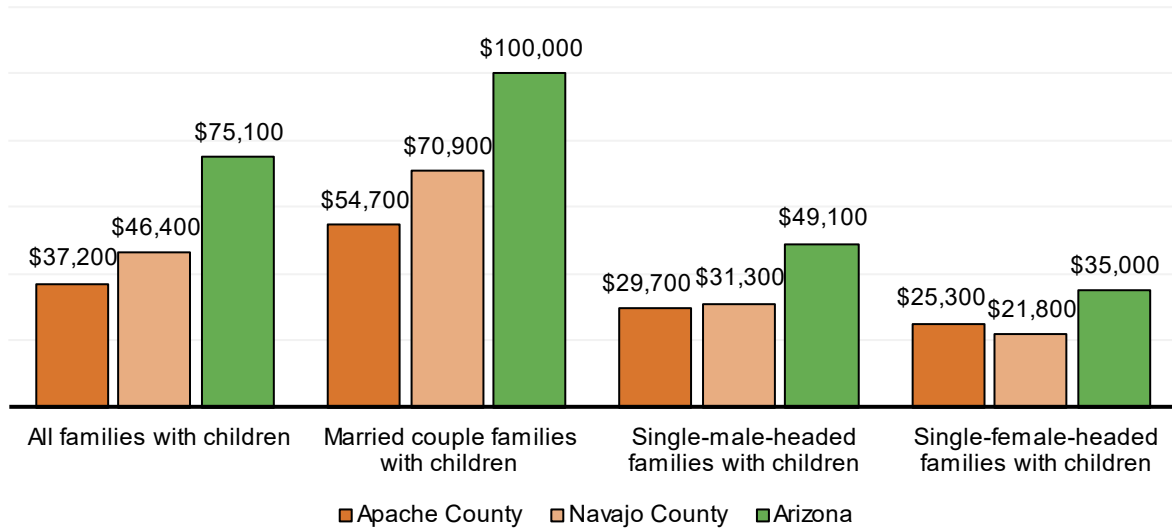
^{xii} For more information see: <https://www.acf.hhs.gov/ofa/programs/temporary-assistance-needy-families-tanf> and <https://des.az.gov/ca>

How the Navajo/Apache Region is faring

- Median family incomes for families with children in Apache County (\$37,200) and Navajo County (\$46,400) are much lower than for families in Arizona (\$75,100). The median incomes for married couple families with children in Apache County (\$54,700) and Navajo County (\$70,900) are lower than for married couple families across Arizona (\$100,000), however these median incomes are about double the median income for single-male-headed families (Apache County: \$29,700; Navajo County: \$31,300) and two to three times those of single-female-headed families in Apache County (\$25,300) and Navajo County (\$21,800) (Figure 12).
- According to 2017-2021 American Community Survey (ACS) estimates, rates of poverty in the region across the entire population (17%) and for children birth to age 5 (30%) are higher than those across the state (13% and 20%, respectively) but lower than in Apache County (34% and 51%) or Navajo County (26% and 36%). Rates of poverty for young children increased by 3% in the region (2012-2016: 27%; 2017-2021: 30%), while statewide rates of poverty for young children decreased by 8% in the same period (2012-2016 28%; 2017-2021 20%) (Figure 13 & Figure 14).
- More than half of young children in the Navajo/Apache Region (55%) live below 185% of the federal poverty level (FPL), higher than across the state (39%) (Figure 15). However, even this relatively higher income category for a family of four (185% = \$50,836) equates to less than the self-sufficiency standard^{xiii} for two parents with one infant and one preschooler in 2022 in Apache County (\$70,428) or Navajo County (\$70,576), indicating that many families across the region may have less income than needed to fully support themselves.
- A higher proportion of young children live in “deep poverty” (defined as 50% FPL) in the Navajo/Apache Region (15%) compared to across the state (9%). This again suggests that many families do not have enough cash income to meet their needs.
- Between state fiscal years (SFY) 2018 and 2022, both the number of families with children birth to age 5 and the number of children birth to age 5 receiving TANF steadily increased in the region, from 77 young children in SFY 2018 to 133 in SFY 2022. In contrast, both the number of families and young children receiving TANF decreased between SFY 2018 and 2022 across the state. In SFY 2022, the percentage of young children participating in TANF in the region (2.8%) was the same as in the state overall (2.8%) for the first time in five years, increasing from 1.6% in SFY 2018 (Figure 16 & Figure 17).

^{xiii} For more information on the Arizona 2022 Self-sufficiency standard, please see https://womensgiving.org/wp-content/uploads/2022/12/AZ2022_SSS_Web.pdf

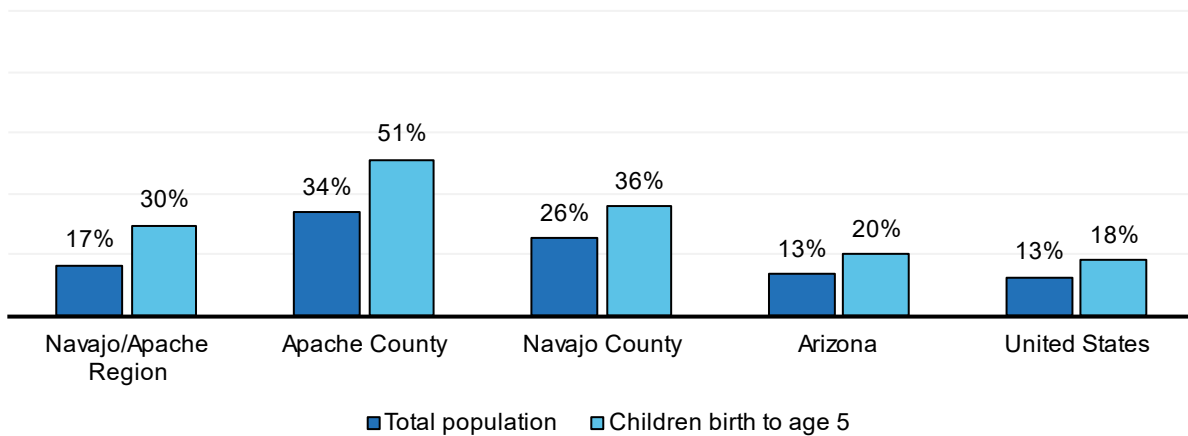
Figure 12. Median family income for families with children birth to age 17, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B19126

Note: Half of the families in the population are estimated to have annual incomes above the median value, and the other half have incomes below the median. The median family income for all families includes families without children birth to age 17.

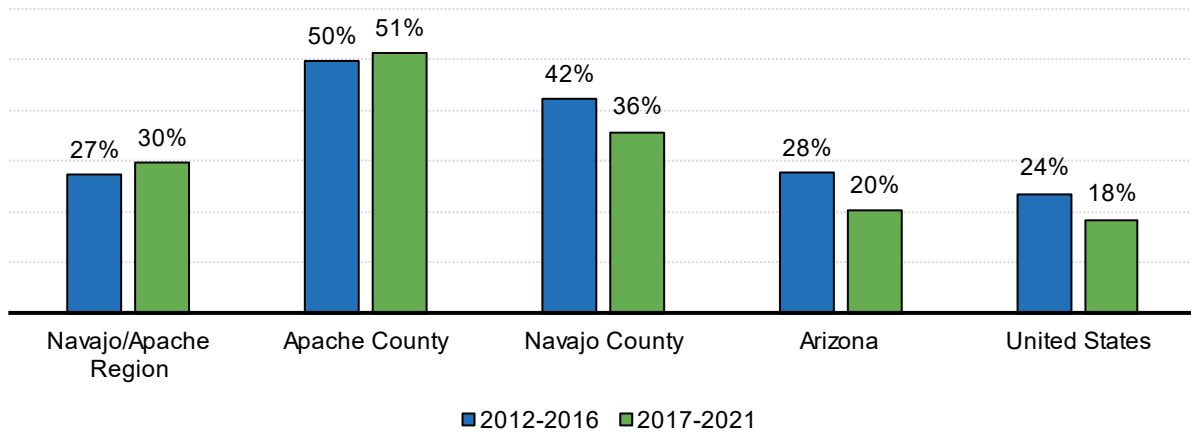
Figure 13. Rates of poverty for persons of all ages and for children birth to age 5, 2017-2021 ACS



Source: U.S. Census Bureau. (2020). American Community Survey 5-year estimates 2017-2021, Table B17001

Note: This graph includes only persons whose poverty status can be determined. Adults who live in group settings such as dormitories or institutions are not included. Children who live with unrelated persons are not included. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677.

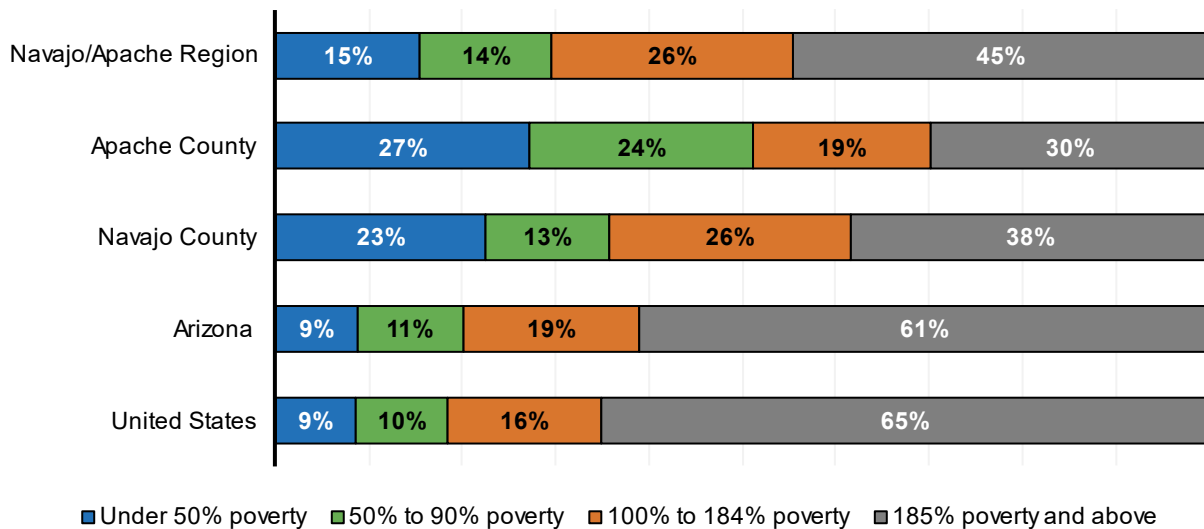
Figure 14. Rates of poverty for children birth to age 5, 2012-2016 and 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B17001. U.S. Census Bureau. (2017). American Community Survey 5-year estimates 2012-2016, Table B17001.

Note: This graph includes only persons whose poverty status can be determined. Adults who live in group settings such as dormitories or institutions are not included. Children who live with unrelated persons are not included. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677.

Figure 15. Children birth to age 5 living at selected poverty thresholds, 2017-2021 ACS

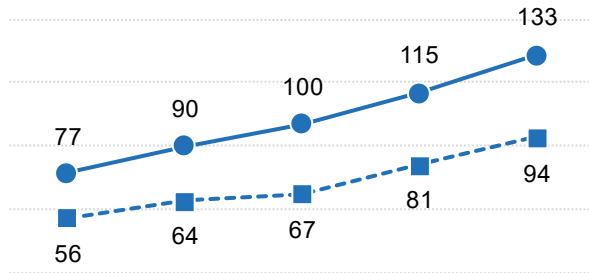


Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B17024

Note: The four percentages in each bar should sum to 100% but may not because of rounding. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677. The 185% thresholds are \$50,836 and \$34,552, respectively.

Figure 16. Number of children birth to age 5 and families with children birth to age 5 receiving TANF, state fiscal years 2018 to 2022

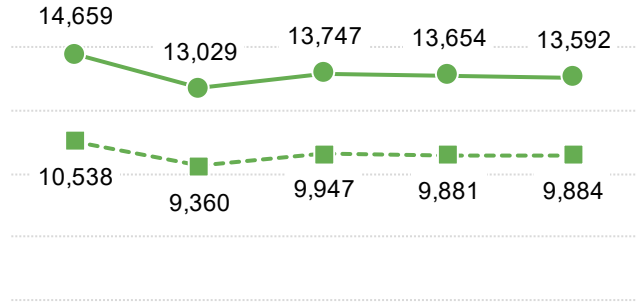
Navajo/Apache Region



SFY2018 SFY2019 SFY2020 SFY2021 SFY2022

--■-- Families with children (ages 0-5) participating in TANF
—●— Children (ages 0-5) participating in TANF

Arizona

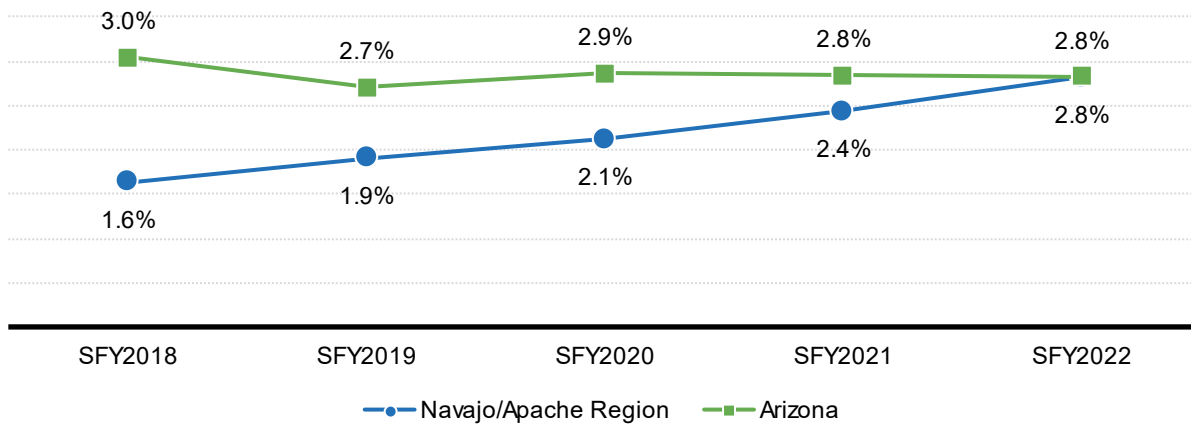


SFY2018 SFY2019 SFY2020 SFY2021 SFY2022

--■-- Families with children (ages 0-5) participating in TANF
—●— Children (ages 0-5) participating in TANF

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

Figure 17. Estimated percent of children birth to age 5 participating in TANF, state fiscal years 2018 to 2022



SFY2018 SFY2019 SFY2020 SFY2021 SFY2022

—●— Navajo/Apache Region —■— Arizona

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Food security

Many families struggle with consistent access to “enough food for an active, healthy life,” a problem known as food insecurity.¹¹¹ Food insecurity is linked with many aspects of child and parent well-being; it can be a major source of stress for parents and has been linked to health and behavioral problems for children, such as poorer parent-child attachment, decreased social skills and self-control and increased risk of depression.^{112, 113, 114, 115, 116, 117}

The Supplemental Nutrition Assistance Program (SNAP; also referred to as “nutrition assistance” and “food stamps”),^{xiv} is administered by the Arizona Department of Economic Security and aims to support working families who are unable to afford the food necessary to sustain their health with their income alone. Nationally, about one in every five children participates in SNAP, and families on average receive a benefit of up to \$2.61 per person for each meal.¹¹⁸ The SNAP program has been shown to reduce hunger and improve access to healthy food options among those who utilize it.¹¹⁹

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC)^{xv} is a federally funded program administered by the Arizona Department of Health Services aimed to support economically disadvantaged women who are pregnant, postpartum and/or breastfeeding, along with infants and young children. The program’s services include directing participants to health services, nutrition and breastfeeding education and supplemental funding for food. In Arizona, WIC provided an average monthly benefit of \$42 per month in 2022, lower than the national average of \$48 per month.¹²⁰

School meals provide another important nutritional safety net for children and their families. The National School Lunch Program (NSLP), administered by the Arizona Department of Education (ADE) and funded by the United States Department of Agriculture (USDA), provides meals for students of low-income families at a reduced price. The Summer Food Service Program (SFSP),^{xvi} also funded by the USDA and administered by ADE, works to keep all children birth to age 18 fed when school is out of session by providing free meals (breakfast, lunch, supper) and snacks at community sites. SFSP unites community sponsors like camps, faith-based organizations and schools with sites like parks, libraries, community centers and apartment complexes in high-need areas to distribute food.¹²¹ In March 2020, in response to school closures due to the COVID-19 pandemic, the USDA issued waivers allowing year-round operation of SFSP to serve meals to children of all ages engaging in remote learning; these waivers remained in effect through June 2022 and led to increased meal service through SFSP compared to NSLP for many schools.¹²² The Child and Adult Care Food Program (CACFP),^{xvii} also funded by the USDA, gives reimbursements to participating child care centers, preschools, emergency centers and after-school programs for nutritious meals and snacks served to eligible children. Eligible providers

^{xiv} For more information see: <https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program> and <https://des.az.gov/na>

^{xv} For more information see: <https://www.fns.usda.gov/wic> and <https://www.azdhs.gov/prevention/azwic/>

^{xvi} For more information see: <https://www.azed.gov/hns/sfsp>

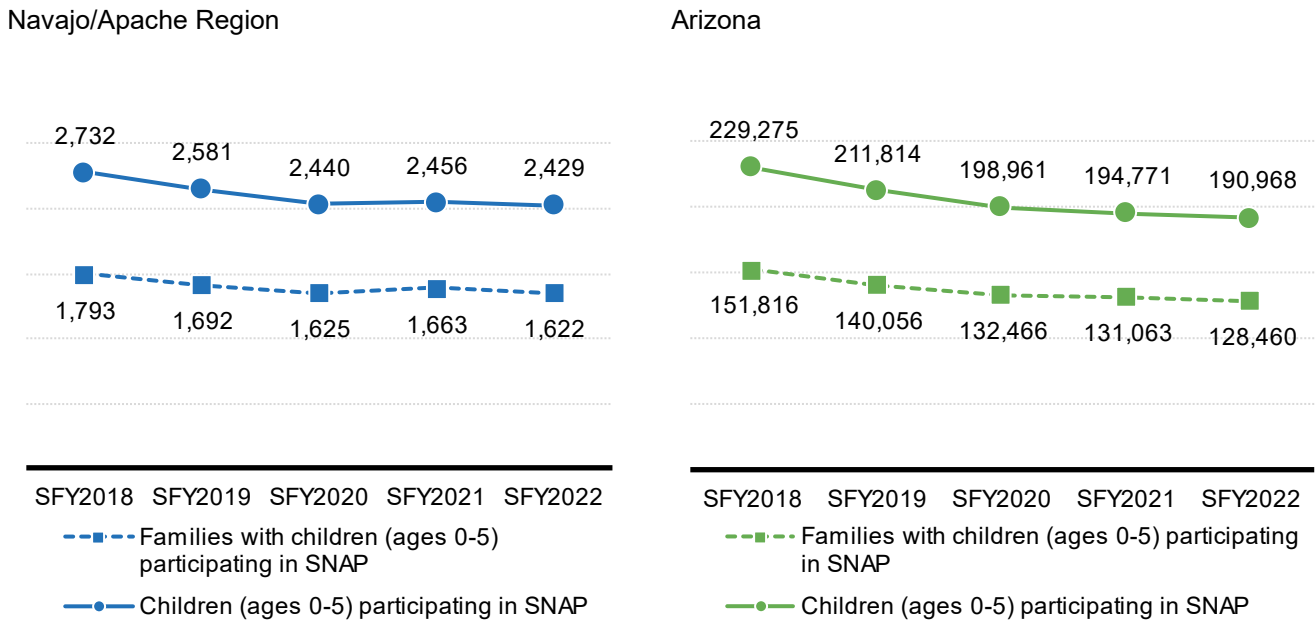
^{xvii} For more information see: <https://www.azed.gov/hns/cacfp>

include for-profit child care centers serving at least 25% free or reduced-price lunch participants or any non-profit program.¹²³

How the Navajo/Apache Region is faring

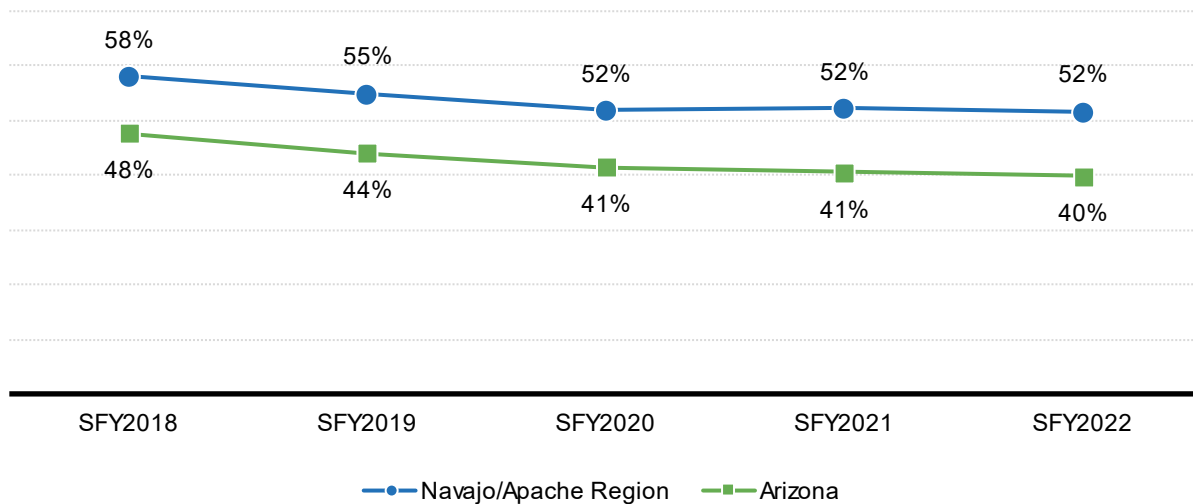
- Participation in SNAP by households with young children declined in the Navajo/Apache Region between SFY 2018 (n=1,793) and 2022 (n=1,622), as did participation across the state. The number of young children birth to age 5 participating in SNAP also decreased during those years in both the region and state. The percentage of young children participating in SNAP was higher in the region than across the state in all years between SFY 2018 and 2022, with 52% of children birth to age 5 participating in the region in SFY 2022, compared to 40% across the state (Figure 18 & Figure 19).
- The number of children birth to age 4 enrolled in and participating in WIC in the Navajo/Apache Region and across the state generally declined in recent years. However, while the state saw a slight uptick in enrollment and participation between 2021 and 2022, the region hit a five-year low in 2022, with 1,992 children enrolled and 1,879 participating (Figure 20).
- WIC participation rates were high in 2022, with 96% of enrolled women, 99% of enrolled infants and 93% of enrolled children receiving benefits that year in the Navajo/Apache Region, generally comparable to statewide rates (Figure 21).
- The number of lunches served through the NSLP, SFSP, and CACFP meal programs varied substantially between program years 2019-20 and 2021-22. After the change in school meal policy following the start of the COVID-19 pandemic, meal service through SFSP increased approximately fivefold in both Apache County and Navajo County between 2019-20 and 2020-21, while meal service through NSLP fell by about 80%. In the 2021-22 school year, NSLP meal service increased and SFSP meal service decreased in both counties, though neither program has yet returned to pre-pandemic levels (Figure 22).
- Compared to 2019-20, the number of lunches served through CACFP more than doubled in both Apache County and Navajo County in 2021-22, indicating higher ongoing participation in CACFP following the onset of the pandemic (Figure 22).

Figure 18. Number of children birth to age 5 and households with children birth to age 5 participating in SNAP, state fiscal years 2018 to 2022



Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

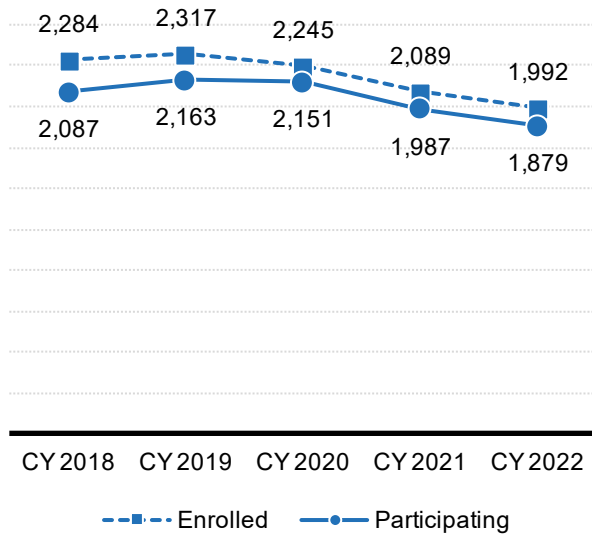
Figure 19. Estimated percent of children birth to age 5 participating in SNAP, state fiscal years 2018 to 2022



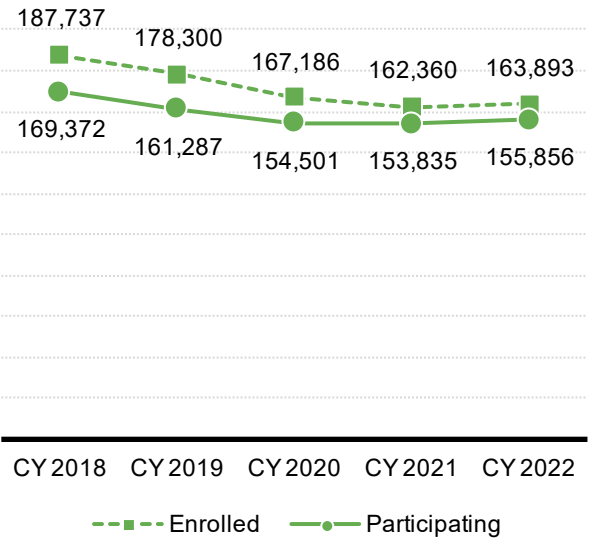
Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Figure 20. Children birth to age 4 enrolled and participating in WIC, 2018 to 2022

Navajo/Apache Region



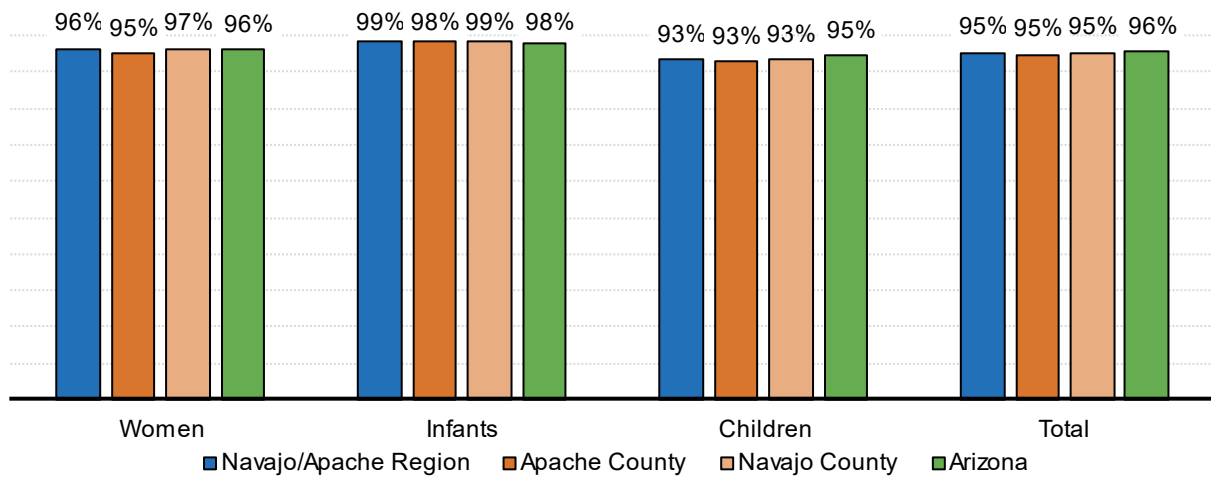
Arizona



Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Note: Children are counted as 'participating' if they received benefits during the time period in question.

Figure 21. WIC participation rates by category, 2022

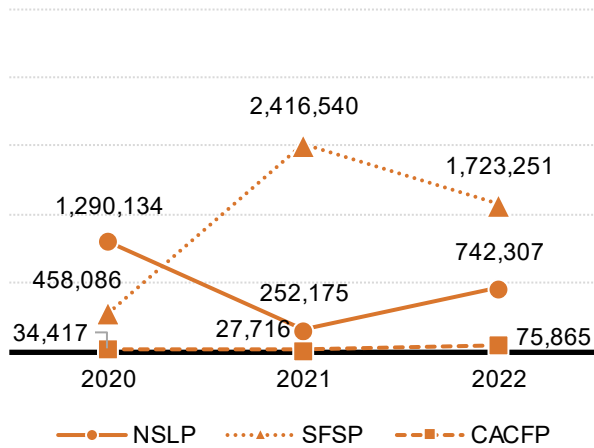


Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

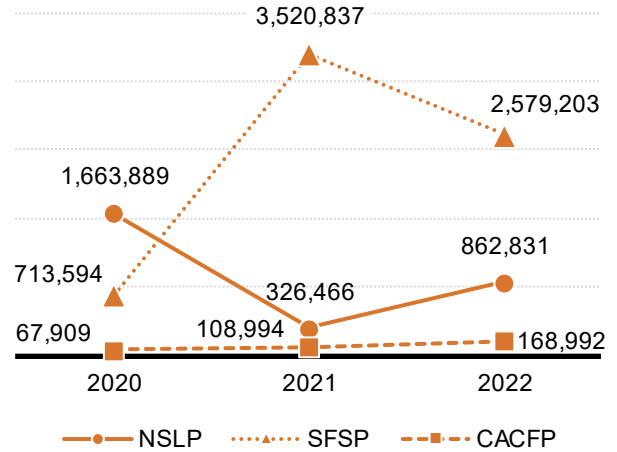
Note: Individuals are counted as 'participating' if they received benefits during the time period in question.

Figure 22. Trends in lunches served through school nutrition programs, 2019-20 to 2021-22

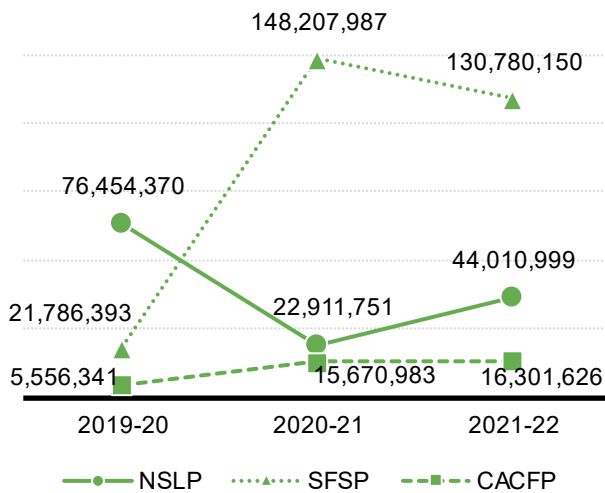
Apache County



Navajo County



Arizona



Source: Arizona Department of Education (2021). [Health and Nutrition Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Due to the COVID-19 pandemic, the USDA issued a substantial number of waivers for school nutrition programs to allow greater flexibility for schools to get meals to students in need. More information on the pandemic's effect on school nutrition can be found on the ADE website: <https://www.azed.gov/hns/covid19>

Employment

Unemployment and underemployment^{xviii} can impact families in ways that affect children’s health and well-being.¹²⁴ Unemployment can limit access to resources that support children’s physical and mental health, like health insurance, and can also contribute to family stress, conflict, homelessness and child abuse.^{125, 126} Children with parents who have lost their jobs may also experience poorer school performance and behavioral issues, resulting in grade repetition, suspension or expulsion.¹²⁷

Education and employment support programs for parents and caregivers are important for increasing wages and improving the economic stability of families. “Two-generation” or “2Gen” approaches address the needs of both parents and children simultaneously through programs to support children and families together, such as a family literacy program that provides educational support to parents while enrolling children in free high-quality preschool.^{128, 129, 130} These programs have the goal of decreasing the intergenerational effects of poverty by building parental capacity and protective factors within families.^{131, 132, 133}

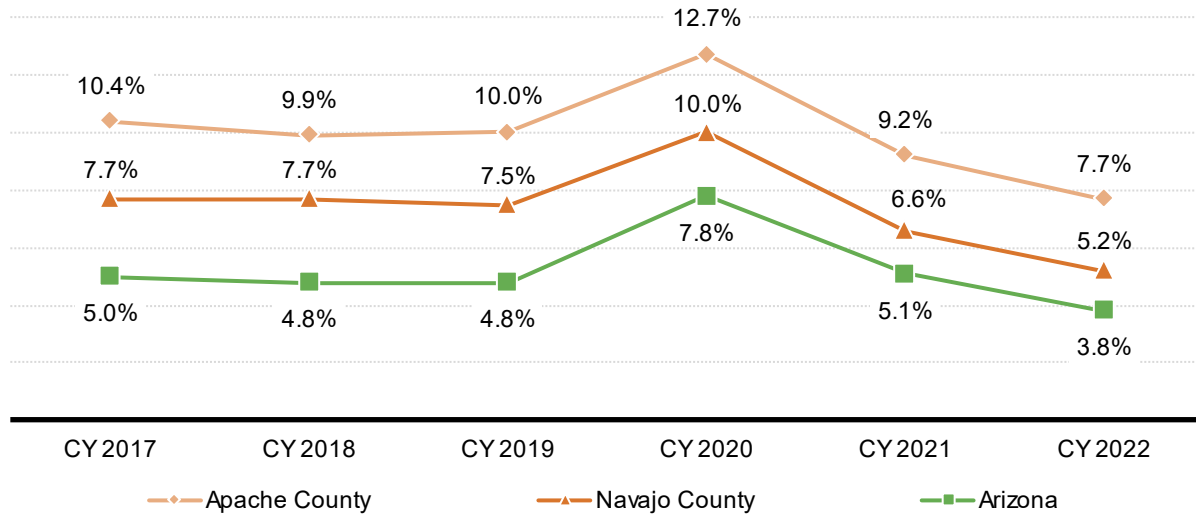
How the Navajo/Apache Region is faring

- Unemployment rates in Apache County and Navajo County have followed the same trend as Arizona’s but have been substantially higher. Despite the spike in rates during the beginning of the COVID-19 pandemic in 2020, unemployment rates fell to their lowest level in six years in 2022 with a 7.7% unemployment rate in Apache County, 5.2% in Navajo County and 3.8% across Arizona (Figure 23).
- The labor force participation rate^{xix} is lower in the Navajo/Apache Region (46%) than across Arizona (61%). The region has a higher proportion of adults who are not in the labor force (54%) compared to Arizona as a whole (39%) (Table 7 & Figure 24).
- An estimated 86% of young children in the Navajo/Apache Region live in families with at least one parent in the labor force, lower than the proportion across the state (90%). More than half of children birth to age 5 in the region (57%) live with all parents in the labor force, making it likely that these families need some form of child care (Table 8 & Figure 25).

^{xviii} Underemployment means that someone works fewer hours than they would like or is in a job that does not require the skills or training that they have.

^{xix} The “labor force” is all persons who are working (employed) or looking for work (unemployed). The “labor force participation rate” is the fraction of the population who are in the labor force, whether employed or unemployed. Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The “unemployment rate” is the fraction of the civilian labor force which are unemployed.

Figure 23. Average annual unemployment rates (not seasonally adjusted), 2017 to 2022



Source: Arizona Commerce Authority (2021), Office of Economic Opportunity, Local Area Unemployment Survey (LAUS)

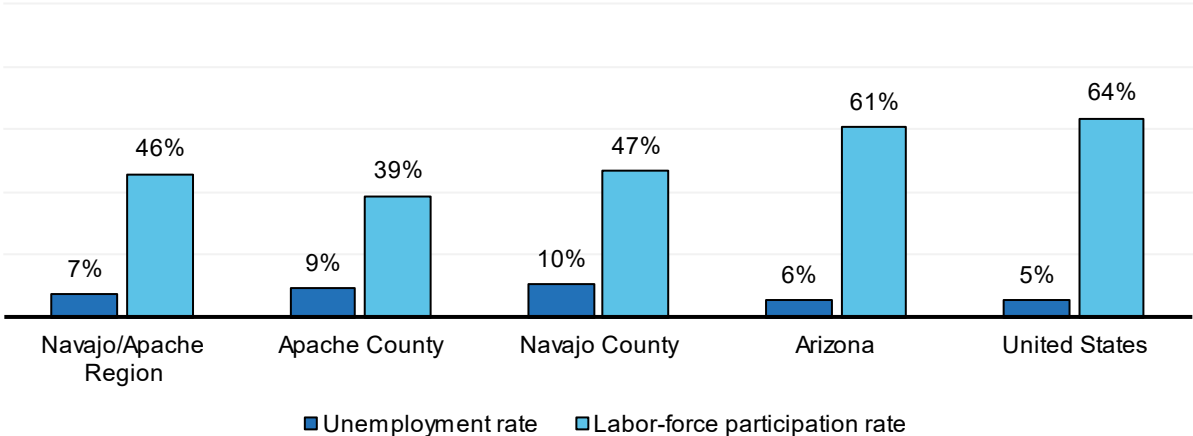
Table 7. Unemployment and labor-force participation for the population ages 16 and older, 2017-2021 ACS

Geography	Estimated working-age population (age 16 and older)	Unemployment rate	Labor-force participation rate	In the labor force and employed	In the labor force but unemployed	In armed forces	Not in the labor force
Navajo/Apache Region	57,004	7%	46%	42%	3%	0.0%	54%
Apache County	50,706	9%	39%	35%	4%	0.0%	61%
Navajo County	81,207	10%	47%	42%	5%	0.0%	53%
Arizona	5,650,624	6%	61%	57%	3%	0.4%	39%
United States	264,087,642	5%	64%	60%	3%	0.5%	36%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2022, Table B23025

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The "labor force participation rate" is the fraction of the population who are in the labor force, whether employed or unemployed. The "unemployment rate" is the fraction of the civilian labor force which are unemployed. The last four percentages in each row (employed, unemployed, in armed forces, and not in the labor force) should sum to 100% but may not because of rounding.

Figure 24. Unemployment and labor-force participation for the population ages 16 and older, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B23025

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The "labor force participation rate" is the fraction of the population who are in the labor force, whether employed or unemployed. The "unemployment rate" is the fraction of the civilian labor force which are unemployed.

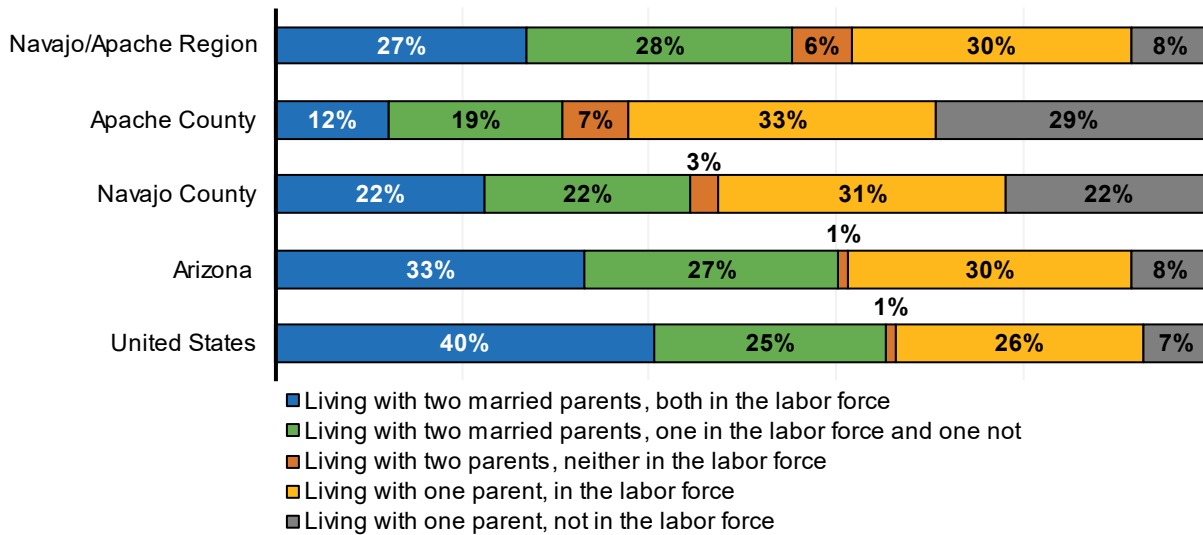
Table 8. Parents of children birth to age 5 who are or are not in the labor force, 2017-2021
ACS

Geography	Estimated number of children (birth to age 5) living with parent(s)	Living with two married parents, both in the labor force	Living with two married parents, one in the labor force and one not	Living with two married parents, neither in the labor force	Living with one parent, in the labor force	Living with one parent, not in the labor force
Navajo/Apache Region	5,021	27%	28%	6%	30%	8%
Apache County	4,817	12%	19%	7%	33%	29%
Navajo County	7,934	22%	22%	3%	31%	22%
Arizona	473,732	33%	27%	1%	30%	8%
United States	22,399,131	40%	25%	1%	26%	7%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B23008

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The term "parent" here includes step-parents. The five percentages in each row should sum to 100% but may not because of rounding. Please note that due to the way the ACS asks about family relationships, children living with two unmarried, cohabitating parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Figure 25. Parents of children birth to age 5 who are or are not in the labor force, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B23025

Note: The labor force is all persons who are working (employed) or looking for work (unemployed). Persons not in the labor force are mostly students, stay-at-home parents, retirees, and institutionalized people. The term "parent" here includes stepparents. The five percentages in each row should sum to 100% but may not because of rounding. Please note that due to the way the ACS asks about family relationships, children living with two unmarried, cohabitating parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Housing instability and internet access

Housing instability can have harmful effects on the development of young children. High housing costs relative to family income are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness.^{134, 135, 136} High relative housing costs leave inadequate funds for other necessities, such as food and utilities.¹³⁷ This can negatively affect the physical, social-emotional and cognitive development of children, with severe forms of housing instability associated with poorer performance in school.^{138, 139}

Another increasingly important utility in homes is reliable internet access. Access to broadband (high-speed) internet enables quick access to a far greater number of resources and information, telehealth options and other opportunities that can be critical for education and employment. Internet access has been deemed a “super determinant” of health because of its influence on more traditional social determinants of health such as education, employment, health care access and social connection.¹⁴⁰ Household access to computers and high-speed internet is also important for school-aged children who may need this technology for school assignments and projects, particularly during the later years of primary education and beyond.¹⁴¹ Lack of access to reliable high-speed internet disproportionately occurs in rural areas and pockets of segregated urban areas, and this disparate access is known as the

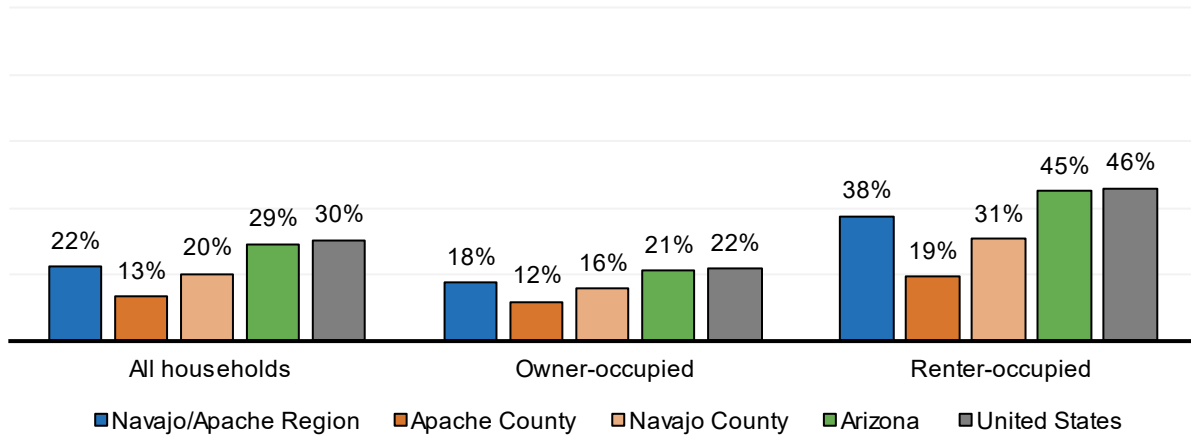
digital divide. Due to the importance of high-speed internet access, the federal government has instituted several funding initiatives to improve access to and the affordability of high-speed internet, including in Arizona.^{xx}

How the Navajo/Apache Region is faring

- Traditionally, housing has been deemed affordable for families if it costs less than 30% of annual household income.¹⁴² More than one in five households (22%) in the region spend 30% or more of their income on housing, lower than the share seen statewide (29%) but higher than the share in Apache County (13%) or Navajo County (20%). Housing costs do differ by home ownership status, with fewer homeowners in the region (18%) and state (21%) spending 30% or more of household income on housing, compared to 38% of renter-occupied households in the region and 45% across the state (Figure 26).
- The McKinney-Vento Act definition of homelessness includes children living in shelters, transitional housing, campgrounds, motels, trailer parks and cars, as well as children whose families are temporarily living within another family's household. The number of students enrolled in public and charter schools in the region experiencing homelessness increased from 114 in the 2020-21 school year to 130 in 2021-22, mirroring increases in Apache County, Navajo County and Arizona schools in the same period (Table 9).
- More than four out of five households (82%) in the Navajo/Apache Region have both a computer (including smartphones) and broadband internet connectivity, lower than the proportion across the state overall (88%) (Table 10).
- Looking at individuals, most people (of all ages) (87%) in the Navajo/Apache Region live in households with both a computer and internet connection. Children are slightly more likely to live in a household with a computer and an internet connection, with 92% of those under age 18 with this access in the region (Figure 27 & Figure 28).

^{xx} For more information, please see <https://internetforall.gov/program/digital-equity-act-programs>

Figure 26. Percent of households spending 30% or more of household income on housing by home ownership status, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B25106

Table 9. Students experiencing homelessness (all grades) enrolled in public and charter schools, 2019-20 to 2021-22

Geography	Number of students experiencing homelessness			Percent of students who were experiencing homelessness		
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
Navajo/Apache Region	N/A	114	130	N/A	<2%	<2%
Apache County	34	11	19	<2%	<2%	<2%
Navajo County	223	187	195	<2%	<2%	<2%
Arizona schools	12,931	8,542	11,161	<2%	<2%	<2%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Data from 2019-20 for the region were not available due to difference in how data were pulled in prior RNA cycles. The McKinney-Vento Act provides funding and support to ensure that children and youth experiencing homelessness have access to education. Under the McKinney-Vento Act, children are defined as homeless if they lack a “fixed, regular, and adequate nighttime address.” This includes children living in shelters, cars, transitional housing, campground, motels, and trailer parks, as well as children who are living ‘doubled up’ with another family due to loss of housing or economic hardship. More information can be found on the ADE website: <https://www.azed.gov/homeless>

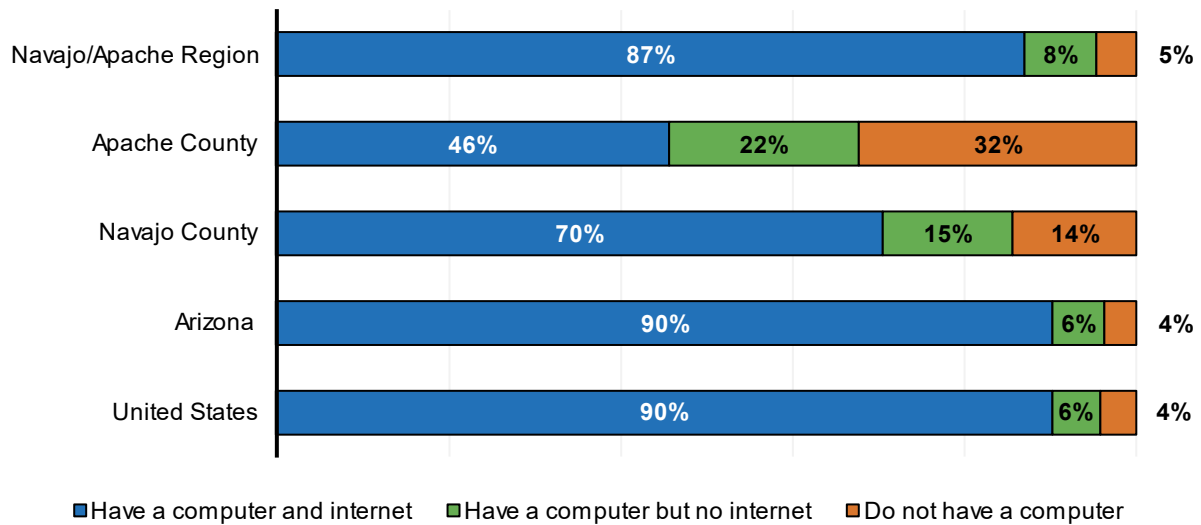
Table 10. Households with a computer and broadband internet connectivity, 2017-2021 ACS

Geography	Estimated number of households	Number and percent of households with a computer and broadband internet connectivity	
		Number	Percent
Navajo/Apache Region	26,883	22,151	82%
Apache County	19,443	8,168	42%
Navajo County	36,567	24,054	66%
Arizona	2,683,557	2,350,265	88%
United States	124,010,992	106,957,995	86%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28008.

Note: In this table, “computer” includes desktops, laptops, tablets and smartphones.

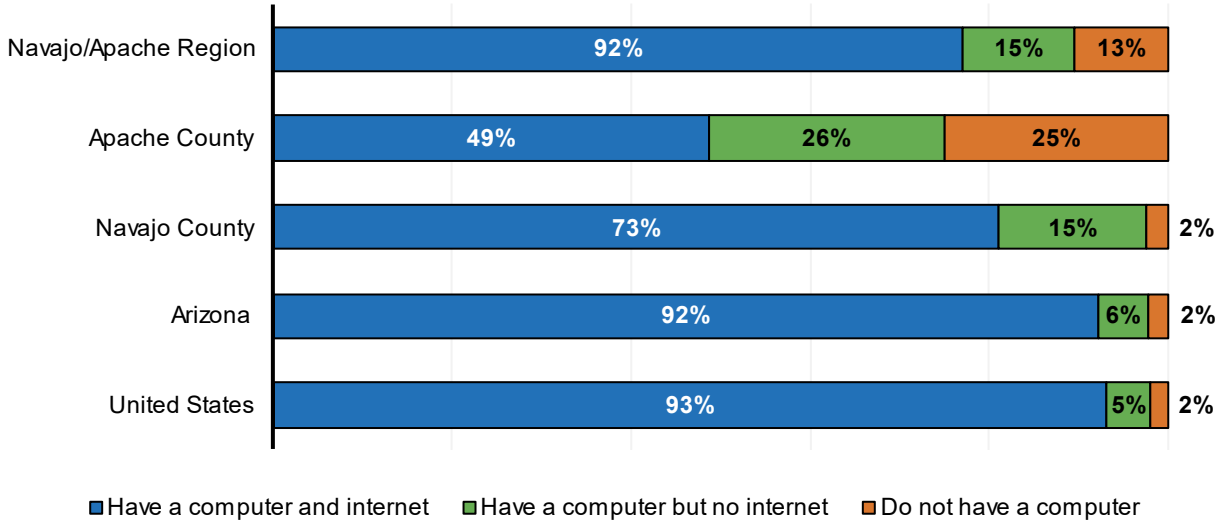
Figure 27. Persons of all ages in households with and without computers and internet connectivity, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each bar should sum to 100% but may not because of rounding.

Figure 28. Children birth to age 17 in households with and without computers and internet connectivity, 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each bar should sum to 100% but may not because of rounding.

Additional data tables related to *Economic Circumstances* can be found in Appendix 1 of this report.



EDUCATIONAL INDICATORS

EDUCATIONAL INDICATORS

Why it Matters

A community's K-12 education system can support positive outcomes for children, families and the overall well-being of the community. Individuals who have higher levels of education tend to live longer and healthier lives.¹⁴³ Graduating from high school, in particular, is associated with better health, financial stability and socio-emotional outcomes as well as a lower risk for incarceration compared to dropping out of high school.^{144, 145} Children with parents that have attained higher levels of education are more likely to do well in school, such as score higher in reading, math and science in their first four years of school and attain higher levels of education themselves.^{146, 147, 148} High-quality early learning experiences also set a strong foundation for children's learning in kindergarten, elementary school and beyond.¹⁴⁹ When children participate in high-quality early education, they are more likely to perform better in reading and math in later grades.¹⁵⁰ Given these lifetime and intergenerational impacts of educational attainment, it is critical to provide substantial support for early education and promote policies and programs that encourage the success of Arizona's children.

What the Data Tell Us

School attendance and absenteeism

School attendance is an important factor in predicting the academic performance and future health of children. Chronic absenteeism, defined as missing 10% of school days in a school year, predicts a student experiencing academic difficulties and even dropping out of school entirely.¹⁵¹ Children who are part of a racial or ethnic minority group, have disabilities or other health conditions, or live in low-income families are at increased risk of absenteeism.^{152, 153}

How the Navajo/Apache Region is faring

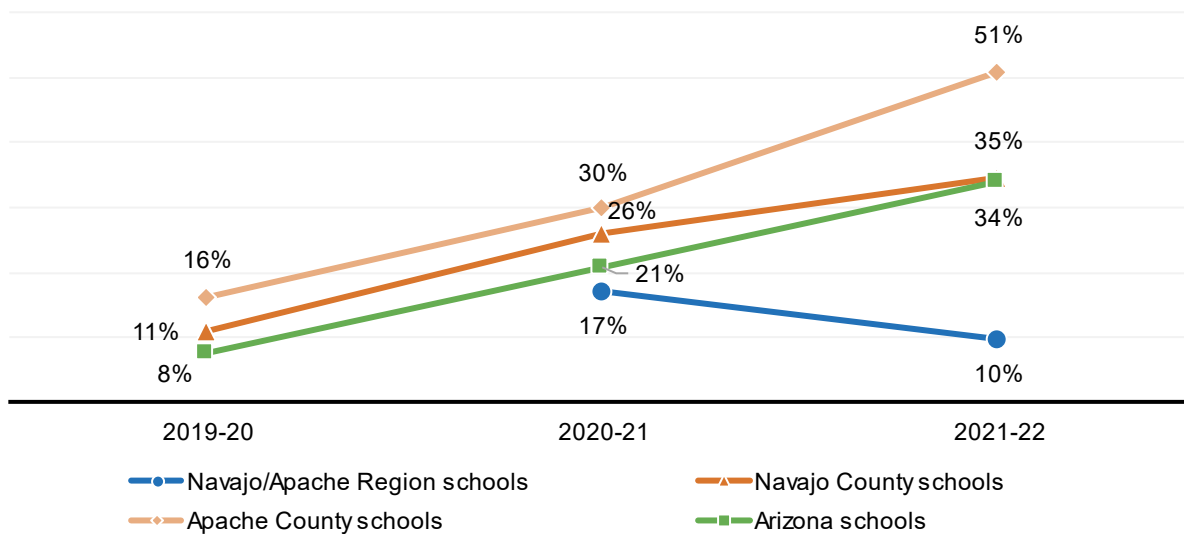
- In the 2021-22 school year, 178 children were enrolled in preschool in public and charter schools in the Navajo/Apache Region. Kindergarten through 3rd grade enrollments for the region were all much higher, ranging from a low of 888 in 2nd grade to a high of 928 children enrolled in kindergarten (Table 11).
- Across the state as well as both Apache County and Navajo County, kindergarten through 3rd grade chronic absence rates more than tripled from 2019-20 (Arizona 8%; Apache County 16%; Navajo County 11%) to 2021-22 (Arizona 34%; Apache County 51%; Navajo County 35%). However, in the Navajo/Apache Region, these chronic absence rates decreased from 17% in the 2020-21 school year to 10% in the 2021-22 school year (data was not available at the region level for the 2019-20 school year) (Figure 29).

Table 11. Preschool to 3rd grade students enrolled in public and charter schools, 2021-22

Geography	Preschool	Kindergarten	1st Grade	2nd Grade	3rd Grade
Navajo/Apache Region schools	178	928	895	888	916
Apache County schools	91	729	687	710	679
Navajo County schools	237	1,145	1,179	1,153	1,174
Arizona schools	17,840	79,423	79,202	82,342	82,243

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Figure 29. Chronic absenteeism rates for kindergarten to 3rd grade students, 2019-20 to 2021-22



Source: Arizona Department of Education (2023). [Absenteeism Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Please note that school closures and transitions to distance learning substantially affected how attendance was tracked by schools in the spring of 2020. Regional data was not available in 2019-20 due to difference in how data were pulled in prior RNA cycles.

Achievement on standardized testing

All Arizona public schools, including both district and charter schools (but not private schools), are required to administer state and federally mandated standardized tests. Between 2019 and 2022, the statewide English Language Arts (ELA) and Math assessment tool for 3rd through 8th graders in public schools was Arizona’s Statewide Achievement Assessment for English Language Arts and Math

(AzM2), previously called Arizona’s Measurement of Educational Readiness to Inform Teaching (AzMERIT).^{xxi, 154, 155} The *Move on When Reading* policy, enacted by the Arizona legislature in 2010, states that a 3rd grade student shall not be promoted to 4th grade if their reading score falls far below the 3rd grade level, as established by the State Board of Education.^{xxii, 156}

These policies are intended to help identify struggling readers who may benefit from more targeted literacy interventions. Children’s 3rd grade reading comprehension and proficiency skills can predict their future academic success, such as their likelihood of graduating high school and attending college.¹⁵⁷ Poor reading skills are associated with a six-fold increase in the likelihood of dropping out of high school in comparison to proficient readers.¹⁵⁸

How the Navajo/Apache Region is faring

- In the 2021-22 school year, 42% of 3rd grade students in the Navajo/Apache Region were meeting or exceeding proficiency expectations for 3rd grade English Language Arts, slightly higher than the proportion across the state (41%). A slightly higher percentage (46%) were meeting or exceeding proficiency expectations for Math, much higher than students across the state (40%) (Table 12 & Table 13).
- In the region, passing rates for the 3rd grade English Language Arts assessment increased from 41% in 2020-21 to 42% in 2021-22. During the same period, passing rates increased from 35% to 41% across the state (Figure 30). However, passing rates in both the region and the state remained lower than pre-pandemic passing rates on AzMERIT assessments.
- Third grade Math passing rates also increased from 41% in 2020-21 to 46% in 2021-22 and were higher than across the state during both periods, where passing rates increased from 36% to 40% (Figure 31). Again, passing rates in both the region and the state remained lower than pre-pandemic passing rates on AzMERIT assessments.

^{xxi} In 2022, AzM2 was replaced by Arizona’s Academic Standards Assessment (AASA).

^{xxii} Exceptions exist for students identified with or being evaluated for learning disabilities or reading impairments, English language learners and those who have demonstrated reading proficiency on alternate forms of assessment approved by the State Board of Education. Students who test in the ‘far below’ proficiency range can also be promoted to 4th grade if they complete summer school and then demonstrate reading at a proficient level. Given these exceptions, historically very few 3rd grade students (<1%) have been retained due to *Move on When Reading*. As of 2022, schools with early elementary grade students are now required to screen all kindergarten and first grade students for dyslexia and have at least one teacher who has complete ADE-approved trainings in reading instruction, intensifying instruction and understanding and recognizing dyslexia.

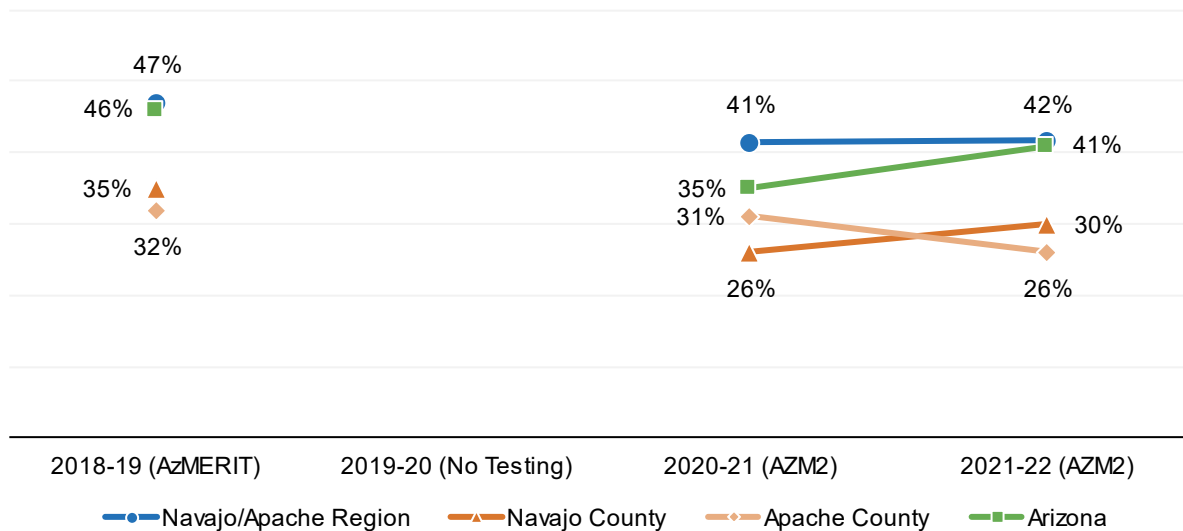
Table 12. Assessment results: 3rd Grade English Language Arts, 2021-22

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
Navajo/Apache Region schools	DS	45%	13%	24%	17%	42%
Apache County schools	642	66%	8%	17%	9%	26%
Navajo County schools	1,134	58%	12%	19%	11%	30%
Arizona schools	79,586	47%	12%	26%	15%	41%

Source: Arizona Department of Education (2023). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: The number of students tested is suppressed at the regional level due to redaction requirements from the ADE data access process.

Figure 30. Trends in passing rates for 3rd Grade English Language Arts assessments, 2021-22



Source: Arizona Department of Education (2023). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

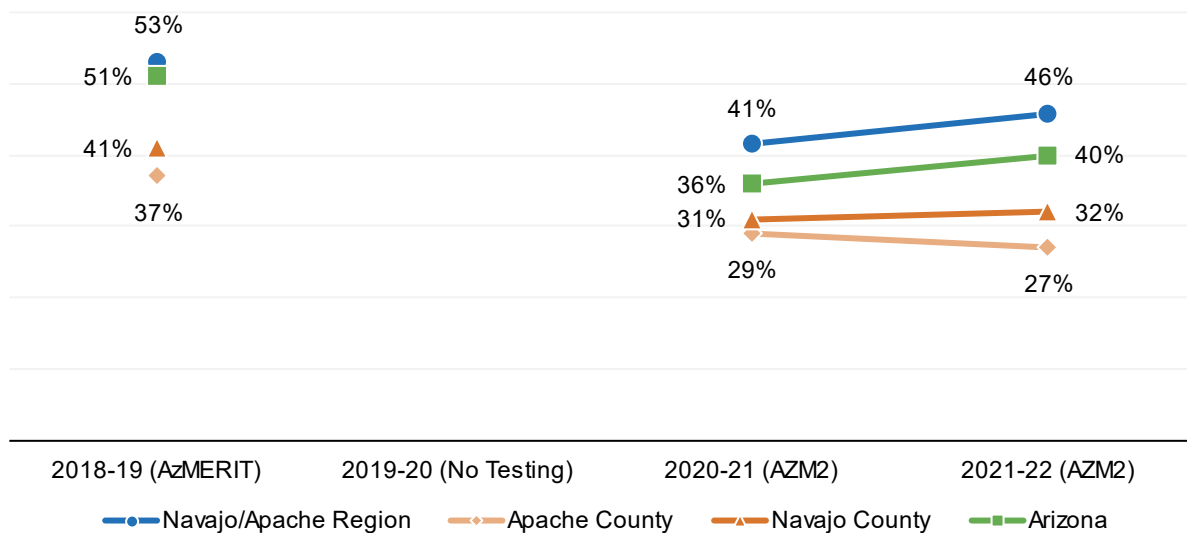
Table 13. Assessment results: 3rd Grade Math, 2021-22

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
Navajo/Apache Region schools	DS	27%	27%	33%	13%	46%
Apache County schools	660	48%	25%	20%	7%	27%
Navajo County schools	1,115	39%	29%	24%	8%	32%
Arizona schools	80,445	33%	27%	28%	12%	40%

Source: Arizona Department of Education (2023). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: The number of students tested is suppressed at the regional level due to redaction requirements from the ADE data access process.

Figure 31. Trends in passing rates for 3rd Grade Math assessments, 2018-19 to 2021-22



Source: Arizona Department of Education (2023). [Assessment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Regional data were not available for 2018-19 due to differences in how data were pulled in prior RNA cycles.

Graduation rates and adult educational attainment

High school graduation and dropout rates within a region can provide insight into the assets within and challenges faced by a community and its future workforce. Adults who graduated from high school have higher rates of employment, higher incomes and better overall health compared to adults who dropped out of high school, even if they received a high school equivalency degree, such as the General

Educational Development certificate (GED).¹⁵⁹ Maternal education is associated with an array of child outcomes starting with infant health,^{160, 161, 162} and both targeted and universal programs serving children from families with lower educational backgrounds can support child development.^{163, 164}

In contrast to the U.S. as a whole, Arizona has a larger proportion of disconnected youth, defined as teenagers ages 16 to 19 who are neither attending school nor employed,^{xxiii} which has been linked to negative physical and mental health outcomes and higher rates of unemployment.¹⁶⁵ Native youth, both nationally and in Arizona, are disproportionately disconnected and therefore particularly vulnerable to these negative outcomes and may need additional support.¹⁶⁶

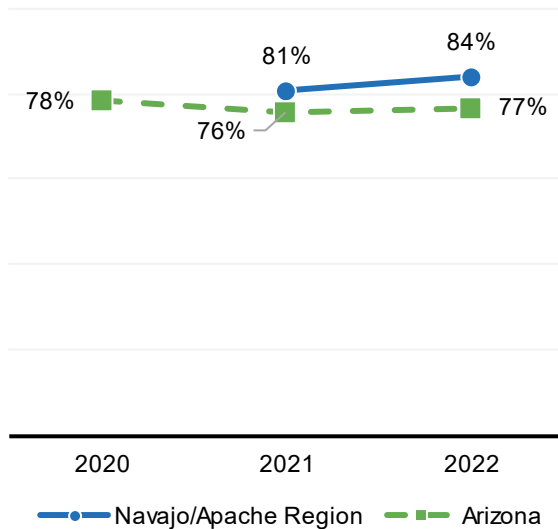
How the Navajo/Apache Region is faring

- Four- and five-year graduation rates in the Navajo/Apache Region have remained above state rates in recent years. In 2021 (the most recent year of data available for both rates), the four-year graduation rate for the region was 81% and the five-year graduation rate was 83%. Both rates were higher than state four- and five-year graduation rates that year (76% and 79%, respectively) (Figure 32 & Table 14).
- The 7th-12th grade dropout rate in the Navajo/Apache Region more than doubled between 2019-20 (2%) and 2020-21 (5%) before decreasing to 3% in 2021-22. Dropout rates statewide steadily increased over the same period (Table 15).
- Nearly two-thirds of adults (65%) in the Navajo/Apache Region have more than a high-school education, the same proportion seen across the state (65%). The share of the population with an Associate's or Bachelor's degree in the region (32%) is lower than that seen statewide (40%) (Figure 33).
- In 2020, 86% of births in the Navajo/Apache Region were to mothers who had at least a high school diploma, GED or higher educational attainment, decreasing slightly to 85% in 2021, similar to proportions across Arizona in 2020 (84%) and 2021 (85%) (Table 16).

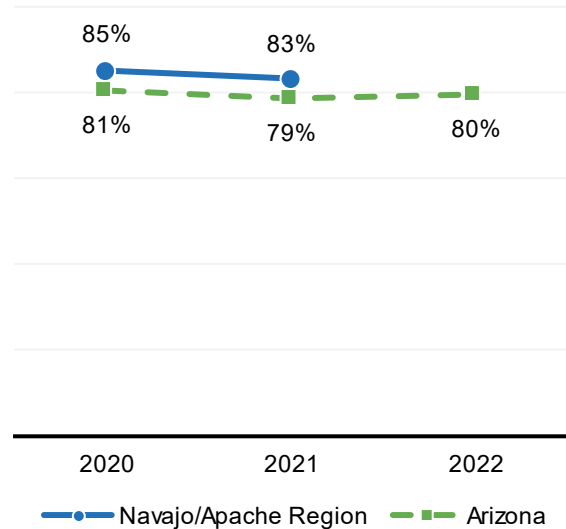
^{xxiii} Age ranges used for 'disconnected youth' vary by source, with some estimates including both teenagers ages 16-19 and young adults ages 20-24 and others focusing on only teenagers or young adults.

Figure 32. Trends in 4-year and 5-year graduation rates, 2020 to 2022

4-year graduation rates



5-year graduation rates



Source: Arizona Department of Education (2023). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: Regional data were not available for 2020 4-year graduation rates, and 5-year graduation rates for 2022 had yet to be released at the time of the data pull for this report (December 2023).

Table 14. Trends in 4-year and 5-year graduation rates, 2020 to 2022

Geography	4-Year Graduation Rates			5-Year Graduation Rates		
	2020	2021	2022	2020	2021	2022
Navajo/Apache Region schools	N/A	81%	84%	85%	83%	N/A
Apache County schools	81%	77%	77%	84%	82%	83%
Navajo County schools	81%	76%	81%	83%	82%	84%
Arizona schools	78%	76%	77%	81%	79%	80%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Regional data were not available for 2020 4-year graduation rates, and 5-year graduation rates for 2022 had yet to be released at the time of the data pull for this report (December 2023). The 5-year graduation rate reflects the percentage of students who graduated high school within 5 years of entry. See

<https://www.azed.gov/sites/default/files/2017/08/2018%2006%2001%20Graduation%20DO%20and%20Persistence%20Rate%20Tech%20Manual.pdf?id=598a34233217e10ce06647ff>

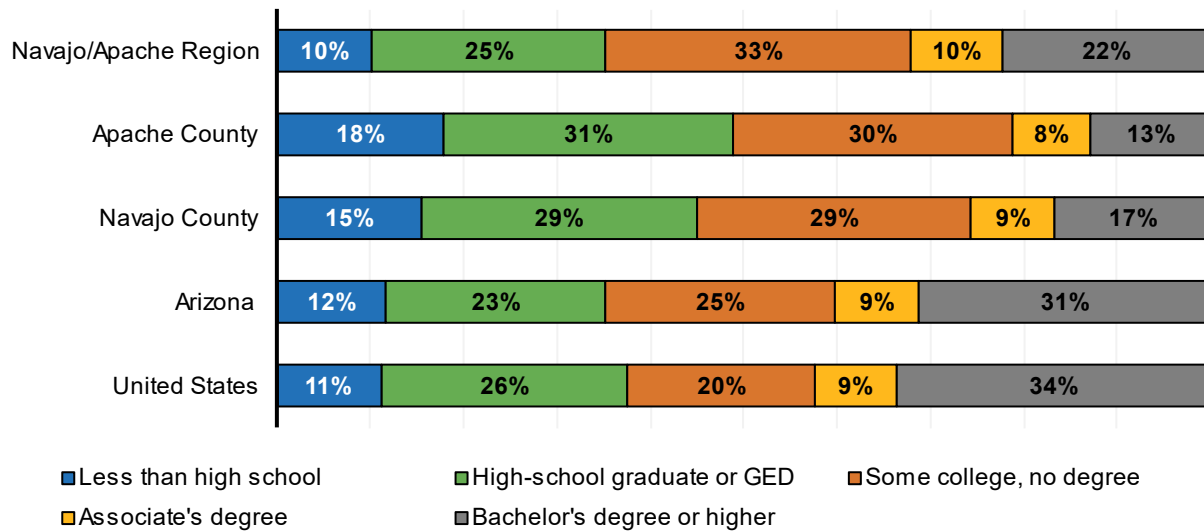
Table 15. 7th to 12th grade dropout rates, 2019-20 to 2021-22

Geography	Dropout Rate, 2019-20	Dropout Rate, 2020-21	Dropout Rate, 2021-22
Navajo/Apache Region schools	2%	5%	3%
Apache County schools	3%	7%	8%
Navajo County schools	3%	8%	6%
Arizona schools	3%	4%	5%

Source: Arizona Department of Education (2023). [Dropout Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Notes: Dropouts are defined by ADE as students who were enrolled in school at any time during the school year but were not enrolled at the end of the year and who did not transfer to another school, graduate, or die. Dropout rates are calculated by dividing the number of dropouts by the total enrollment. In many elementary districts, dropout rates reflect students who transferred out and were lost to follow-up.

Figure 33. Level of education for the adult population (ages 25 and older), 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey five-year estimates 2017-2021, Table B15002

Note: The five percentages in each bar should sum to 100% but may not because of rounding.

Table 16. Level of education of the mothers of babies born in 2020 and 2021

Geography	Calendar year	Number of births	Mother had less than a high-school education	Mother finished high school or had GED	Mother had more than a high-school education
Navajo/Apache Region	2020	878	14%	31%	55%
	2021	818	15%	31%	54%
Navajo County	2020	1,305	18%	35%	47%
	2021	1,210	17%	36%	47%
Apache County	2020	785	16%	31%	53%
	2021	762	17%	31%	51%
Arizona	2020	76,781	15%	27%	57%
	2021	77,857	14%	27%	58%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table. Please note that maternal education is unknown for a small number of births so totals may not sum to 100%.

Additional data tables related to *Educational Indicators* can be found in Appendix 1 of this report.



EARLY LEARNING

EARLY LEARNING

Why it Matters

Early childhood is a pivotal time for building crucial physical, cognitive and social-emotional skills.^{167,}
¹⁶⁸ Early experiences are important for healthy brain development and set the stage for lifelong learning and well-being.^{169, 170, 171} Just as rich, stimulating environments can promote healthy development, early negative experiences can also have lasting effects.^{172, 173} However, considering the major COVID-19 pandemic-related challenges experienced by many Arizona families, it is important to remember that predicted short- and long-term effects of adverse experiences are not inevitable.^{174, 175} Access to quality early care and learning environments can be a powerful protective factor for every child, and the effects can be particularly life-changing for children facing chronic stressors and for children with disabilities.^{176, 177}

Quality early care and educational experiences help children develop into capable learners by supporting many crucial systems in the body.¹⁷⁸ In addition to promoting healthy brain development, positive and adverse experiences in the first few years of life can shape a child's immune functioning, ability to handle stress in a healthy way and capacity to learn and thrive.¹⁷⁹ Each of these factors contribute to being a skillful learner.¹⁸⁰

What the Data Tell Us

Access to early care and education

Early childhood systems play a key role in supporting children, parents, caregivers and communities as a whole.^{181, 182} Unfortunately, many Arizona families continue to face obstacles when seeking quality early care and education. Communities in both urban and rural areas of Arizona face a gap between the number of young children and licensed child care slots.^{183, 184, 185, 186} According to the Center for American Progress, almost half of Arizonans (48%), including the majority of rural, low-income and Hispanic or Latino families, live in a “child care desert,” defined as areas where there are three times as many children as there are available child care opportunities.^{187, 188}

Analyses by the Bipartisan Policy Center indicate that Arizona needed an additional 76,740 licensed or registered early care and education slots to have enough for all young children in working families in 2019.¹⁸⁹ Because the COVID-19 pandemic forced many child care centers and home-based providers to close either temporarily or permanently, care has been disrupted for many more families in Arizona and nationwide.¹⁹⁰ Disruptions to child care arrangements may have been especially burdensome for Hispanic and Latino households,¹⁹¹ which is meaningful to Arizona given the high proportion of young children who are Hispanic or Latino compared to children nationwide. Parents and caregivers in Hispanic and Latino households were less likely to use paid leave or to simultaneously supervise their children while working – likely due to lower access to paid leave and telework options – and more likely to leave or lose their job as a result.¹⁹²

Availability and cost are especially challenging for parents seeking care for infants and young children in Arizona. For example, a family with one infant and one preschooler can expect to pay about \$1,670 per month for a licensed child care provider.¹⁹³ This monthly cost exceeds what many Arizonans pay per month for housing, creating potential financial challenges that are further compounded for families with multiple children under the age of 6.^{xxiv, 194, 195} The Arizona Department of Economic Security (DES) provides child care assistance to financially eligible families, including specific funding for families involved with the Arizona Department of Child Safety (DCS).¹⁹⁶ However, families that are eligible to receive funding may not have access to child care services in their community that are licensed or that accept assistance payments, leaving them unable to utilize the funding.^{197, 198}

How the Navajo/Apache Region is faring

- In the Navajo/Apache Region, 25% of children (ages 3 and 4) were estimated to be enrolled in preschool^{xxv} or kindergarten, which is a much lower proportion than across the state (37%). Preschool enrollment in the region decreased substantially in recent years from 46% to 35%, whereas only a minimal decrease was seen statewide (from 37% to 36% during the same period). In 2021, preschool enrollment in Arizona hit a 10-year low,¹⁹⁹ which makes the Navajo/Apache Region's decrease in enrollments not inconsistent with statewide trends, but much more severe (Figure 34).
- Most licensed child care capacity in the region is provided by child care centers (98%), with a small proportion provided by family child care providers (2%). Given there are 2,856 children with all parents in the labor force in the region according to the 2017-2021 American Community Survey (ACS) (see Table 8), an availability of only 793 child care slots suggests that many of these parents face challenges in finding quality child care for their children (Table 17).
- An area is labeled a child care desert if the ratio of children to child care slots is three to one or more. Looking collectively across all children birth to age 5, the Navajo/Apache Region is considered a desert, with a ratio of 4.7 children to each licensed slot. For 1 year-olds, the ratio is a bit lower, with 4.1 children per slot. However, regulated infant care in the region is very scarce, with about 37 infants per available infant child care slot. While this pattern is similar across the state, the limited availability of infant care is notable in the Navajo/Apache Region. There were only 19 slots for infants in Arizona Department of Health Services (ADHS)-licensed child care providers in July 2023 in the region. Given that there were 802 babies born in 2022 in the region

^{xxiv} In addition to the financial challenges faced by parents paying for child care, the early care and education workforce is one of the most underpaid fields in the country. Nationally, educators working with infants and toddlers are 7.7 times more likely to live in poverty compared to K-8 teachers. The median hourly wage for a child care worker in Arizona (\$11.97) is \$13.19 less per hour than what is considered a living wage for a single parent with 1 child (\$25.16). For more information on early care and education workforce wages visit <https://cscce.berkeley.edu/workforce-index-2020/the-early-educator-workforce/early-educator-pay-economic-insecurity-across-the-states/>

^{xxv} The American Community Survey uses the terms nursery school and preschool interchangeably.

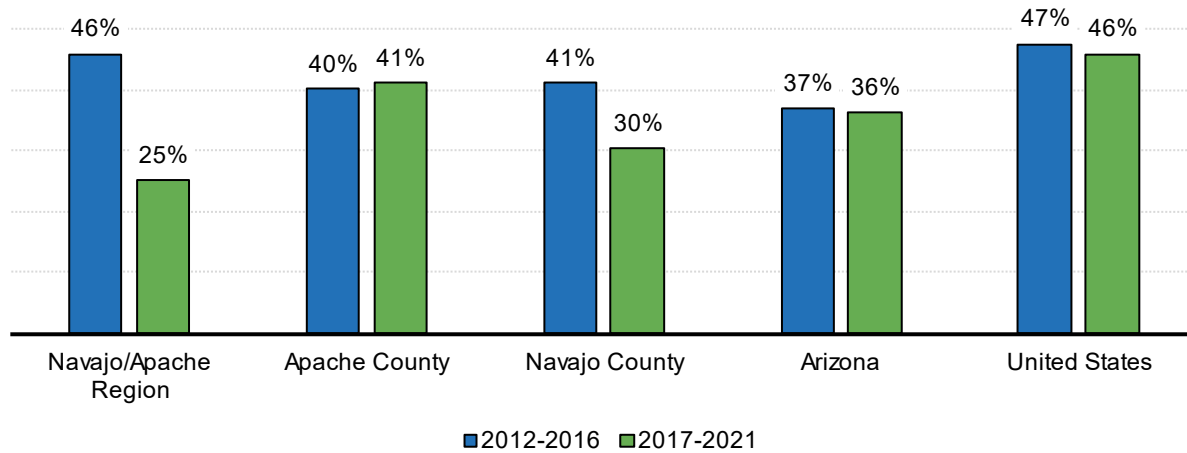
(see Figure 3), this regulated child care capacity suggests that parents must turn to informal or unlicensed care providers if they need infant care (Table 18, Figure 35 & Table 3).

- The median monthly costs of child care show that care provided by certified family homes in Navajo and Apache counties is the lowest priced type of care in the area at \$525 per month for infants to 5-year-olds for full-time care. For other types of care, care for infants is the most expensive in the counties and the state, with the median monthly cost for infant care in licensed centers (\$945) and public schools (\$1,050) in the counties similar to the costs of that care across the state (\$949 and \$1,011, respectively). Licensed centers and public schools providing child care in Navajo and Apache counties are notably more expensive than home-based care (Figure 36), and there are relatively few slots with these more budget-friendly providers.
- Child care costs as a percentage of income are elevated in Apache County and Navajo County compared to the state overall. In 2022, sending an infant to a licensed center cost nearly one-third (30%) of a family's income in Apache County and a quarter (24%) in Navajo County, compared to 15% for families across the state. The percentage of income spent on older children's care was lower in comparison in both counties but still substantially more expensive in terms of income than seen statewide (Figure 37).
- Median child care costs have also been increasing in the counties and state since 2018. For example, the cost of care in the most available type of care in Navajo and Apache counties, licensed centers, increased 25% for one infant, 20% for one 1–2-year-old and 15% for one 3–5-year-old between 2018 and 2022. However, unlike the state, costs in certified family homes in the counties remained stable in this period (Table 19).
- The number of children eligible for and receiving DES child care assistance in the Navajo/Apache Region has differed from the pattern seen across the state in recent years. The number of children eligible for and receiving assistance increased in the region from 2017 to 2019, mirroring the increase seen statewide. However, the number of eligible children in the region has steadily fallen in 2020 through 2022, while statewide this number only substantially dropped in 2022. The proportion of eligible families not using DES child care assistance decreased in both the region and state from 2020 (region 24.7%; Arizona 18.3%) to 2022 (region 5.9%; Arizona 9.2%) (Figure 38 & Figure 39).
- Children are automatically eligible for DES child care assistance when they are involved with DCS.^{xxvi} For DCS-involved children, the number of children eligible for child care assistance in the region has decreased in recent years, from a high of 124 young children in 2019, to 49 in 2022, mirroring the pattern seen across the state. Again, like the pattern seen with non-DCS-

^{xxvi} Children involved with DCS include children who have been removed by DCS and placed with a foster family or kinship caregiver as well as children who are residing with their own family but receiving services from DCS (such as in-home family support and counseling). Families of these children are not required to pay a co-pay for child care.

involved children, the number of children receiving assistance substantially declined, falling by about two-thirds between 2019 (n=97) and 2022 (n=36) (Figure 40).

Figure 34. School enrollment for children ages 3 to 4, 2012-2016 and 2017-2021 ACS



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B14003. U.S. Census Bureau. (2017). American Community Survey 5-year estimates 2012-2016, Table B14003

Note: In this table, “school” may include nursery school, preschool, or kindergarten.

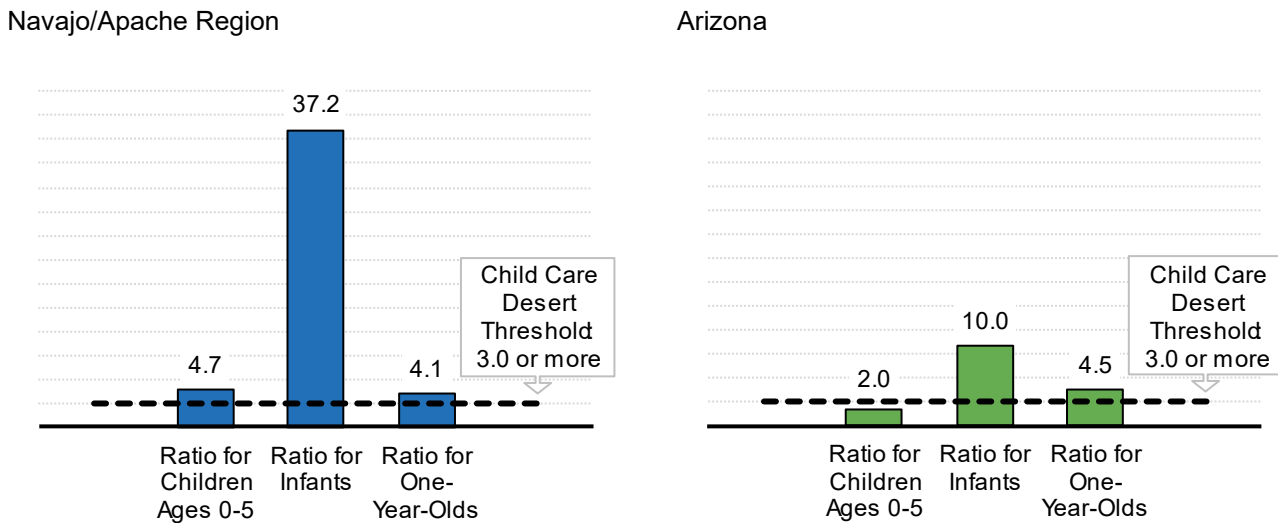
Table 17. Number and Capacity of Early Care & Education Providers active in the National Data System for Child Care, May 2023

Geography	Total ECE Providers		Child care centers		Family child care providers		Nannies or individual providers	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
Navajo/Apache Region	20	793	18	779	2	14	0	0
Apache County	13	780	13	780	0	0	0	0
Navajo County	28	1,240	24	1,212	4	28	0	0
Arizona	2,454	211,860	1,933	208,407	516	3,435	5	18

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: Providers in this table are those who were active in the National Data System for Child Care NACCRRAware database as of May 2023. This database of child care providers includes most state-licensed child care providers in the state of Arizona, but the database does not include informal or unlicensed providers or providers who are licensed through military or tribal authorities. Please also note that not all school-based preschools or Head Start centers participate in this data system (whereas all center-based facilities are required to be licensed and thus will appear in the ADHS licensing dataset in Table 18). The two family child care providers in Navajo County but not in the region are both located in Winslow.

Figure 35. Ratio of children to slots in ADHS-licensed child care facilities, July 2023



Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14. ADHS (2023). [Child Care Licensing Database]. Retrieved from <https://www.azdhs.gov/licensing/childcare-facilities/index.php#parents-databases> on 12 July 2023

Note: ADHS licenses most child care centers in the state of Arizona, except for those regulated by military or tribal authorities. While these licensed slots do not account for home-based care, as evidenced in Table 17, the majority of child care capacity in the region is in center-based care. Child care deserts are defined by the Center for American Progress as areas where there are more than three times as many children as available child care slots. To see a nationwide map of childcare supply, visit <https://childcaredeserts.org/>

Table 18. ADHS-licensed child care providers by age of child served, July 2023

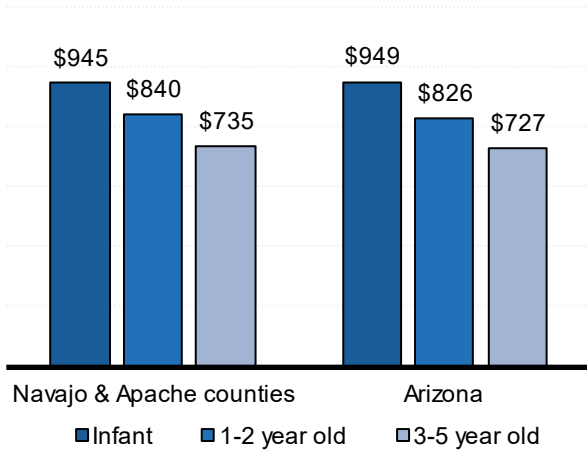
Geography	Licensed Providers		Infants		1-year-olds		Number of providers licensed for 2-year-olds	Number of providers licensed for 3- to 5-year-olds
	Num.	Capacity	Num.	Capacity	Num.	Capacity		
Navajo/Apache Region	22	1,008	3	19	9	173	11	21
Apache County	15	715	0	0	2	40	2	15
Navajo County	27	1,306	8	46	13	190	15	24
Arizona	2,344	246,369	822	7,474	1,136	17,323	1,217	2,175

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P1, P14. ADHS (2023). [Child Care Licensing Database]. Retrieved from <https://www.azdhs.gov/licensing/childcare-facilities/index.php#parents-databases> on 12 July 2023

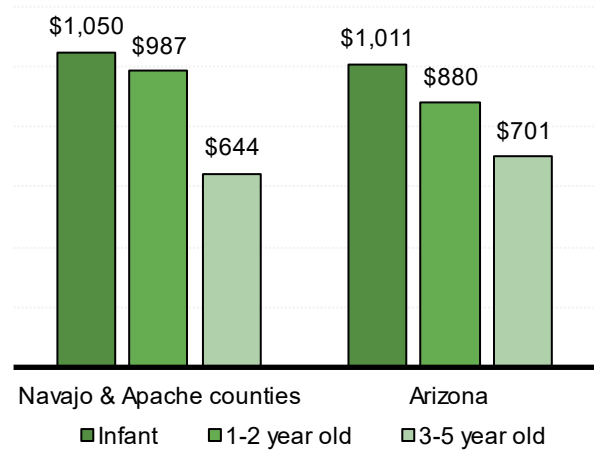
Note: ADHS licenses most child care centers in the state of Arizona, except for those regulated by military or tribal authorities. While these licensed slots do not account for home-based care, as evidenced in Table 17, the majority of child care capacity in the region is in center-based care.

Figure 36. Median monthly charge for full-time child care, 2022

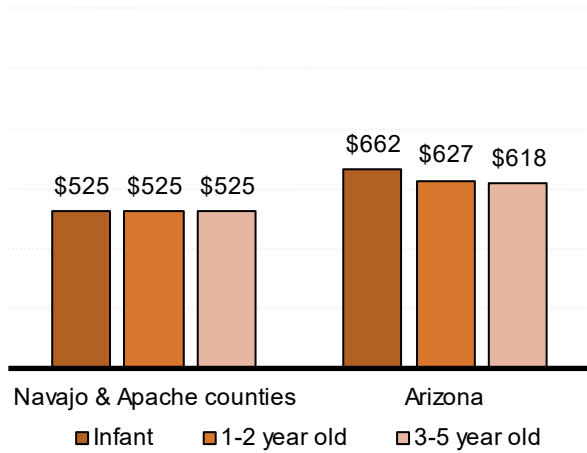
Licensed centers



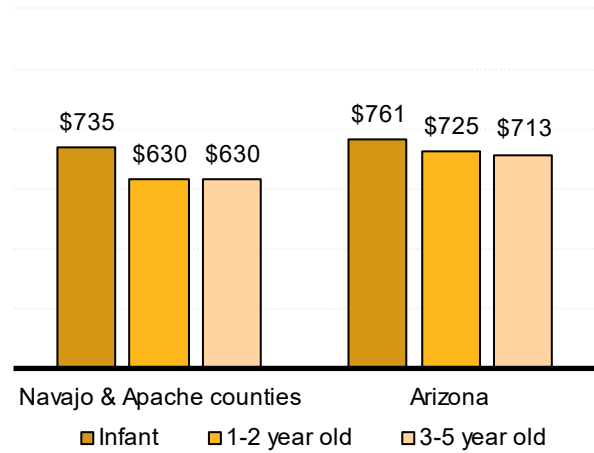
Public schools



Certified family homes



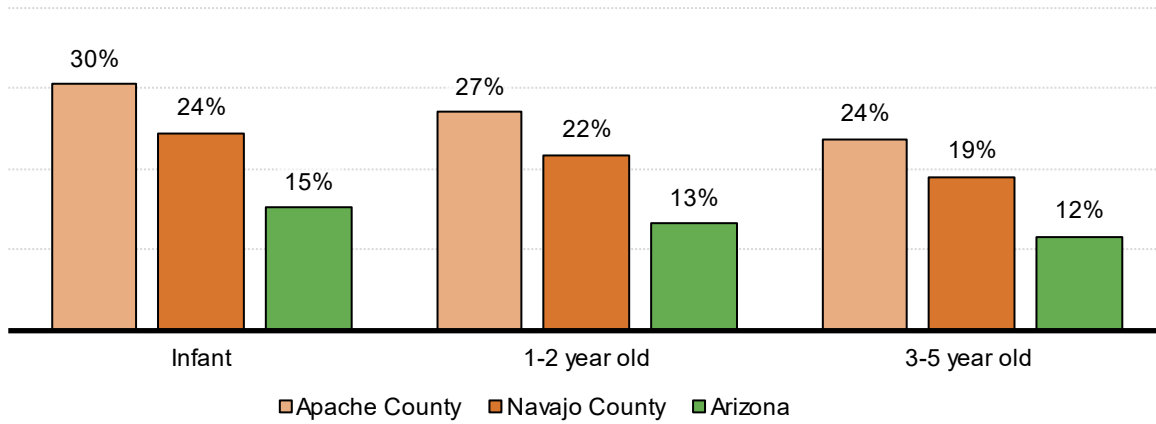
Small group homes



Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Note: Median monthly charges are calculated by multiplying the daily median cost of care by 21 to approximate a full month of care. Care costs are drawn from District III, which includes Navajo, Apache, Coconino and Yavapai counties.

Figure 37. Cost of center-based child care for one child, as a percentage of income, 2022



Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Note: Annual costs of care are calculated by multiplying the median daily cost of care by 252 to approximate a full year of care, then dividing by median income in a given area. The U.S. Department of Health and Human Services Child Care and Development Fund (CCDF) Program sets a benchmark for affordable co-payments for child care at 7% of family income. Care costs are drawn from District III, which includes Navajo, Apache, Coconino and Yavapai counties, while median income estimates are for all families with children in each county.

Table 19. Increase in median child care cost by provider type and child age, 2018 to 2022

Geography	Certified family homes			Small group homes			Licensed centers		
	One infant	One 1- or 2-year-old	One 3- to 5-year-old	One infant	One 1- or 2-year-old	One 3- to 5-year-old	One infant	One 1- or 2-year-old	One 3- to 5-year-old
Navajo/Apache Region	Regional data not available								
Apache & Navajo counties	0%	0%	0%	+23%	+13%	+18%	+25%	+20%	+15%
Arizona	+26%	+23%	+26%	+28%	+28%	+28%	+21%	+19%	+18%

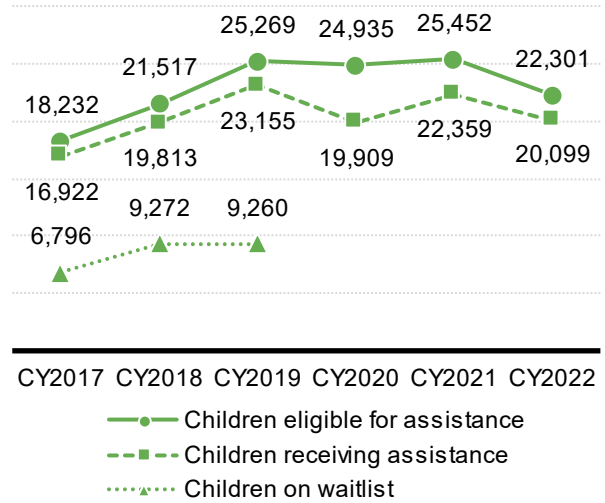
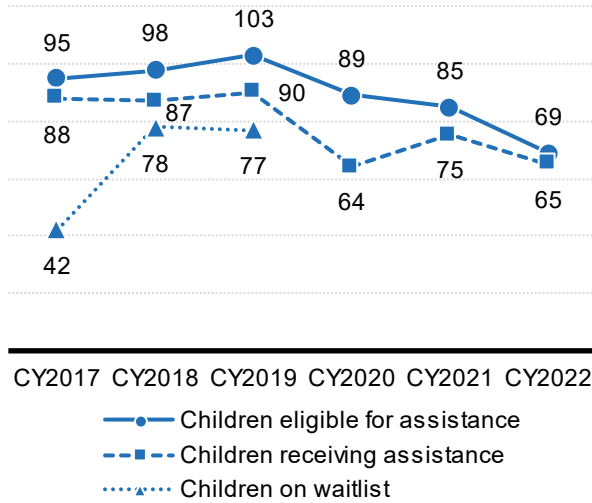
Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Note: Change in care costs are drawn from District III, which includes Navajo, Apache, Coconino and Yavapai counties.

Figure 38. Children birth to age 5 eligible for, receiving, and on waitlist for DES child care assistance, 2017 to 2022

Navajo/Apache Region

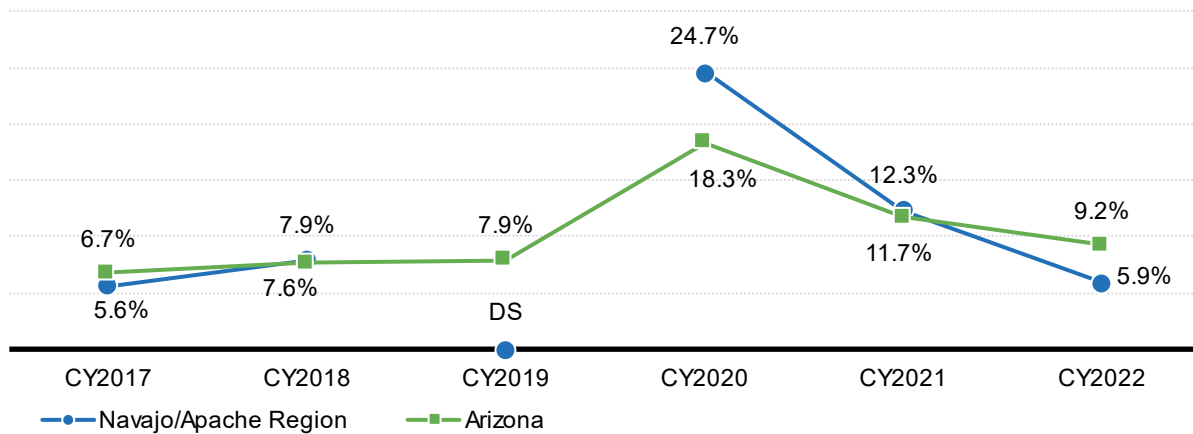
Arizona



Sources: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: The DES child care waitlist was suspended in June 2019, so there are no waitlist numbers for 2020 or beyond. DES child care assistance amounts vary based on a number of factors including the age of the child, the type of provider and the quality status of the provider. For more information, please see the current DES reimbursement rates for child care at https://des.az.gov/sites/default/files/dl/CCA-1227A_1.pdf?time=1646262773961

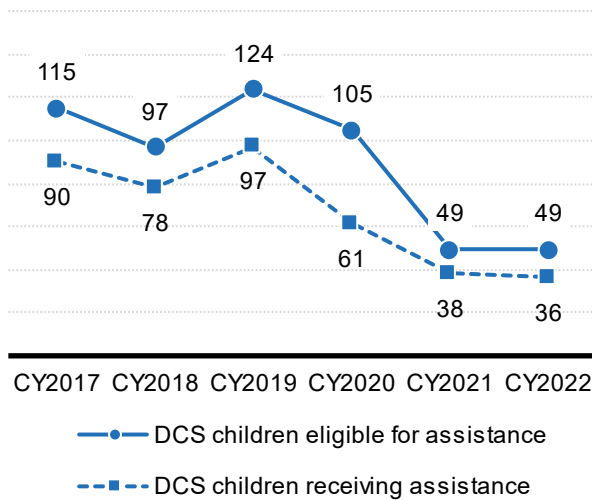
Figure 39. Eligible families not using DES child care assistance, 2015 to 2020



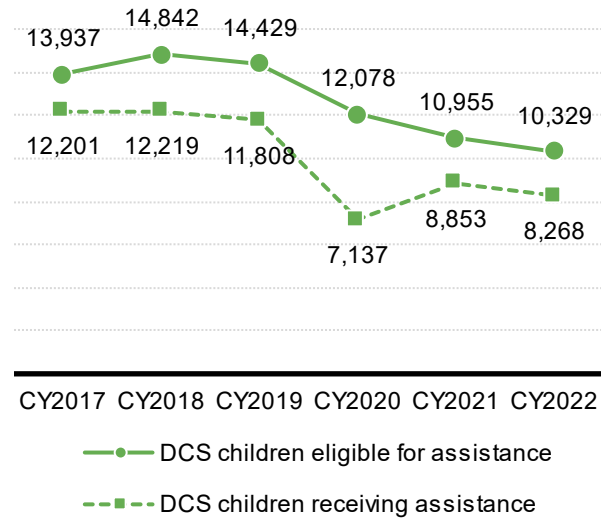
Source: Arizona Department of Economic Security (2021). [Child Care Administration dataset]. Unpublished data.

Figure 40. DCS-involved children birth to age 5 eligible for and receiving for DES child care assistance, 2017 to 2022

Navajo/Apache Region



Arizona



Sources: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: The DES child care waitlist was suspended in June 2019, so there are no waitlist numbers for 2020 or beyond. DES child care assistance amounts vary based on a number of factors including the age of the child, the type of provider and the quality status of the provider. For more information, please see the current DES reimbursement rates for child care at https://des.az.gov/sites/default/files/dl/CCA-1227A_1.pdf?time=1646262773961

High quality early care and education

Children who begin their education in high-quality preschool programs tend to repeat grades less frequently, obtain higher scores on standardized tests, experience fewer behavior problems and are more likely to graduate from high school.²⁰⁰ This provides a return on investment to society through increased educational achievement and employment, reductions in crime and better overall health of children as they mature into adults.^{201, 202} The key ingredients in positive early experiences include responsive relationships, core adaptive skills development, reduced sources of stress and appropriate nutrition – all things that quality early care and education are in a unique position to provide at the critical time to encourage optimal learning and well-being for years to come.²⁰³ Early care and education shapes far more than a child’s future academic achievement, and an investment in early childhood can be one of the most productive investments a community can make.²⁰⁴

One way that the quality of early child care and education is measured in Arizona is through the Quality First program.²⁰⁵ The program offers training and funding for participating schools and providers to improve the quality of the services they provide. The Quality First program also rates the quality of child care providers and preschools on a scale of one to five stars, with providers considered high quality

when they have received a three-star rating or higher.²⁰⁶ Quality First providers are supported by regional funding.

How the Navajo/Apache Region is faring

- The 13 Quality First child care providers in the Navajo/Apache Region enrolled 435 young children in state fiscal year (SFY) 2023. The majority of children (79%) in Quality First sites in the region were enrolled at a site with a 3-5-star rating, indicating a quality provider. This was notably higher than across the state, where 68% of children enrolled in Quality First sites were at a site with a 3-5-star rating (Table 20; Table 21; Figure 41).
- About one in 10 children enrolled in a Quality First provider site in the region (47 of 435; 11%) were served by Quality First Scholarships in SFY 2023 (Table 21).
- In May 2023, three licensed or registered child care providers in the region were nationally accredited, representing 15% of providers in the region. These accredited providers had the capacity to serve 195 children, which represents 25% of child care capacity in the region (Table 22).
- DES defines quality environments as child care providers with a 3-, 4-, or 5-star Quality First rating, a national accreditation or a Child Development Associate (CDA) credential for family child care providers. At the regional level in 2022, 54% of non-DCS involved young children and 53% of DCS- involved children receiving DES child care assistance were enrolled in quality environments, lower proportions than across the state as a whole (68% non-DCS; 72% DCS) (Table 23).

Table 20. Quality First child care providers by funding source, state fiscal year 2023

Geography	Child care providers served	Regional Funding	DES Expansion	Buy-In
Navajo/Apache Region	13	4	9	0
Apache County	<i>County data not available</i>			
Navajo County	<i>County data not available</i>			
Arizona	1,434	1,045	384	5

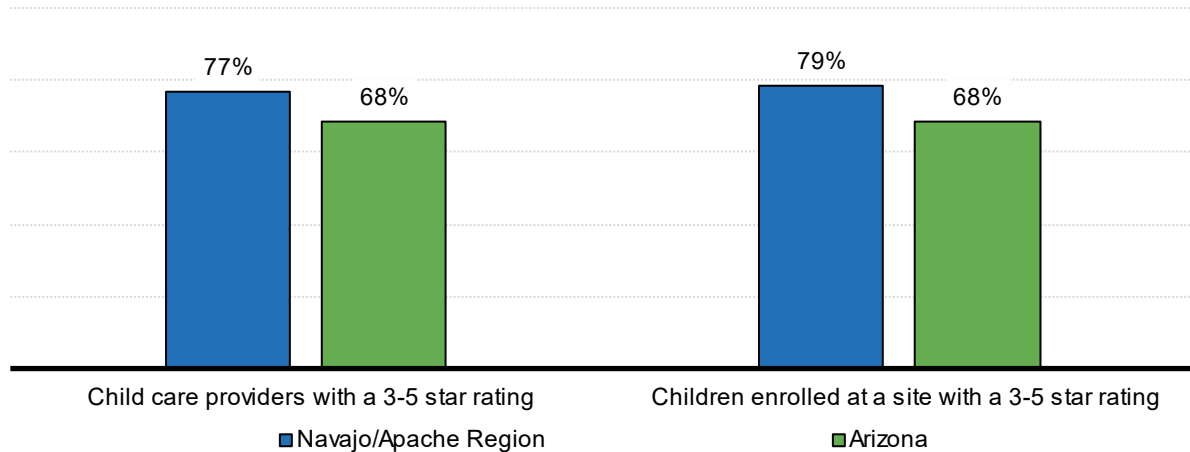
Source: First Things First (2023). Quality First Summary Data. Unpublished data.

Table 21. Children served by Quality First child care providers, state fiscal year 2023

Geography	Children enrolled at a Quality First provider site	Children enrolled at a Quality First provider site with a star rating	Children enrolled at a Quality First provider site with a 3–5-star rating	% of Children in a Quality-Level Setting (3-5 Stars)	Children served by Quality First Scholarships
Navajo/Apache Region	435	342	342	79%	47
Apache County	<i>County data not available</i>				
Navajo County	<i>County data not available</i>				
Arizona	70,837	54,155	48,379	68%	8,262

Source: First Things First (2023). Quality First Summary Data. Unpublished data.

Figure 41. Percent of Quality First programs with a 3-5 star-rating and percent of children enrolled in quality-level programs, state fiscal year 2023



Source: First Things First (2023). Quality First Summary Data. Unpublished data.

Note: Quality First considers providers with a 3-star rating and above to be 'quality level.' Percents are of total Quality First providers and children enrolled in Quality First sites.

Table 22. Number and licensed capacity of accredited child care providers, May 2023

Geography	Number of accredited providers	Percent of providers who are accredited	Capacity in accredited providers	Percent of provider capacity which is with accredited providers
Navajo/Apache Region	3	15%	195	25%
Apache County	0	N/A	0	N/A
Navajo County	3	11%	195	16%
Arizona	224	9%	25,486	12%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: This table includes only licensed or registered centers, homes, or individual providers listed in the CCR&R who have a national accreditation, such as NECPA – National Early Childhood Program Accreditation, CDA – Child Development Association, AMI – American Montessori International, or NAEYC – National Association for the Education of Young Children.

Table 23. Children receiving DES child care assistance who are enrolled in quality environments, 2022

Geography	Children ages 0-5 (non-DCS involved)			DCS-involved children ages 0-5		
	Received assistance	Enrolled in quality environment	Percent in quality environment	Received assistance	Enrolled in quality environment	Percent in quality environment
Navajo/Apache Region	65	35	54%	36	19	53%
Apache County	1 to 9	1 to 9	0%	1 to 9	1 to 9	22%
Navajo County	108	63	58%	47	31	66%
Arizona	20,099	13,619	68%	8,268	5,969	72%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Note: Quality environments are defined by DES as child care providers with a 3-, 4-, or 5-star Quality First rating, a national accreditation, or a Child Development Associate (CDA) credential for family child care providers. DCS-involved means that DCS is involved with the child or their family. In other words, the child has been reported to DCS and determined to need some level of supervision while in their parents' home, or the child has been removed

Young children with special needs

Timely intervention can improve the language, cognitive and socio-emotional developmental outcomes of young children who have, or are at risk for, developmental delays.^{207, 208} Early intervention also reduces educational costs by decreasing the need for special education.²⁰⁹ Ensuring that children have access to timely and adequate screening and intervention services from birth to age 5 can be key for preparing children for kindergarten.

In Arizona, the Arizona Early Intervention Program (AzEIP),^{xxvii} the Division of Developmental Disabilities (DDD),^{xxviii} and the Arizona Department of Education (ADE) Early Childhood Special Education Program are designed to provide services to families with children who have special needs.^{xxix} AzEIP is a program under DES that provides early intervention and a variety of supportive services to Arizona children birth to age 2 with developmental delays or disabilities, as well as their families.²¹⁰ The goal of these services is to improve the learning and development of children and inform their family members of how they can best support their child.²¹¹ DDD is a program under DES that provides supportive services to people of all ages with a qualifying developmental disability, including cerebral palsy, autism spectrum disorder, down syndrome, epilepsy and cognitive disabilities.²¹² Children under the age of 6 that have been assessed by AzEIP to have a qualifying disability may also receive DDD services. At age 3, children with special needs transition from AzEIP services to their local education agency (LEA), usually a school district. Each Arizona school district is mandated to participate in Child Find^{xxx} and to provide preschool services to children with special needs either through their own schools or through agreements with other programs such as Head Start.

According to national research, insufficient funding and staffing of these programs are the greatest obstacles to identifying and providing resources for all children who would benefit from early intervention.²¹³ Arizona falls in the bottom 10 states in the nation for early intervention service provision.²¹⁴ Fewer children in Arizona are accessing critical early intervention services that can identify disabilities, provide parent-coaching and encourage optimal development at home.²¹⁵ This matters because, while early education discussions often center around pre-kindergarten for 4-year-olds, research continues to point to the impact of experiences during the first three years of life as being just as crucial for healthy brain and body development.²¹⁶ Positively, Arizona has taken steps toward improving funding for early intervention, including being one of 10 states to cross-reference Medicaid and Early Intervention data to maximize federal Medicaid matching of funds.²¹⁷

How the Navajo/Apache Region is faring

- Children birth to age 2 are most frequently referred to AzEIP by physicians in both the Navajo/Apache Region and across the state. Family referrals have been consistently lower in the region than across the state in recent years, with 20% of referrals from families in federal fiscal year (FFY) 2022 in the region compared to 21% across the state (Figure 42). Referrals from

^{xxvii} For more information on AzEIP (which is a division of the Department of Economic Security), visit <https://www.azdes.gov/azeip/>

^{xxviii} For more information on DDD (which is a division of the Department of Economic Security), visit <https://des.az.gov/services/disabilities/developmental-disabilities>

^{xxix} For more information on ADE's Early Childhood Special Education program, visit <http://www.azed.gov/ece/early-childhood-special-education/> and <http://www.azed.gov/special-education/az-find/>

^{xxx} The Arizona Child Find program is a component of the Individuals with Disabilities Education Act (IDEA) that requires states to identify and evaluate all children with disabilities (birth through age 21) to attempt to ensure that they receive the supports and services they need.

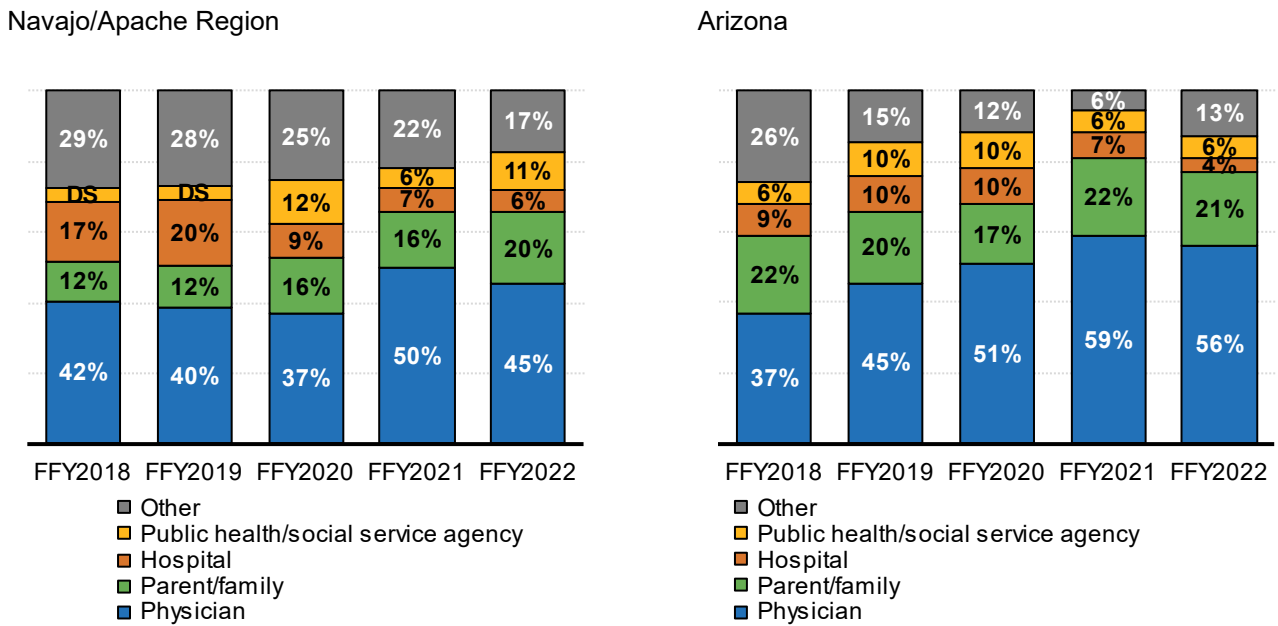
“other” sources make up a large proportion of AzEIP referrals in the region, and the largest proportion of these originate from DCS.

- More than half of young children (54%) referred to AzEIP in FFY 2022 were found eligible (18%) or received services (36%) in the Navajo/Apache Region, much higher than the 37% referred across the state who were found eligible (16%) or received services (21%). Children referred were less likely to be screened out (1%) or assessed and found not eligible (18%) than across the state (7% and 22%, respectively) (Figure 43).
- In the Navajo/Apache Region, the number of children birth to age 2 receiving services from AzEIP varied from a low of 45 in October 2020 to a high of 55 in October 2021. There were 51 children receiving services as of October 1, 2022 (Figure 44).
- In contrast to relatively stable AzEIP caseload numbers in the region, the number of children birth to age 5 receiving DDD services decreased sharply from a high of 40 in SFY 2018 to a low of 14 in SFY 2020; service numbers have since increased to 20 in SFY 2022. Large decreases have also been seen statewide, with service numbers falling by nearly half between SFY 2017 and 2021 before increasing somewhat in 2022 (Figure 45).
- Qualifying children may receive services from AzEIP and/or DDD, a number which can be used to estimate the total number of young children receiving early intervention services in a region. The total number of children birth to age 2 receiving AzEIP and/or DDD services^{xxxii} decreased overall between SFY 2019 and SFY 2022 in the region, compared to a slight decrease seen across the state. Following a high of 53 children served in the region in SFY 2020, numbers fell to a four-year low of 31 young children receiving AzEIP and/or DDD services in the region in SFY 2022. Based on 2020 Census population counts, 1.4% of children birth to age 2 were receiving AzEIP and/or DDD services in the region, compared to 2.6% across the state in SFY 2022 (Figure 46).
- The number of preschoolers with disabilities served in LEAs decreased in the region from a high of 113 in SFY 2018 to a low of 77 in SFY 2021 before increasing to 93 in SFY 2022. By contrast, in the state, numbers of preschoolers served increased between SFY 2018 and 2020 before sharply declining in SFY 2021 and 2022. Forty-six percent of preschoolers with disabilities receiving LEA services in the region had a development delay, 44% had a speech or language impairment and another 10% had a preschool severe delay. A larger share of children in the region had speech or language impairments (44%) than seen statewide (30%), and a smaller share had a preschool severe delay (region: 10%; state: 24%) (Figure 47 & Figure 48).
- The pattern of kindergarten through 3rd grade student enrollment in special education in public and charter schools between SFY 2018 and SFY 2022 also differed between the region and the state. After a high of 522 students enrolled in special education in the Navajo/Apache Region in

^{xxxii} Please note that this is a unique count of children receiving AzEIP services, DDD services, or both AzEIP and DDD.

SFY 2020, enrollments declined to a five-year low of 434 in SFY 2022. In contrast, while statewide enrollments also peaked in SFY 2020, enrollments in SFY 2022 are higher than those seen in SFY 2018. In SFY 2022, 36% of students (K-3rd) enrolled in special education in the region were diagnosed with a speech or language impairment, 25% with a developmental delay, 20% with a specific learning disability and 7% with autism. There were slightly lower proportions of students with autism and higher proportions with specific learning disabilities in the region compared to the state (Figure 49 & Figure 50).

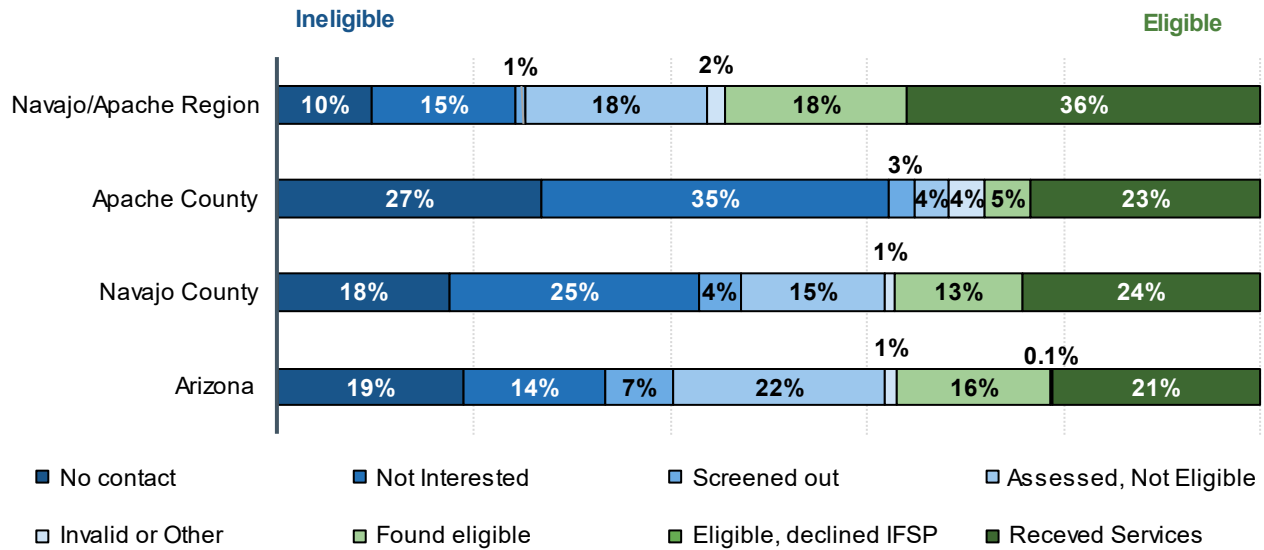
Figure 42. Children birth to age 2 referred to AzEIP by referral source, federal fiscal years 2018 to 2022



Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

Note: Other referral sources include audiologists, child care or early learning programs, foster care or adoption agencies, homeless shelters or programs, public health facilities, schools, Department of Child Safety, or referrals without a recorded sources. These referrals reflect unique children (duplicates have been removed). The largest number of “other” referrals in the region were from DCS across all years.

Figure 43. Outcomes for children birth to age 2 referred to AzEIP, federal fiscal year 2022

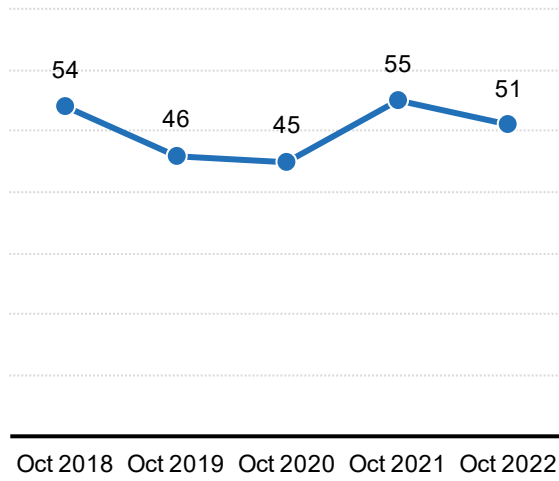


Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

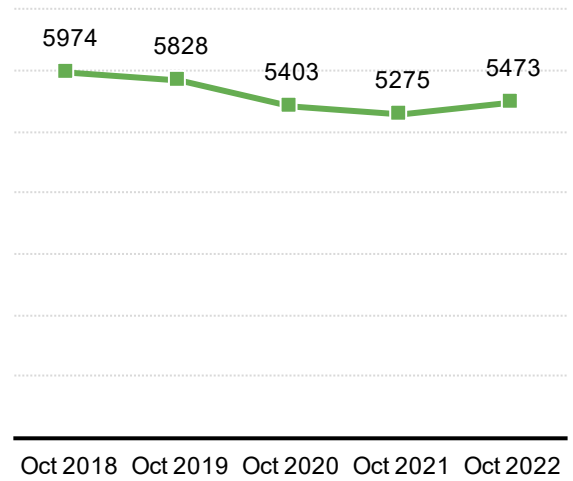
Note: These referral outcomes are recorded by AzEIP service providers. “No contact” means that a service coordinator made multiple attempts to contact a child’s family but was unsuccessful. “Not interested” indicates that when contacted the family of the child did not proceed with screening for eligibility. Children who are “screened out” were not suspected to have a qualifying developmental delay based on an initial developmental screening with a service coordinator; children who are “assessed, not eligible” are those with a formal evaluation who were found to not have a qualifying developmental delay. “Invalid or Other” refers to cases where the child was over-age (age 3 or older) or residing outside Arizona, the referral was a duplicate, the referral was for information-only, or the outcome was listed as “other.”

Figure 44. Children birth to age 2 receiving services from AzEIP as of October 1, 2018 to 2022

Navajo/Apache Region



Arizona



●—● Navajo/Apache Region

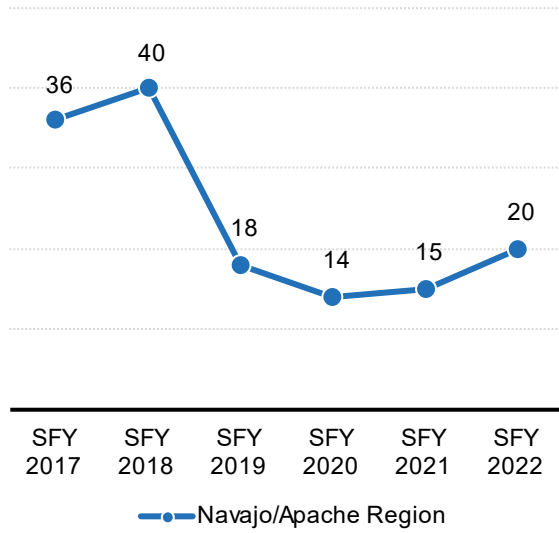
■—■ Arizona

Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

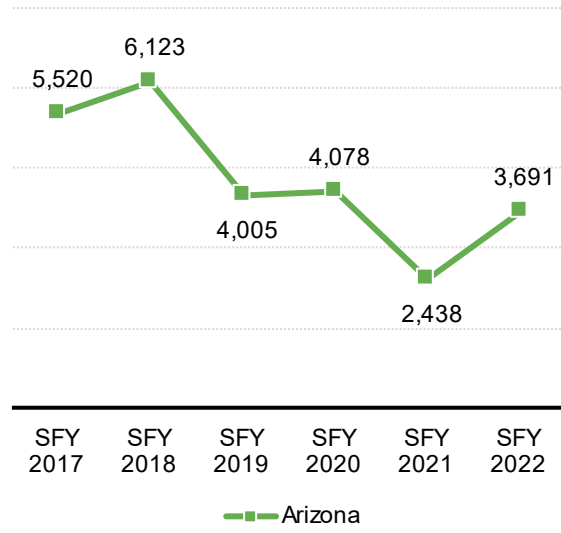
Note: These data reflect the Oct 1 snapshot of AzEIP services, not a cumulative total throughout the year.

Figure 45. Number of children (birth to age 5) receiving DDD services, state fiscal years 2017 to 2022

Navajo/Apache Region



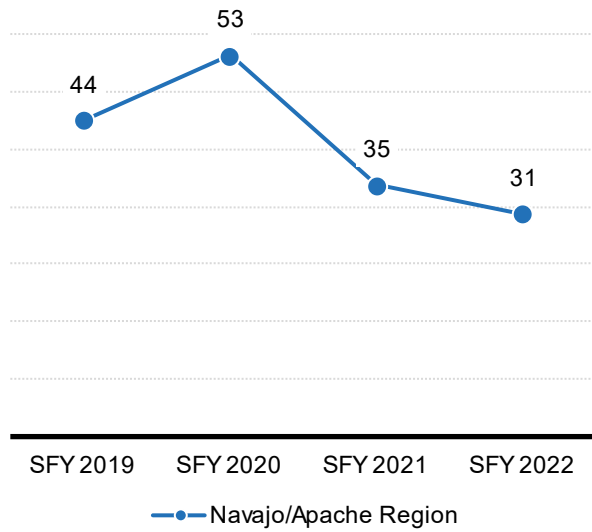
Arizona



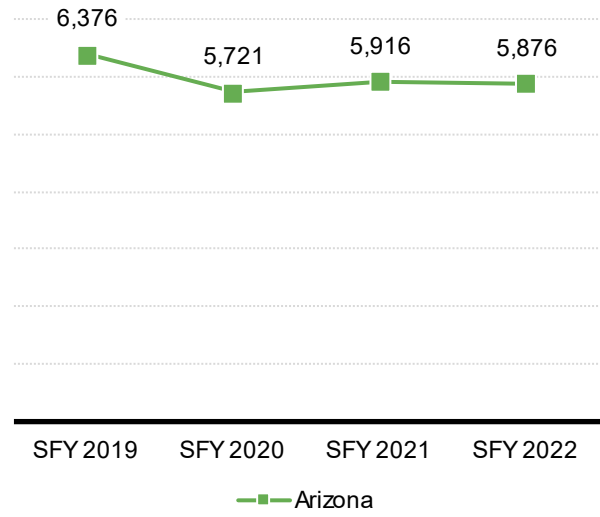
Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

Figure 46. Number of children (birth to age 2) receiving AzEIP and/or DDD services, state fiscal years 2019 to 2022

Navajo/Apache Region

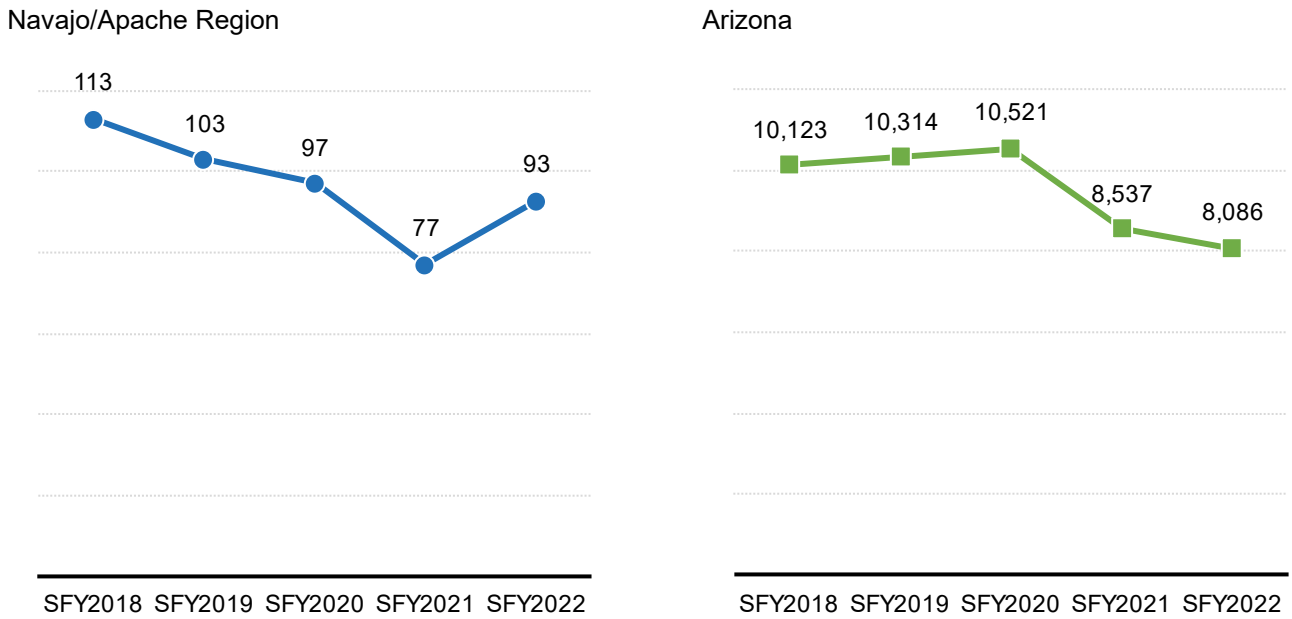


Arizona



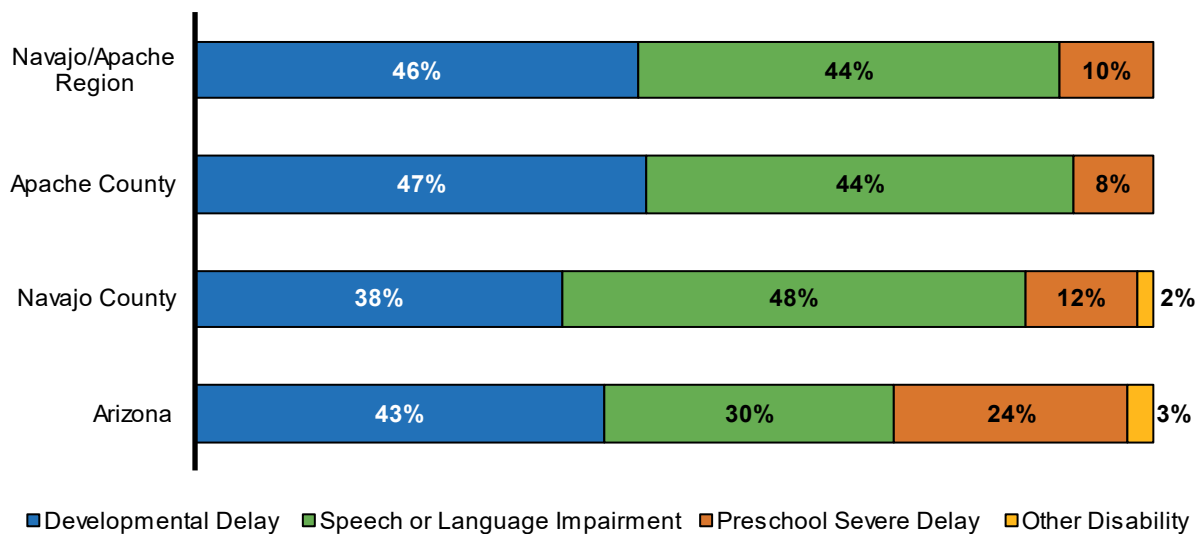
Sources: Arizona Department of Economic Security (2023). [Arizona Early Intervention Program dataset]. Unpublished data.

Figure 47. Trends in preschoolers with disabilities served by LEAs, state fiscal years 2018 to 2022



Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Figure 48. Preschoolers with disabilities receiving services through LEAs by type of disability, state fiscal year 2022

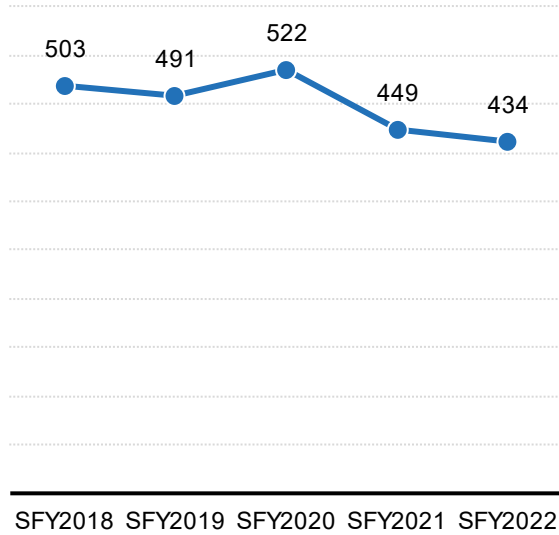


Source: Arizona Department of Education (2021). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

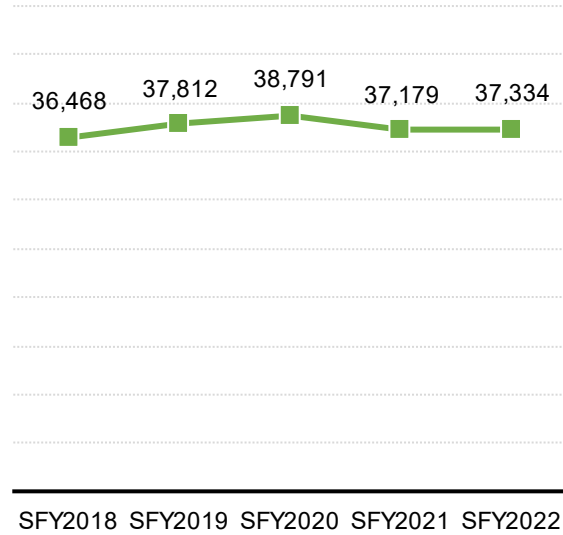
Note: The "Other Disability" includes children with hearing impairment, visual impairment, or deaf-blindness.

Figure 49. Kindergarten to 3rd grade students enrolled in special education in public and charter schools, state fiscal years 2018 to 2022

Navajo/Apache Region

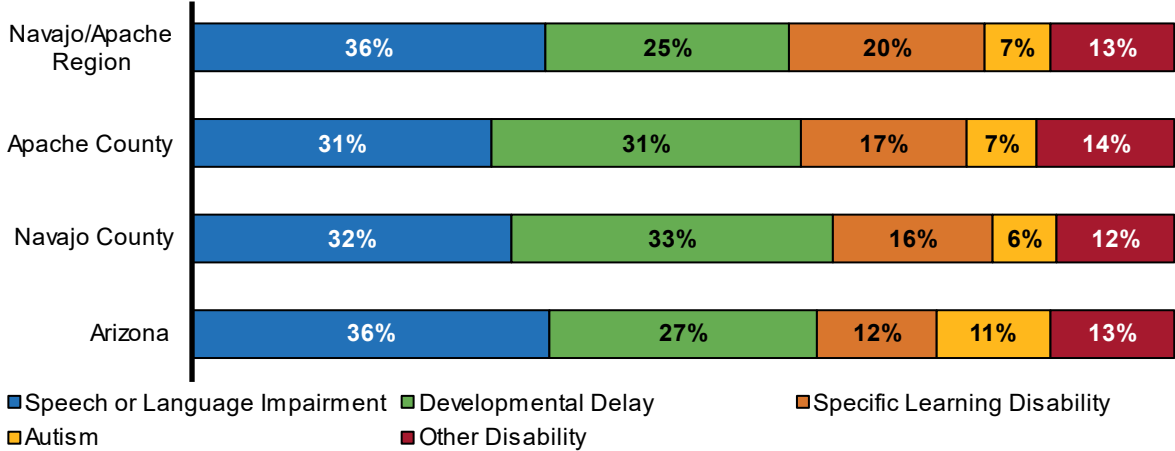


Arizona



Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Figure 50. Kindergarten to 3rd grade students enrolled in special education in public and charter schools by primary disability, state fiscal year 2022



Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The “Other Disabilities” category includes children with emotional disturbance, deafness, deaf-blindness, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairments such as chronic medical conditions that affect a child’s ability to participate in the educational setting, traumatic brain injury, or visual impairment.

Additional data tables related to *Early Learning* can be found in Appendix 1 of this report.



CHILD HEALTH

CHILD HEALTH

Why it Matters

The physical and mental health of both children and their caregivers are important for optimal child development and well-being. Early childhood health, and even maternal health before pregnancy, has lasting impacts on an individual's quality of life.^{218, 219} Experiences during the prenatal and early childhood periods can result in lifelong impacts on immune functioning, brain development and risk for chronic diseases.^{220, 221} Poor health in childhood can also result in lower educational attainment and socioeconomic status in adolescence, adulthood and even inter-generationally.^{222, 223} Therefore, adequate access to preventive care and treatment services is vital to support a child's long-term health, development and success.^{224, 225, 226}

What the Data Tell Us

Access to health services

Health insurance coverage is an important indicator of whether families can access, afford and utilize medical care. In Arizona, children up to age 19 can enroll in health insurance through the Arizona Health Care Cost Containment System (AHCCCS), Arizona's Medicaid program. Children whose families earn too much for AHCCCS but do not earn enough to afford private health insurance may also be enrolled in KidsCare, Arizona's Children's Health Insurance Program.^{xxxii} During the COVID-19 pandemic, uninsured rates declined due to federal policies prohibiting states from disenrolling people from Medicaid.²²⁷ Despite these efforts, uninsured rates in the overall population are still high.²²⁸ One primary reason for this is perceived cost, with more than two-thirds (69.6%) of uninsured U.S. adults citing their inability to pay for health insurance as the primary reason they were uninsured.²²⁹ Families who qualify for low- or no-cost health insurance may not be aware that they qualify, or they may face administrative barriers to enrolling.²³⁰

A variety of health outcomes for both mothers and infants depend on access to quality health care and support before, during and after pregnancy. Early initiation of prenatal care reduces the risk of smoking during pregnancy, pregnancy complications,^{xxxiii} premature births and maternal and infant mortality.^{231, 232, 233, 234, 235} Poor access to maternal health care (e.g., hospitals with labor and delivery units, birth centers and obstetric health providers) is one factor that can contribute to these outcomes.^{236, 237, 238} Black, Hispanic, American Indian and Alaska Native people experience a disproportionate lack of access to quality health care and support for their pregnancies.^{239, 240} Lack of access to this care has

^{xxxii} For more information on AHCCCS and KidsCare see: <https://www.azahcccs.gov/Members/GetCovered/Categories/KidsCare.html>

^{xxxiii} One such complication is congenital syphilis, where untreated maternal syphilis is passed to the fetus and can lead to stillbirth or infant death. The number of babies born in Arizona with congenital syphilis increased more than 10-fold in the last 6 years, even though congenital syphilis can be prevented with adequate prenatal care. For more information, see:

<https://www.azdhs.gov/preparedness/epidemiology-disease-control/disease-integration-services/std-control/congenital-syphilis/index.php>

contributed to considerably higher rates of low birth weight births, preterm births and maternal and infant mortality compared to non-Hispanic White Americans.^{241, 242, 243} Efforts to increase the number of women in Arizona with access to early prenatal care, such as expanding access to telehealth care and midwifery care, could improve the health outcomes of the state's mothers and babies, especially in counties with lower access to maternal health care services.²⁴⁴

How the Navajo/Apache Region is faring

- In the Navajo/Apache Region, more than one in 10 people (12%) do not have health insurance coverage, slightly higher than the proportion across the state of Arizona overall (11%) but lower than in Apache County (27%) or Navajo County (14%) (Table 24). However, it is important to note that the U.S. Census Bureau does not consider coverage by the Indian Health Service (IHS) to be insurance coverage, meaning that some uninsured individuals in the region and the counties may have access to health care through IHS and tribally-operated health care facilities if they are enrolled in a federally-recognized tribe.
- Health insurance coverage for young children specifically is the same as the overall population in the region, with 12% of children birth to age 5 not having health insurance, much higher than the proportion seen across the state (7%). The proportion of young children without health insurance has increased in the region (+3%), Apache County (+8%) and Navajo County (+6%) in recent years, counter to a 1% decrease statewide (Table 24 & Figure 51).
- The proportion of births in the region paid for by AHCCCS or the Indian Health Service (IHS, which covers about 1% of births in the region each year) has remained steady around 60% between 2018 and 2022, notably higher than the state proportion across those years. This proportion has decreased in the state, from 51% in 2018 to 47% in 2022 (Figure 52).
- Rates of timely prenatal care have been increasing in the Navajo/Apache Region in recent years. The region consistently had a higher proportion of births to mothers who began prenatal care in the first trimester compared to Arizona as a whole between 2018 and 2022, with 77% in that category in the region in 2022, compared to 71% across the state, the widest gap between the region and state across those five years (Figure 53).
- The region has had varied rates of inadequate prenatal care in the past five years, with a high of 6% of births to mothers with fewer than five prenatal care visits in 2020 which then fell to a low of 3% in 2022. Between 0.6% and 2.4% of births have been to mothers with no prenatal care in the region. Statewide in 2022, 4.7% of births were to mothers with fewer than five prenatal visits and 2.3% with no prenatal care (Figure 54).

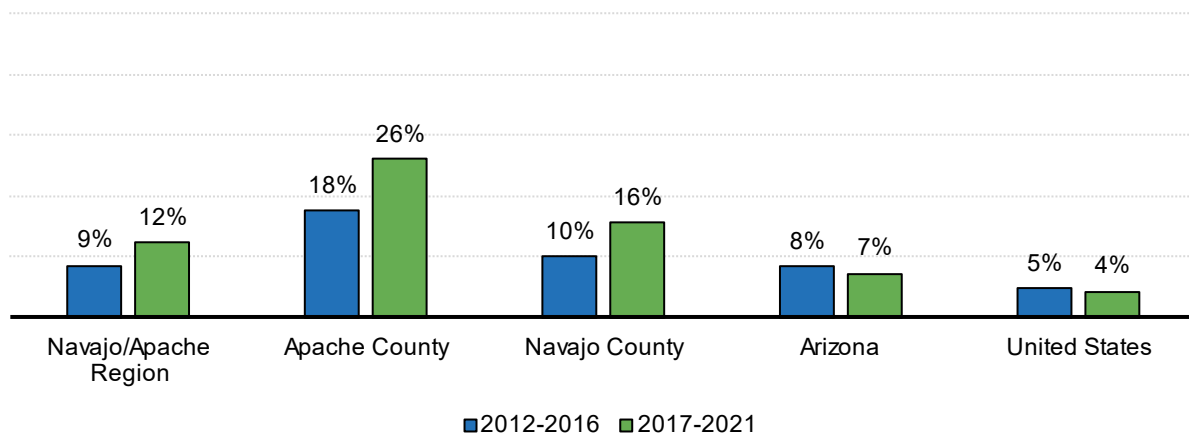
Table 24. Health insurance coverage, 2017-2021 ACS

Geography	Estimated civilian non-institutionalized population (all ages)	Without health insurance (all ages)	Estimated number of children (ages 0-5)	Without health insurance (ages 0-5)
Navajo/Apache Region	70,511	12%	5,179	12%
Apache County	65,819	27%	5,144	26%
Navajo County	104,285	14%	8,391	16%
Arizona	6,976,512	11%	496,410	7%
United States	324,818,565	9%	23,365,564	4%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B27001

Note: This table excludes persons in the military and persons living in institutions such as college dormitories. People whose only health coverage is the Indian Health Service (IHS) are considered "uninsured" by the U.S. Census Bureau.

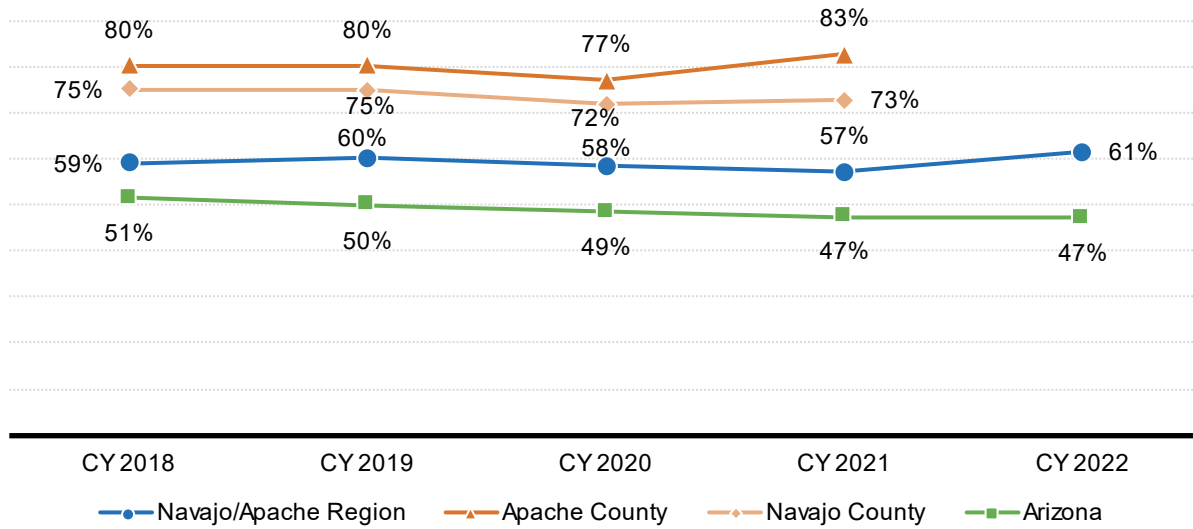
Figure 51. Children birth to age 5 without health insurance, 2012-2016 and 2017-2022 ACS



Source: U.S. Census Bureau. (2021). American Community Survey 5-year estimates 2012-2016 & 2017-2022, Table B27001

Note: This table excludes persons in the military and persons living in institutions such as college dormitories. People whose only health coverage is the Indian Health Service (IHS) are considered "uninsured" by the U.S. Census Bureau.

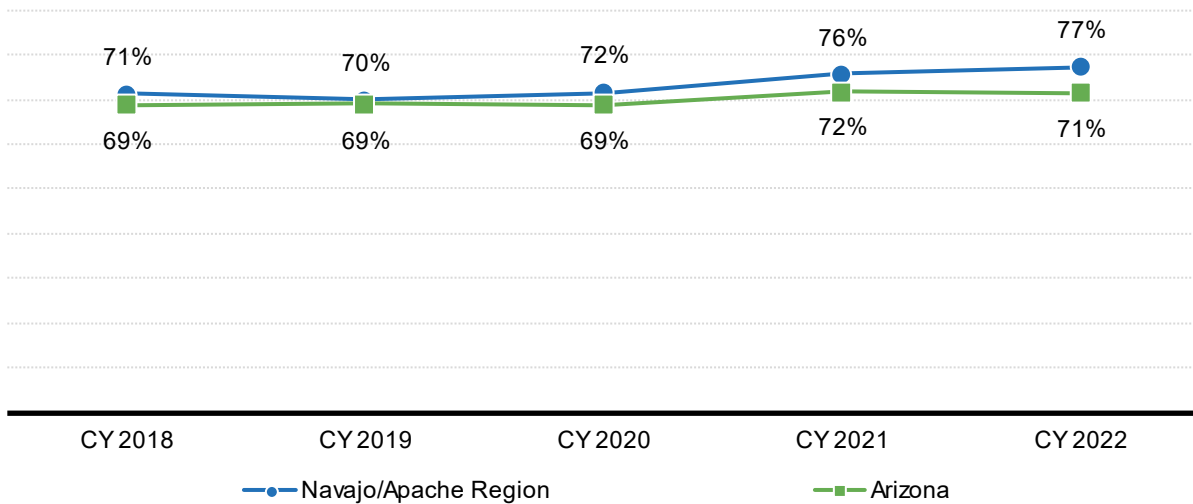
Figure 52. Births paid for by AHCCCS or IHS, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: In the Navajo/Apache Region about 1% of births in each year between 2018 and 2022 were paid for by IHS. Data on payor for births were not available for the counties or state in 2022.

Figure 53. Births to mothers who began prenatal care in the first trimester, 2018 to 2022



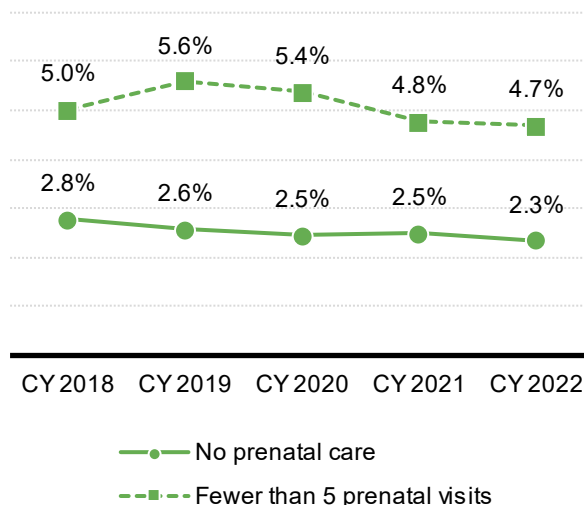
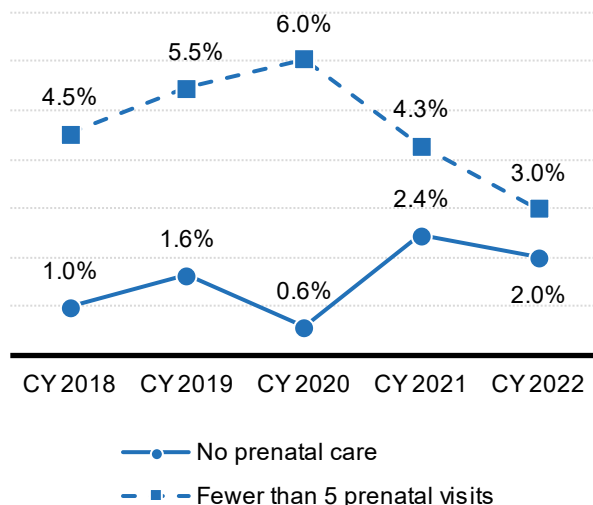
Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this figure.

Figure 54. Births to mothers with inadequate prenatal care, 2018 to 2022

Navajo/Apache Region

Arizona



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in these figures

Maternal age and substance abuse

Infants’ immediate and long-term health can be influenced by maternal characteristics including age and substance use during or after pregnancy. For example, teenage parents often experience increased stress and hardship in comparison to older parents and other non-parent teenagers as they are less likely to complete high school or college and more likely to maintain a lower socioeconomic status and require public assistance to make ends meet.^{245, 246, 247, 248, 249}

The use of substances during pregnancy can cause negative health complications for fetuses and babies. For example, babies born to mothers who smoked cigarettes during pregnancy are more likely to be born preterm, have low birth weight, die from sudden infant death syndrome (SIDS) and have weak lungs.^{250,251} The use of opioids, whether prescribed or illicit, during pregnancy also poses health risks to developing fetuses including preterm birth, stillbirth and birth defects.²⁵² It may also cause infants to experience withdrawal symptoms after birth, which is referred to as neonatal abstinence syndrome (NAS). Symptoms of NAS include sleep problems, seizures, poor feeding, dehydration, loose stool, sweating, tremors and vomiting. However, suddenly stopping opioid use while pregnant is also dangerous for both mothers and their fetuses, so access to knowledgeable health care providers and appropriate treatment options are vital for protecting both maternal and fetal health.²⁵³

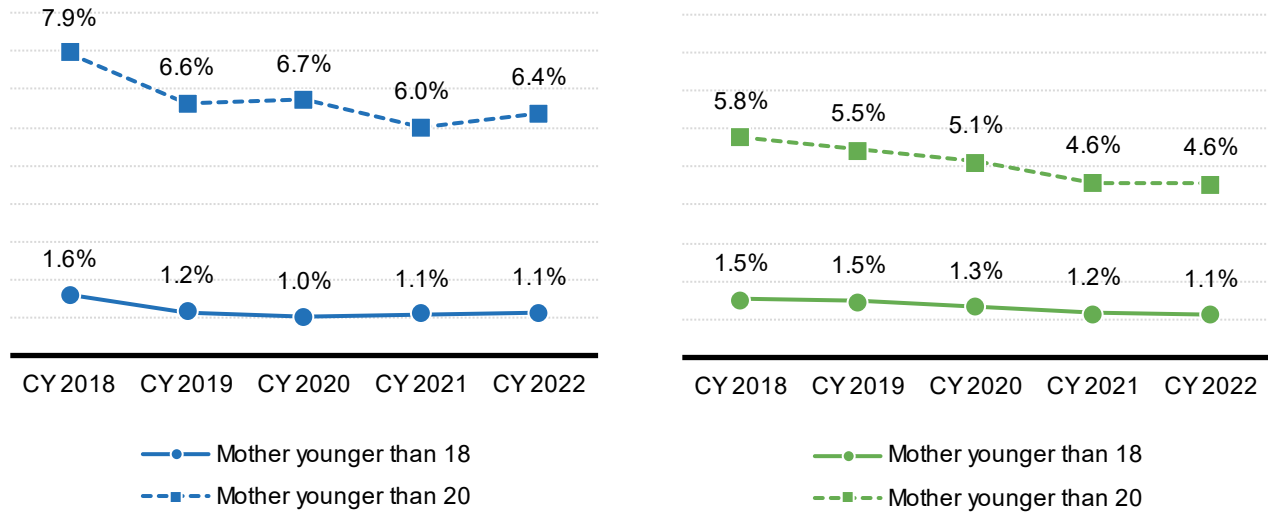
How the Navajo/Apache Region is faring

- The region has seen a decrease in the proportion of births to teenaged mothers overall between 2018 and 2022, a pattern similar to what was seen across the state. Births to mothers under age 20 fell from 7.9% in 2018 to 6.4% in 2022 in the region, higher than the proportions across the state (5.8% in 2018; 4.6% in 2022). Births to mothers under age 18 have been highly similar in the region and state, declining from 1.6% to 1.1% in the Navajo/Apache Region and 1.5% to 1.1% in Arizona overall between 2018 and 2022 (Figure 55).
- The Navajo/Apache Region had a substantially higher percentage of births to mothers who smoked cigarettes while pregnant than the state in all years; however, the share of births to mothers who smoked has steadily declined from a high of 11.5% in 2018 to 6.9% in 2022. The region has not met the Healthy People 2030 target of 4.3% or less in any year. Statewide rates met this target in 2020 and 2021 (Figure 56).
- Between 2018 and 2022, 258 newborns in the region were hospitalized because of maternal drug use during pregnancy, with an average length of stay of 4.6 days (Table 25). In the region this equates to 6.2 newborns hospitalized due to maternal drug use during pregnancy per 100 live births, nearly double the rate of 3.3 per 100 births statewide. Taken together with cigarette smoking, this suggests that substance use during pregnancy is more prevalent in the region than in Arizona overall.

Figure 55. Births to teenaged mothers, 2018 to 2022

Navajo/Apache Region

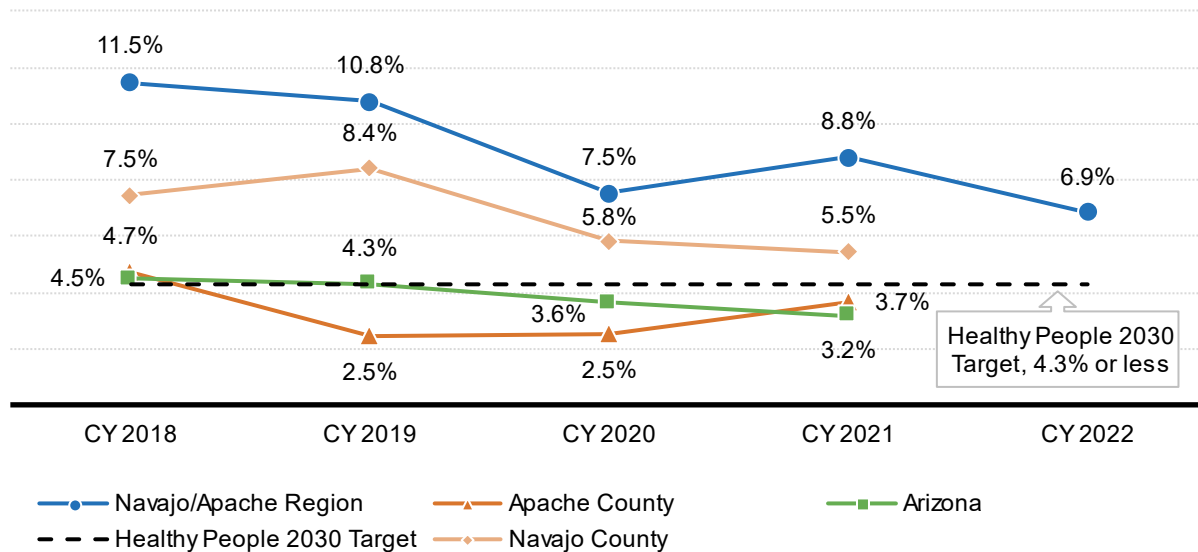
Arizona



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this figure.

Figure 56. Births to mothers who smoked cigarettes during pregnancy, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this figure. The Healthy People 2030 target for maternal use of tobacco during pregnancy was increased to 4.3% of females giving birth reporting smoking during pregnancy, or alternatively 95.7% of females reporting abstaining from smoking during pregnancy.

Table 25. Newborns hospitalized because of maternal drug use during pregnancy, 2018-2022 combined

Geography	Newborns hospitalized	Average length of stay (days)
Navajo/Apache Region	258	4.6
Apache County	83	4.2
Navajo County	380	6.5
Arizona	12,939	9.5

Source: Arizona Department of Health Services (2023). [Hospital Discharge dataset]. Unpublished data.

Note: Data on newborns hospitalizations were geocoded to FTF regions using the address provided by parents at the time of hospitalization; however, in cases where the address provided was not valid, hospitalizations could not be assigned to a region. County of residence is captured separately from addresses, meaning that counts in the county often exceed those seen in a particular region because they include all newborns regardless of address validity.

Maternal health and well-being

A pregnant woman’s health and well-being are closely linked to infant and child health and development. Gestational diabetes (i.e., diabetes that only presents during the pregnancy) increases the likelihood of an infant having low blood sugar, being born preterm, being larger than average at birth, needing to be delivered through cesarean section and even developing type 2 diabetes and cardiovascular diseases later in life.^{254, 255} Children of mothers categorized as having maternal obesity have increased risk of birth complications, asthma, diabetes, heart disease and neonatal and infant mortality.^{256, 257, 258} A variety of social determinants of health have been linked to the development of diabetes and obesity, including low socioeconomic status, employment struggles, lack of health insurance and living in rural areas with fewer resources.^{259, 260, 261, 262} Risks associated with these conditions can be reduced through increased access to maternal health care before, during and after childbirth as well as planning high-risk deliveries at hospital facilities with more resources and technical expertise.^{263, 264}

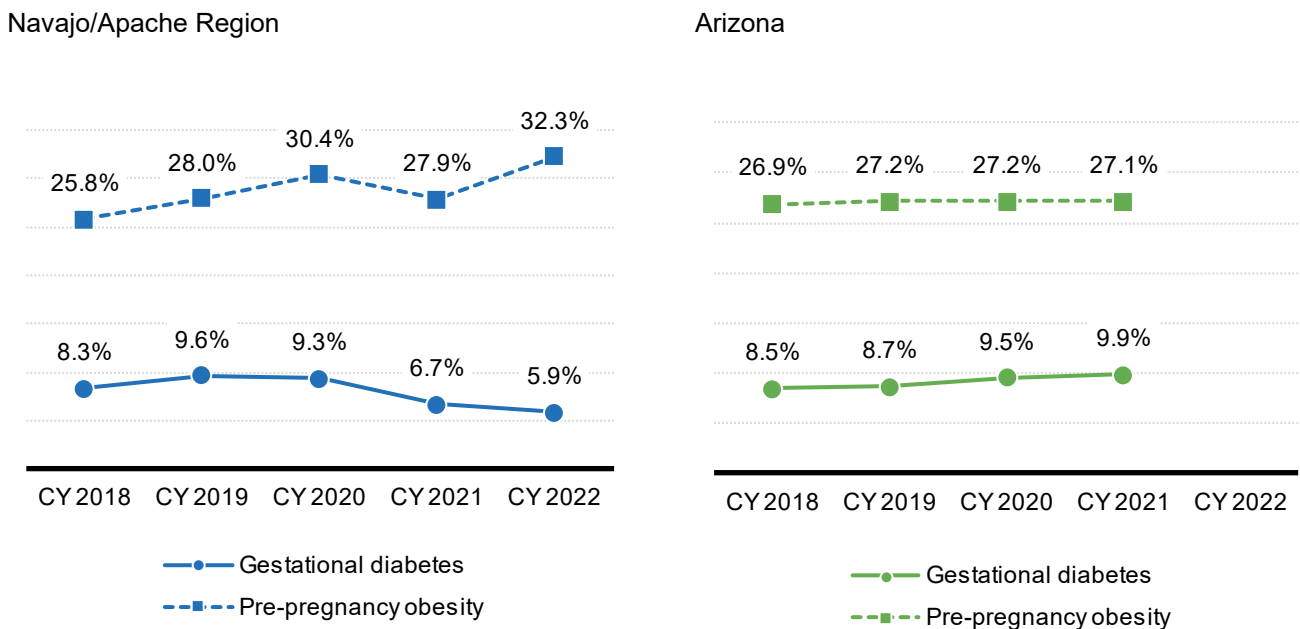
Postpartum depression has a clear link to negative outcomes in infant health and development. Untreated postpartum depression can lead to infant sleeping, eating and behavioral problems, issues with maternal and infant bonding and infant developmental delays.^{265, 266} Groups that have higher rates of postpartum depression include American Indian and Alaska Native mothers, mothers who are under age 19 and mothers who smoked during or after pregnancy.²⁶⁷ The United States Preventive Services Task Force and the American Congress of Obstetricians and Gynecologists recommend assessing mothers’ mental health both during pregnancy and after giving birth to facilitate early identification and intervention.²⁶⁸ In 2022, AHCCCS implemented a policy requiring depression screenings during prenatal and

postpartum visits as well as well-child visits within the first 6 months of an infant’s life for all enrolled mothers in Arizona.²⁶⁹ Mothers who screen positively for depression must be referred to a case manager or treatment services.²⁷⁰ These screenings, as well as the ability to bill AHCCCS for the cost of screenings, will hopefully increase the likelihood that mothers experiencing postpartum depression are referred to appropriate mental health services.

How the Navajo/Apache Region is faring

- More than a quarter of births in the region and state in recent years were to mothers with pre-pregnancy obesity, with this proportion increasing in the region from 25.8% in 2018 to 32.3% in 2022. In contrast, the proportion of births to mothers with gestational diabetes decreased in the region from 8.3% in 2018 to 5.9% in 2022, running counter to a statewide increase from 8.5% in 2018 to 9.9% in 2021 (the latest year that statewide data were available) (Figure 57).
- More than one in 10 mothers in Arizona (13.7%) reported experiencing post-partum depression in 2020 according to the Pregnancy Risk Assessment Monitoring System.²⁷¹

Figure 57. Births to mothers diagnosed with gestational diabetes or pre-pregnancy obesity, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this figure. Data on gestational diabetes and pre-pregnancy obesity were not available for Arizona in 2022.

Infant health

Infants who are born preterm or at a low birth weight have a higher possibility of short- and long-term health complications. Preterm birth is defined as birth at less than 37 weeks of gestation. Risks related to preterm births include respiratory, immune, neurological, vision, hearing and intestinal developmental issues.²⁷² Infants born preterm also have increased rates of mortality during their first 28 days to 1 year of life, longer hospitalization after birth, more health care costs and physical impairments.^{273, 274} Preterm births are more likely among mothers who are under age 20, over the age of 35, low income, experience infections during pregnancy or engage in substance use.²⁷⁵

Low birth weight is defined as weighing less than 5 pounds and 8 ounces (2,500 grams) at birth. Babies born in this condition have a higher risk of infant mortality and long-term health problems such as diabetes, hypertension and cardiac disease.^{276, 277} Low birth weight risk factors include low maternal weight during pregnancy, preterm birth, teen pregnancy, pregnancy over the age of 35, high blood pressure, diabetes, substance use and air pollution.²⁷⁸

Newborns are admitted into neonatal intensive care units (NICUs) in hospitals for numerous reasons that can vary across medical providers and have implications for the short- and long-term health of babies and families.²⁷⁹ NICU stays can take a large emotional and financial toll on families, especially families living far from the hospital. Although NICU admissions may be an indicator of important health concerns in newborns, including low birth weight, they can also be a site of family-based interventions that can positively impact infant development and parent-child relationships.²⁸⁰

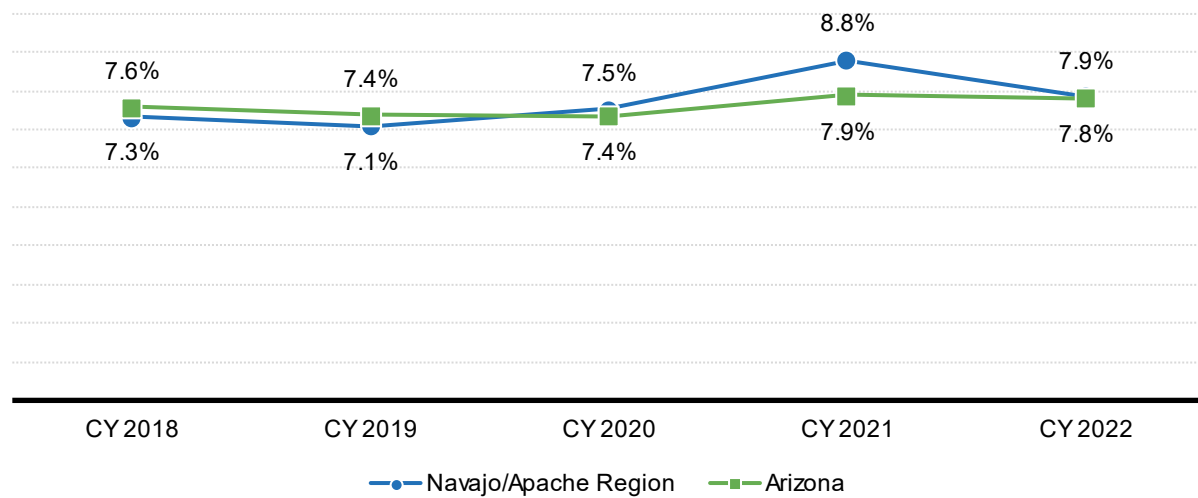
For parents who are able to breastfeed, the American Academy of Pediatrics recommends breastfeeding infants exclusively for the first 6 months after birth, followed by a combination of breastfeeding and other foods for up to 2 years or longer.²⁸¹ Breastfeeding offers a variety of benefits to infants due to the nutrition and antibodies that human breast milk provides. These benefits include lowering an infant's risk of type 1 diabetes, obesity, ear infections, SIDS, asthma and gastrointestinal infections.²⁸² Robust data on breastfeeding rates are only available for children served through the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program.

How the Navajo/Apache Region is faring

- The proportion of babies born at low birth weight has been similar in the region and the state across most years, with 7.9% of births at low birth weight in the Navajo/Apache Region and 7.8% in Arizona in 2022. The only substantial difference between the region and the state was seen in 2021, when 8.8% of regional births were at low birth weight compared to 7.9% statewide (Figure 58).
- The proportion of preterm births (less than 37 weeks gestation) decreased in the region from a high of 11% in 2020 to 7% in 2022. In 2021 (the most recent year that both data points are available), the rate of preterm birth in the region (9.7%) was slightly under the statewide rate (10%). The region met the Healthy People 2030 target of 9.4% or fewer births before 37 weeks gestation in 2018 (9.4%), 2019 (8.8%) and 2022 (7%) (Figure 59).

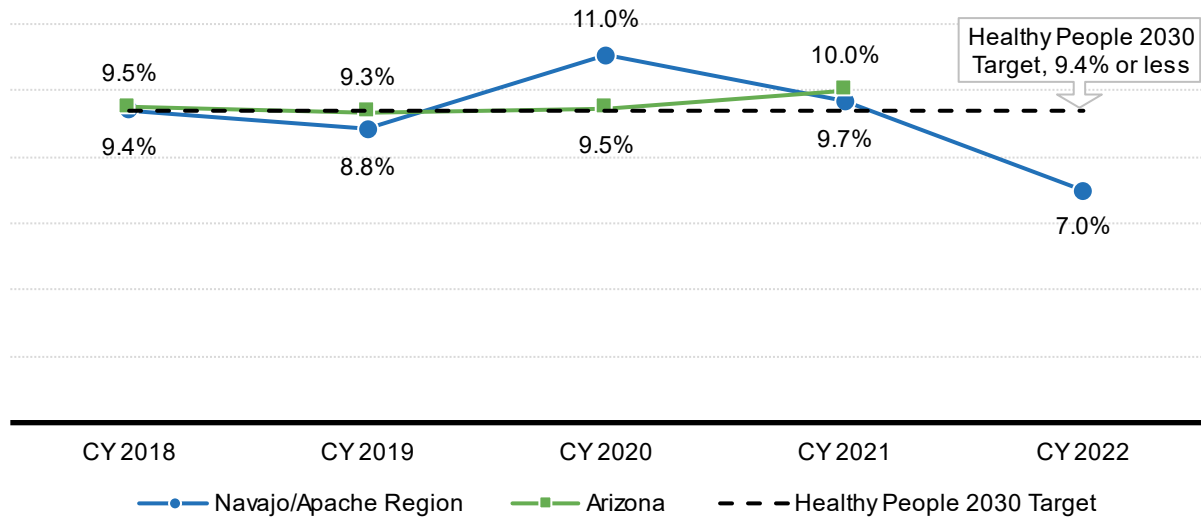
- The proportion of births with an admission to a NICU in the region have remained consistent between 9% and 10% over the last five years, notable higher than the proportion statewide (7.6-7.9%). In 2022, 9.0% of births in the region had a NICU admission (Figure 60).
- In the Navajo/Apache Region, rates of breastfeeding were higher than those across the state in all years from 2018 through 2022. In 2022, 85% of WIC-enrolled infants were ever breastfed, compared to 79% statewide (Figure 61).

Figure 58. Low birth weight births (less than 2,500 grams), 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

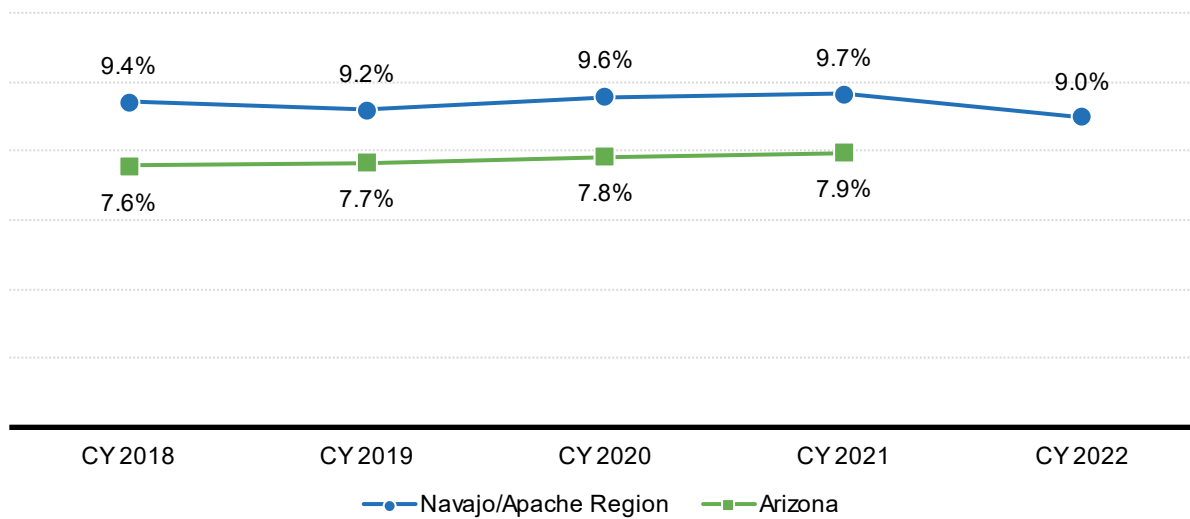
Figure 59. Preterm births (less than 37 weeks gestation), 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Data on preterm births were not available for Arizona in 2022.

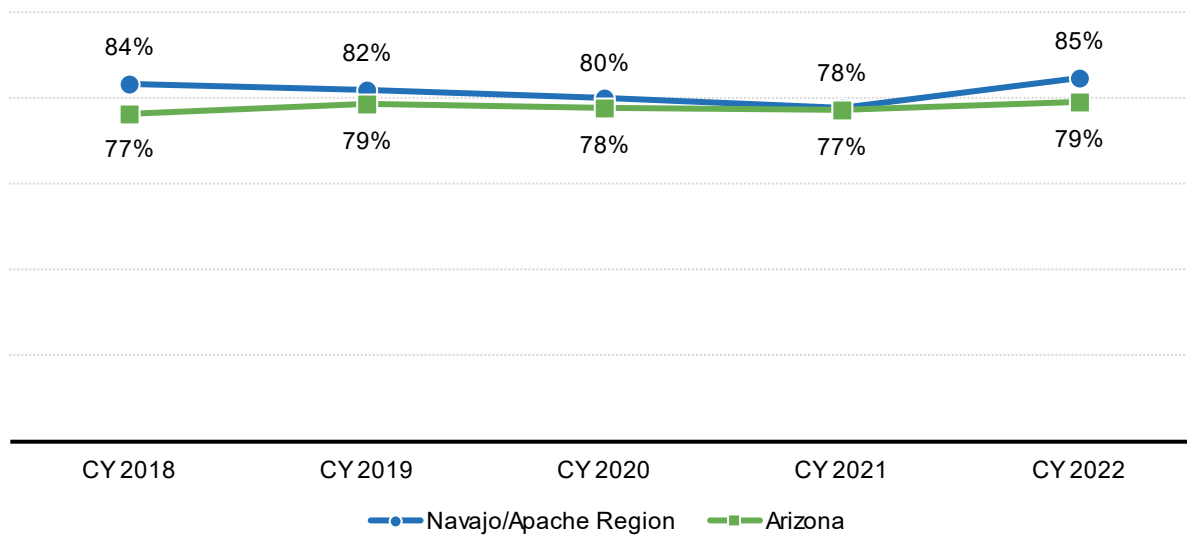
Figure 60. Births with a NICU admission, 2018 to 2022



Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Data on NICU admissions were not available for Arizona in 2022.

Figure 61. Percent of WIC-enrolled infants ever breastfed, 2018 to 2022



Source: Arizona Department of Health Services (2023). [WIC dataset]. Unpublished data.

Childhood infectious disease and immunization

Immunization against preventable diseases protects both children and the surrounding community from potential illness and death. Immunization protects not only the vaccinated person but also individuals who are unable to be vaccinated, through “community immunity.”²⁸³ In order to attend state-licensed child care programs and public or charter schools, children are required to receive specific vaccinations or obtain an official exemption, which can be requested for medical, personal or religious reasons.²⁸⁴ Statewide and nationally, childhood immunization rates have been declining in recent years. The COVID-19 pandemic exacerbated disparities in health care access, including routine immunizations, that specifically impacted children who are Black, Hispanic, low-income, live in rural areas or lack health insurance.²⁸⁵ National survey data from the Pew Research Center also show that declining childhood immunization rates, particularly for measles, mumps and rubella (MMR), can be linked to parents' shifting attitudes towards vaccines. While the majority of U.S. parents continue to express confidence in the value of childhood vaccination for MMR, a sizable proportion expressed concerns about the necessity of vaccines and showed declining support for vaccine requirements for children to attend public schools.²⁸⁶

Respiratory syncytial virus (RSV) and influenza (flu) are leading causes of serious illness in young children, and following the onset of the COVID-19 pandemic in 2020, recent flu and RSV seasons have been more severe nationwide.^{287, 288} RSV is the most frequent cause of hospitalization in children under 1 year of age.²⁸⁹ In 2023, two new preventative therapies for RSV were approved—a single-dose antibody medication for infants, and an adult immunization for pregnant people administered in the third

trimester of pregnancy.^{290, 291} These new treatments have the potential to prevent severe illness in infants and young children, but shortages of the antibody medication have led the Centers for Disease Control and Prevention (CDC) to recommend prioritizing access for the highest-risk infants. This includes infants under 6 months of age, those with underlying health conditions such as lung or heart disease and American Indian or Alaska Native infants under 8 months of age, as well as older American Indian or Alaska Native infants who live in remote areas with limited access to health care facilities.²⁹² The flu can also cause serious illness in young children under age 5, particularly for children birth to age 2, who are the most likely to be hospitalized with flu complications.²⁹³ The American Academy of Pediatrics recommends that all children ages 6 months and older be vaccinated against influenza each year.²⁹⁴

How the Navajo/Apache Region is faring

- Across all required immunizations, children in child care in the Navajo/Apache Region had lower vaccination rates (DTaP^{xxxiv} 87.6%; Polio 91.2%; MMR 92.1%) than the state as a whole (DTaP 90.6%; Polio 92.2%; MMR 93.0%) in the 2022-23 school year. The Navajo/Apache Region also failed to meet the Healthy People 2030 DTaP immunization target of 90%, which the state met (Table 26).
- Immunization exemptions among children in child care peaked in the region in 2019-20 for religious exemptions (7.1%) and 2020-21 for exemptions from all immunizations (6.3%), but rates of exemptions have since declined in the region, with both rates of religious exemptions and exemptions from all immunizations at 5.1% in the 2022-23 school year. Statewide, rates of exemptions have steadily increased to 5.7% of children with a religious exemption in 2022-23 and 4% with an exemption from all immunizations. Rates of medical exemptions have remained below 1% in both the region and state in all years (Figure 62).
- The Navajo/Apache Region also had very low kindergarten immunization rates in the 2022-23 school year (DTaP 68.7%; Polio 66.7%; MMR 69.7%) compared to the state (DTaP 89.6%; Polio 90.3%; MMR 89.9%). Both the region and state failed to meet the Healthy People 2030 kindergarten MMR immunization target of 95% (Table 27). Regional immunization rates may be too low to assure community immunity of preventable infectious diseases. For example, 95% of children need to be vaccinated to create herd immunity in order to protect communities and achieve and maintain measles elimination.²⁹⁵
- The Navajo/Apache Region also had notably higher rates of children in kindergarten receiving personal belief exemptions and exemptions from all required immunizations between the 2018-19 and 2022-23 school years than across the state. In the region, rates of personal belief exemptions and exemptions from all vaccines fell to their lowest in 2020-21 (9.9% and 5.7%, respectively), before sharply increasing to 16.3% for personal belief exemptions and 10% for exemptions from all immunizations in 2022-23, more than double the rates seen statewide.

^{xxxiv} *The DTaP vaccine immunizes against Diphtheria, Tetanus and Pertussis.*

Medical exemptions from immunizations also increased from 0.1% in 2020-21 to 1.6% in 2022-23 in the region while statewide rates remained relatively flat (Figure 63).

- The pattern of confirmed and probable cases of RSV and influenza in young children birth to age 5 were similar in both the region and state with an increase in RSV cases since 2020, but a marked decrease in influenza in 2021, followed by a steep increase. In 2022, there were 241 cases of RSV and 149 cases of influenza in young children in the region, the highest numbers in the last four years (Figure 64).

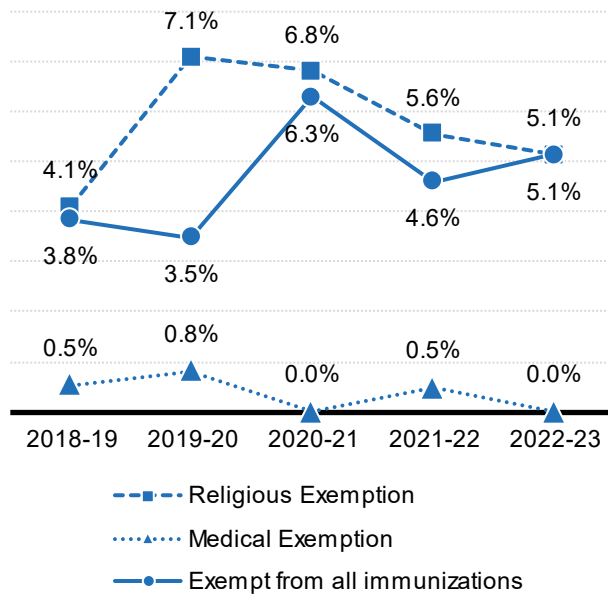
Table 26. Children in child care with selected required immunizations, 2022-23

Geography	Number Enrolled	DTaP	Polio	MMR	Religious exemption	Medical exemption	Exempt from every required vaccine
Navajo/Apache Region	331	87.6%	91.2%	92.1%	5.1%	0.0%	5.1%
Apache County	206	95.6%	96.1%	97.1%	1.5%	0.5%	1.5%
Navajo County	377	91.8%	94.2%	94.4%	3.7%	0.3%	3.7%
Arizona	70,690	90.6%	92.2%	93.0%	5.7%	0.2%	4.0%
Healthy People 2030 targets		90.0%					

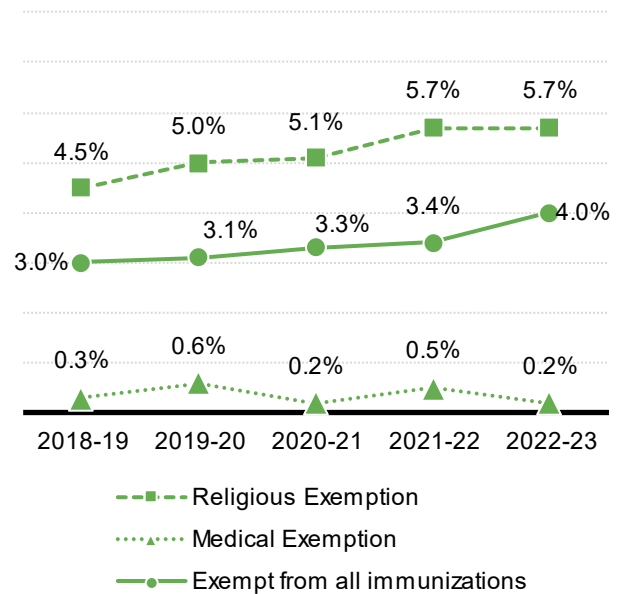
Source: Arizona Department of Health Services (2023). *Childcare Immunization Coverage, 2022-23 School Year*. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). *Childcare Immunization Coverage by County, 2022-23 School Year*. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Figure 62. Child care immunization exemption rates, 2018-19 to 2022-23

Navajo/Apache Region



Arizona



Source: Arizona Department of Health Services (2023). Childcare Immunization Coverage, 2018-19 to 2022-23 School Years. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). Childcare Immunization Coverage by County, 2018-19 through 2022-23 School Years. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

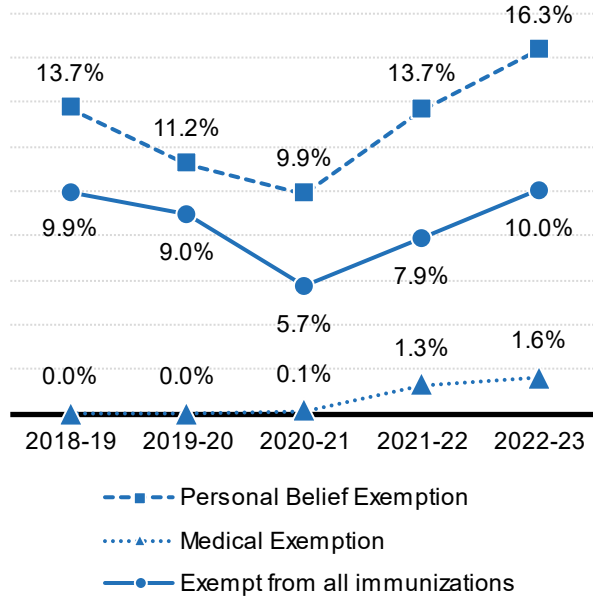
Table 27. Kindergarteners with selected required immunizations, 2022-23

Geography	Number Enrolled	DTaP	Polio	MMR	Personal belief exemption	Medical exemption	Exempt from every required vaccine
Navajo/Apache Region	937	68.7%	66.7%	69.7%	16.3%	1.6%	10.0%
Apache County	673	87.4%	87.8%	88.3%	8.5%	0.3%	5.9%
Navajo County	1,093	79.9%	78.5%	80.5%	9.3%	0.0%	7.0%
Arizona	78,937	89.6%	90.3%	89.9%	7.3%	0.2%	4.6%
Healthy People 2030 targets				95.0%			

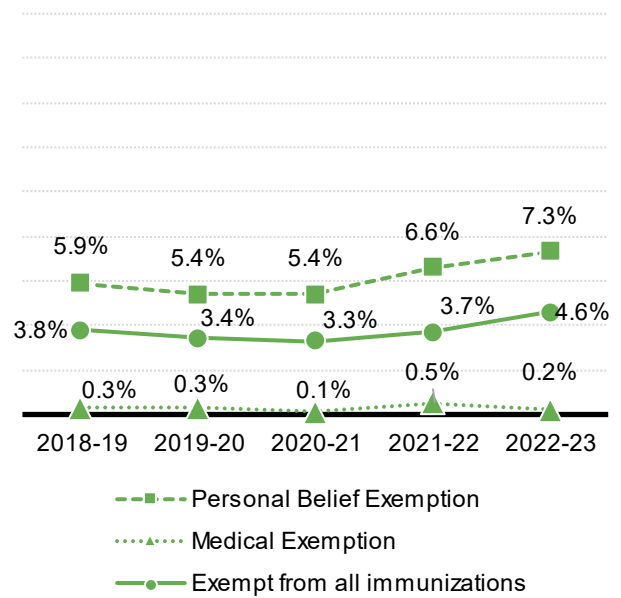
Source: Arizona Department of Health Services (2023). Kindergarten Immunization Coverage, 2022-23 School Year. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). Kindergarten Immunization Coverage by County, 2022-23 School Year. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Figure 63. Kindergarten immunization exemption rates, 2018-19 to 2022-23

Navajo/Apache Region

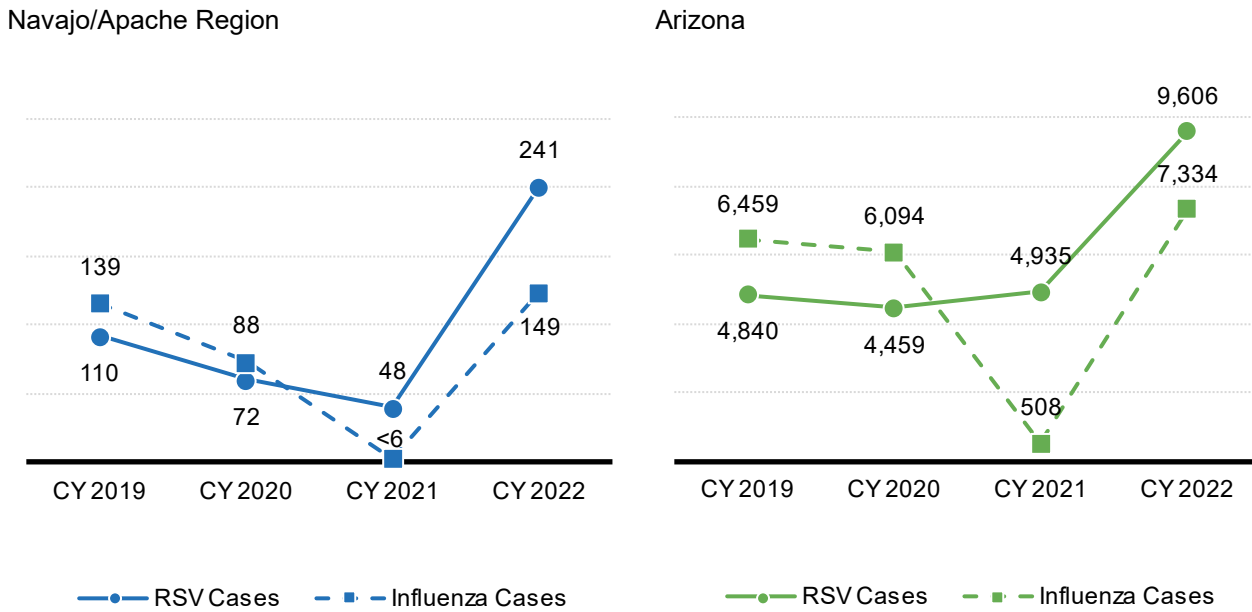


Arizona



Source: Arizona Department of Health Services (2023). Kindergarten Immunization Coverage, 2018-19 to 2022-23 School Years. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). Kindergarten Immunization Coverage by County, 2018-19 through 2022-23 School Years. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Figure 64. Confirmed and probable cases of infectious diseases in children birth to age 5, 2019 to 2022



Source: Arizona Department of Health Services (2023). [FTF VPD Flu RSV dataset]. Unpublished data.

Infant and child hospitalization and mortality

Infant mortality refers to the death of infants under 1 year of age. Some of the most common causes of infant mortality in Arizona and the U.S. include congenital abnormalities, low birth weight, preterm birth, pregnancy complications, SIDS and unintentional injuries.^{296, 297, 298} According to provisional CDC data, infant mortality increased between 2021 and 2022 by 3% nationally, 13% in Arizona for all infants, and 21% for American Indian or Alaska Native infants nationwide, the highest increase seen for any group.²⁹⁹ In addition to increasing, the infant mortality rates for American Indian or Alaska Native (9.1 deaths per 1,000 live births) and Black infants (10.9) were also notably higher than White (4.5) or Hispanic (4.9) infants in 2022, racial disparities that have been linked to maternal care deserts, which are particularly prevalent on tribal lands.³⁰⁰ This indicates a serious need to increase access to timely prenatal care, newborn screening and home visiting programs in rural and tribal areas to begin to reduce infant mortality rates.³⁰¹

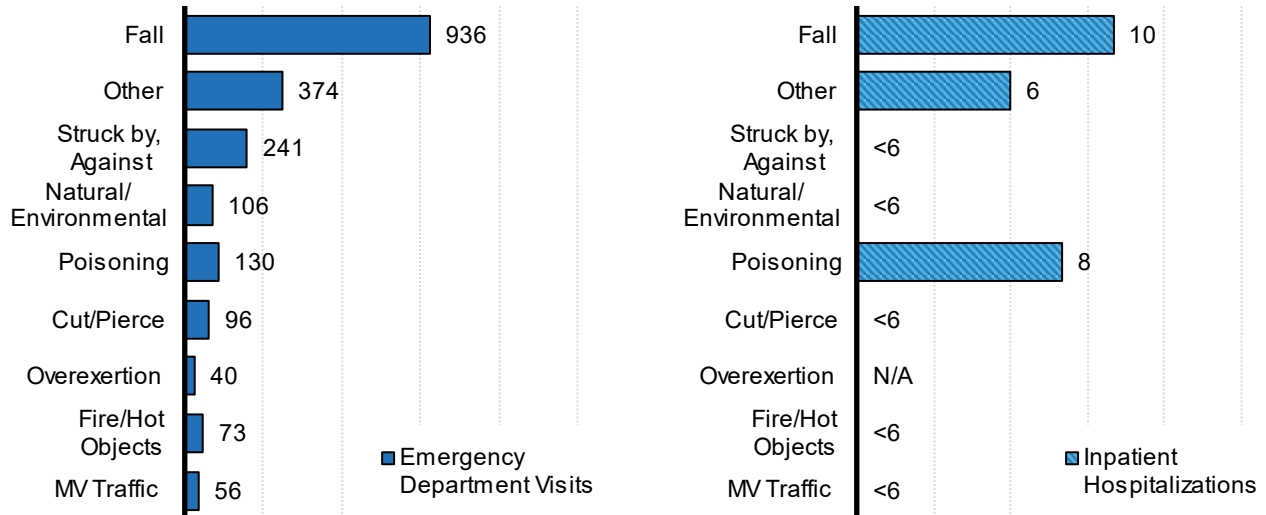
The leading cause of death for children birth to age 17 in the United States is unintentional injuries.³⁰² The most prevalent accidental injuries are car crashes, drowning, falls, suffocation, fires and poisoning.³⁰³ Death from unintentional injuries is more common in children living in rural areas, as well as among American Indian and Alaska Native children.^{304, 305} Increased awareness and safety precautions have helped reduce childhood deaths in the last decade, including child swimming lessons, proper infant sleeping position, installing smoke detectors, keeping medications out of reach, practicing gun safety and utilizing seatbelts and helmets.³⁰⁶

How the Navajo/Apache Region is faring

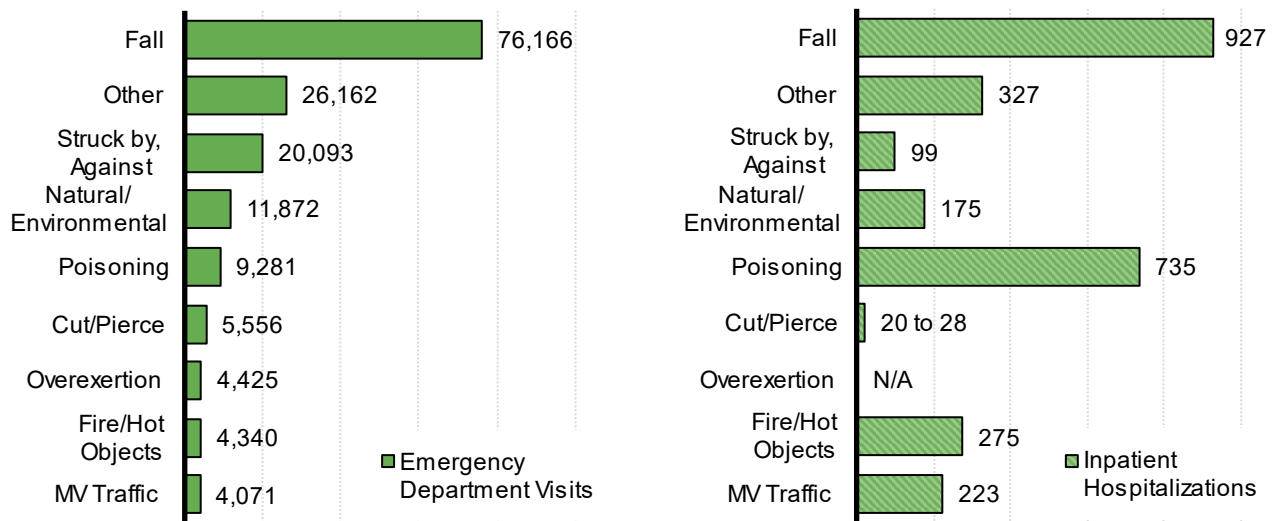
- Falls were the most common unintentional injuries that led to emergency department visits for children under 5 in both the region and the state between 2018 and 2022, followed by ‘other’ injuries or being ‘struck by or against’ an object or person. During those years, there were 936 emergency department visits due to falls in the region, 374 for other reasons and 241 due to being struck. The pattern of injuries prompting inpatient hospitalizations was also similar for the region and state, with falls being most common followed by poisoning or ‘other’ injuries. Between 2018 and 2022, 10 young children in the region were hospitalized due to falls, 8 for poisoning and 6 for other reasons (Figure 65).
- Between 2019 and 2021, the infant mortality rate was lower in the Navajo/Apache Region (4.7), compared to Apache County (5.1), Navajo County (6.5) and the state (5.4); only the regional rate met the Healthy People 2030 target of 5.0 or less (Figure 66).
- Overall, 46 children birth to age 17 died in the region between 2018 and 2021. Nearly one in three deaths (30%) were due to accidents, with congenital malformations (birth defects) being the second most common cause of death (15%). No other single cause led to more than six deaths in the region. The share of deaths in the region (30%) due to accidents was higher than that in the state (20%) while the proportion of deaths due to congenital malformations was the same in the region and state (Figure 67).

Figure 65. Non-fatal hospitalizations and emergency department visits due to unintentional injuries for children birth to age 4 by selected mechanism of injury, 2018-2022 combined

Navajo/Apache Region

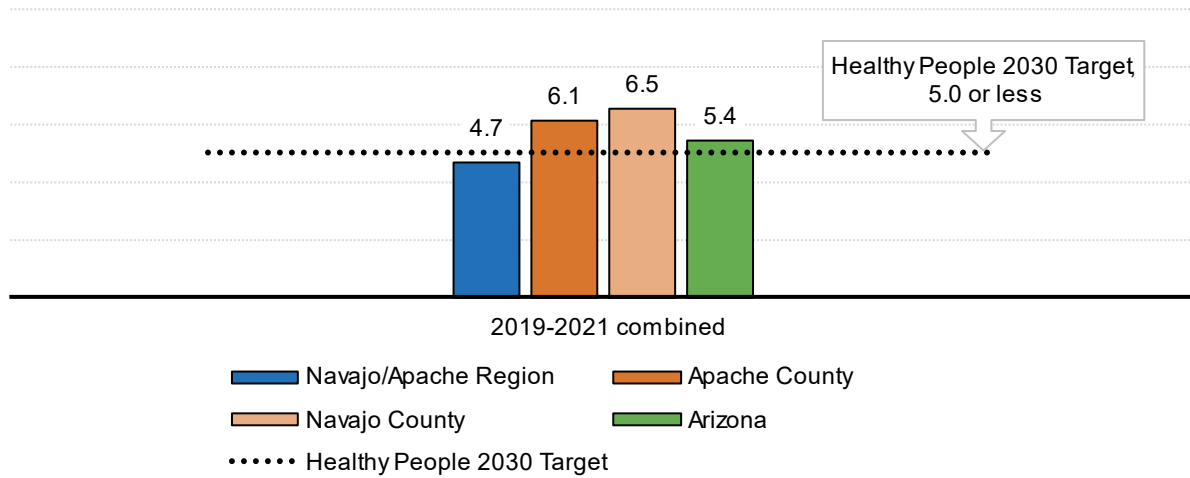


Arizona



Source: Arizona Department of Health Services (2023). [Hospital Discharge dataset]. Unpublished data.

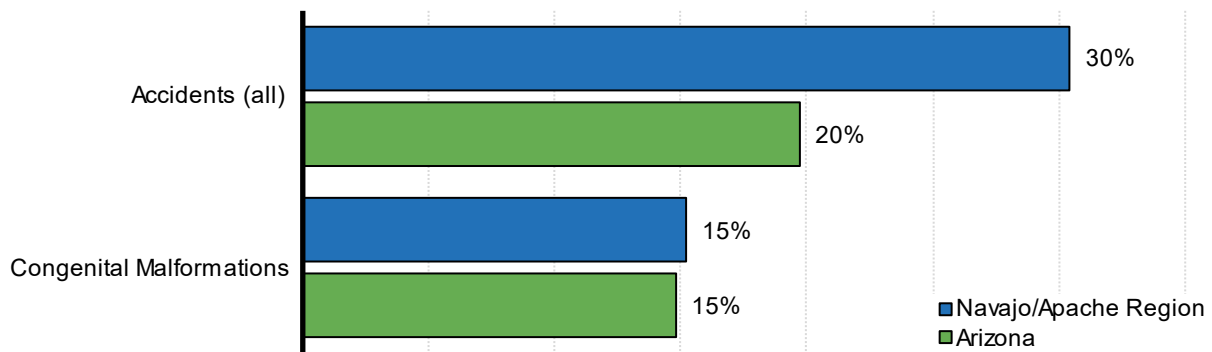
Figure 66. Infant mortality rates, 2019-2021 combined



Source: Arizona Department of Health Services (2023). [Vital Statistics Mortality Report dataset]. Unpublished data.

Note: The infant mortality rate is the number of infant (under age 1) deaths per 1,000 live births.

Figure 67. Leading causes of death for children birth to age 17, 2018-2021 combined



Source: Arizona Department of Health Services (2023). [Vital Statistics Mortality Report dataset]. Unpublished data.

Note: The leading causes of child death in Arizona are accidents (20%), congenital malformations (15%), low birthweight (9%), intentional self-harm/suicide (6%), and cancer/malignant neoplasms (5%). Causes of death in this figure are ordered by the leading causes of death in the region.

Additional data tables related to *Child Health* can be found in Appendix 1 of this report.



FAMILY SUPPORT AND LITERACY

FAMILY SUPPORT AND LITERACY

Why it Matters

Children’s long-term well-being and success is tied to their relationships and experiences with their caregivers. Adverse childhood experiences (ACEs) refer to childhood experiences of abuse, neglect and other life events that can negatively impact children’s immediate and long-term well-being.^{xxxv,307} ACEs have been associated with negative effects on development, educational achievement, future employment, mental health, drug and alcohol use and overall increased health care utilization.^{308, 309, 310} ACEs are more prevalent among Arizona children with special health care needs and children living in poverty.³¹¹

Social, physical, academic and economic outcomes are positively influenced by healthy relationships and interactions with family members and caregivers during childhood.^{312, 313, 314, 315, 316} An understanding of, and ability to utilize, positive parenting skills is an important protective factor that reduces the likelihood of abuse and neglect, leading to better childhood and long-term outcomes.³¹⁷ Positive Childhood Experiences (PCEs), including positive parent-child relationships and feelings of safety and support, have been shown to have positive long term impacts on mental and relational health.³¹⁸ Even if children have experienced multiple ACEs, if their families show high levels of resilience and connection (e.g., working together to solve problems, staying hopeful in difficult times and talking together about things that matter to their family) they show higher rates of flourishing, characterized by healthy social and emotional development and an open and engaged approach to learning.³¹⁹ These higher flourishing scores coupled with higher ACE scores point to the reality that childhood flourishing can, and does, exist amid adverse experiences and can potentially help mitigate their negative health effects.³²⁰ Supporting families with the knowledge and skills to promote resilience and connection can therefore be critical for ensuring children’s long-term well-being.

What the Data Tell Us

Early literacy

Parents and families can play an important role in promoting early academic skills. When families read, sing and tell stories together, it can help young children develop reading and writing fluency as well as their capacity for reading comprehension.^{321, 322, 323} Literacy practices at home have also been found to increase children’s motivation to learn.³²⁴ These early literacy skills are important because they are linked to durable outcomes including elementary school performance and overall educational achievement.³²⁵

^{xxxv} ACEs include eight categories of traumatic or stressful life events experienced before the age of 18 years. The eight ACE categories are sexual abuse, physical abuse, emotional abuse, household adult mental illness, household substance abuse, domestic violence in the household, incarceration of a household member, and parental divorce or separation.

Some families may face challenges to implementing literacy practices with their young children, especially when they are low-resourced. Barriers include being unfamiliar with child development benchmarks, having limited free time to spend with children and lower access to books in the home.³²⁶ Community programs, family resource centers, home visitation and larger-scale initiatives can help caregivers implement home-based literacy practices to improve children's reading scores. Recognizing the influence caregivers can have, the American Academy of Pediatrics suggests that pediatricians provide information to families about the benefits of early literacy practices. Doctor's offices and other community locations are also places where initiatives like Read on Arizona and Reach Out & Read may provide books and other materials that families can bring home.³²⁷

Substance use disorders

Parental substance use has major implications for children's health and well-being. Children of parents with substance use disorders are frequently referred to child welfare services due to neglect or abuse and face a higher risk of later mental health and behavioral health issues, including developing substance use disorders themselves.^{328, 329} Access to treatment for substance use disorders and supports for parents and families grappling with these issues can help ameliorate the short and long-term impacts on young children.^{330, 331}

How the Navajo/Apache Region is faring

- The number of non-fatal opioid-related overdoses nearly tripled in Navajo and Apache counties combined since 2017, from 29 that year to 86 in 2021. Overdose-related deaths also more than tripled between 2017 (n<10) and 2020 (n=35) before declining slightly to 21 in 2021. By contrast, deaths statewide climbed continuously in this time period, more than doubling from 923 in 2017 to 2,019 in 2021 (Figure 68). To help address opioid addiction, the state of Arizona has made three resources available in recent years; the Opioid Assistance and Referral^{xxxvi} line launched in 2018, no cost availability of naloxone (also called Narcan, a medication that rapidly reverses opioid overdose) to many organizations across the state through the Arizona Department of Health Services (ADHS) and access to naloxone without a prescription at pharmacies.

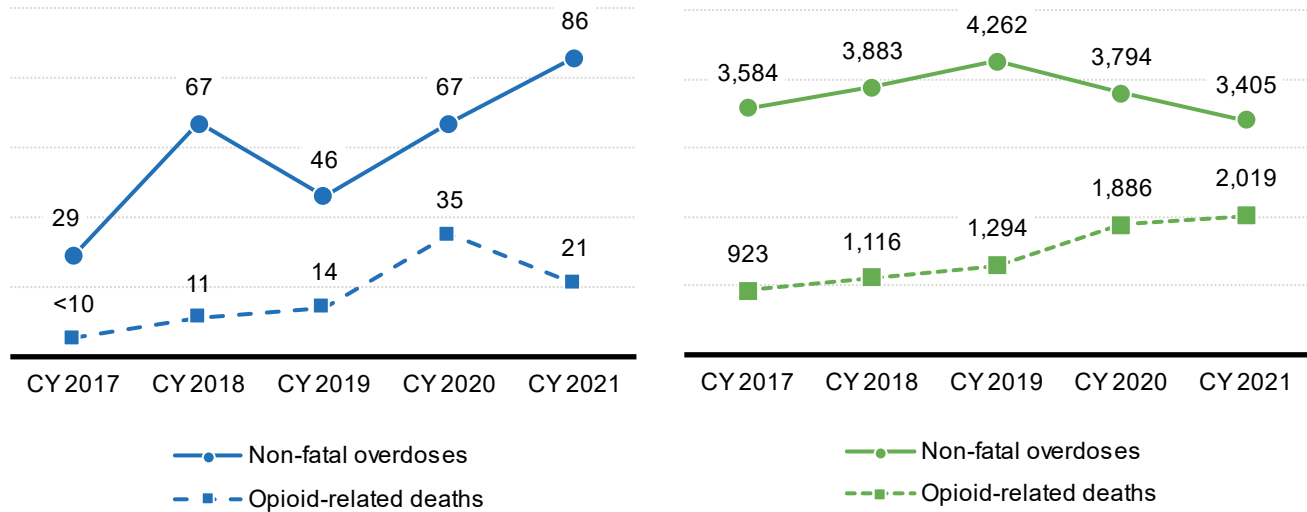
^{xxxvi} For more information, please see <https://www.azdhs.gov/oarline/>

^{xxxvii} For more information, please see <https://www.azdhs.gov/opioid/index.php#naloxone>

Figure 68. Number of non-fatal overdoses with opioids or opiates contributing to the overdose and opioid-related deaths, 2017 to 2021

Navajo & Apache counties (combined)

Arizona



Source: Arizona Department of Health Services (2021). [Opioid-related vital statistics dataset]. Unpublished data.

Note: Data for both counties are combined because of small counts of overdoses and deaths in Apache County.

Child removals

In situations where the harm in remaining with their family is determined to be too great to a child, they may be removed from their home, either temporarily or permanently. Since 2014, the number of children removed from their home by the Arizona Department of Child Safety (DCS) was nearly cut in half, from 12,162 children (birth to age 17) in 2014 to 6,689 in 2022.^{332, 333, 334} This major reduction in removals is tied to multiple intentional efforts by DCS over the past decade to improve Arizona’s child welfare system and safely reduce the number of children in foster care.^{335, 336, 337}

One notable effort was the work to better define instances of neglect and reduce unnecessary investigations of families. After a 2015 review found that DCS hotline staff lacked clear guidelines for determining cases of neglect, DCS provided coaching for hotline staff and developed an improved decision-making protocol with clearer guidance. This resulted in screened-in cases declining from 70% to 55%.³³⁸

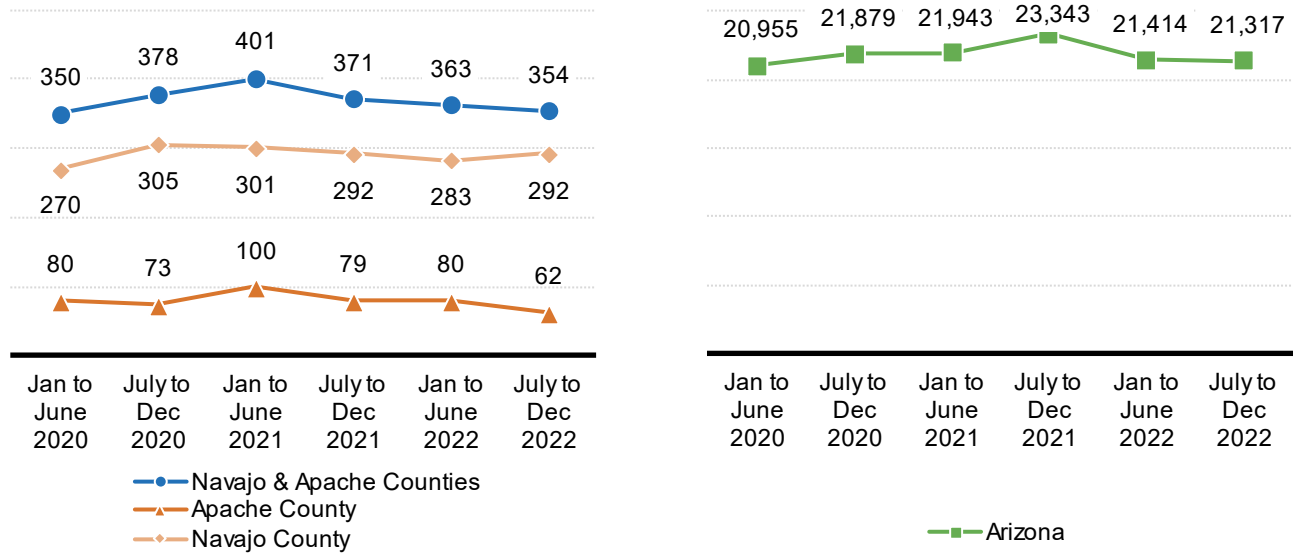
In March 2022, Arizona also passed legislation (SB 1050) which created a stricter definition of ‘neglect,’ reducing the risk that children are separated from their families simply for living in poverty.^{339, 340} Despite removals declining, Black and American Indian children continue to be overrepresented in the DCS system. Addressing this disproportionality of Black and American Indian children in the DCS system is another area of targeted effort by the agency. In June 2023, Mathematica

published the Arizona Department of Child Safety Next Event Study, which aimed to identify disparities in DCS engagement and provide recommendations to further reduce unnecessary investigations and removals.³⁴¹ DCS has developed several strategic initiatives to reduce these disparities, including implementing standardized training for staff and increasing involvement of family and community members in decision-making processes.³⁴²

How Navajo/Apache Region is faring

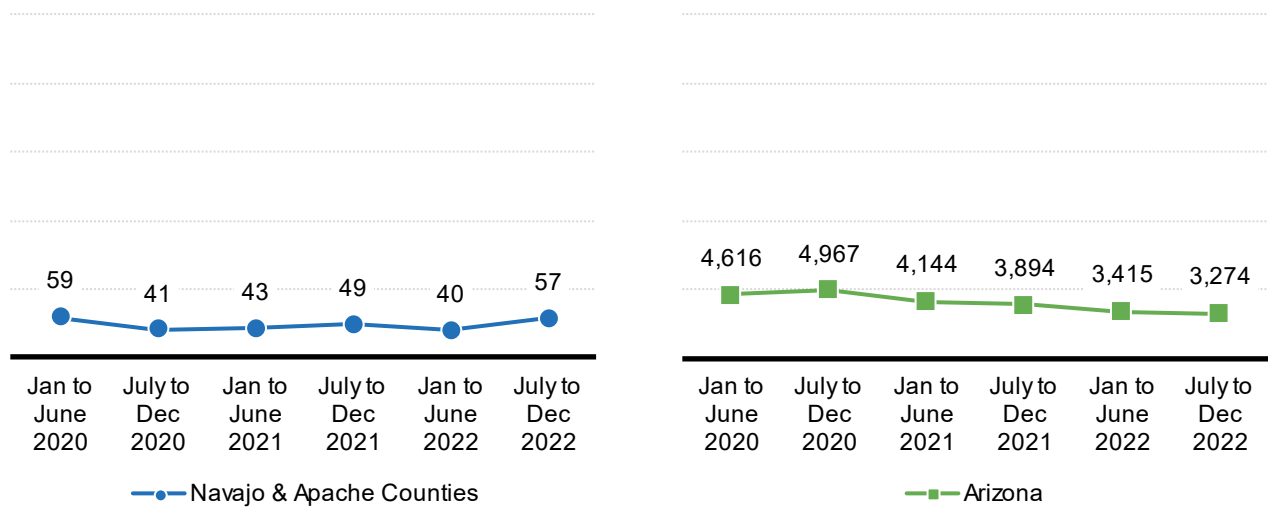
- The number of child abuse and neglect reports assigned for investigation by DCS peaked in Apache and Navajo counties combined in the first half of 2021 (n=401), while the highest number of reports statewide occurred in the latter half of 2021. In the last half of 2022 there were 354 child abuse and neglect reports assigned for investigation in Apache and Navajo counties combined (Figure 69).
- The number of children under 18 removed by DCS varied in Navajo and Apache counties combined between January 2020 and December 2022, ranging from a high of 59 in the first half of 2020 to a low of 40 in the first half of 2022. By contrast, the number of children removed statewide steadily declined from 4,967 in the latter half of 2020 to 3,274 in the latter half of 2022 (Figure 70).
- Neglect was the most common type of substantiated maltreatment during this period in Apache County (57%), Navajo County (77%) and Arizona overall (71%), followed by physical abuse. Physical abuse was much more prevalent in Apache County (43%) compared to Navajo County (15%) and the state (24%) (Figure 71).

Figure 69. Child abuse and neglect reports (for children birth to age 17) assigned for investigation by DCS, Jan 2020 to Dec 2022



Source: Department of Child Safety (2023). Semiannual child welfare reports, Sept 2020 to March 2023. Retrieved from <https://dcs.az.gov/reports>

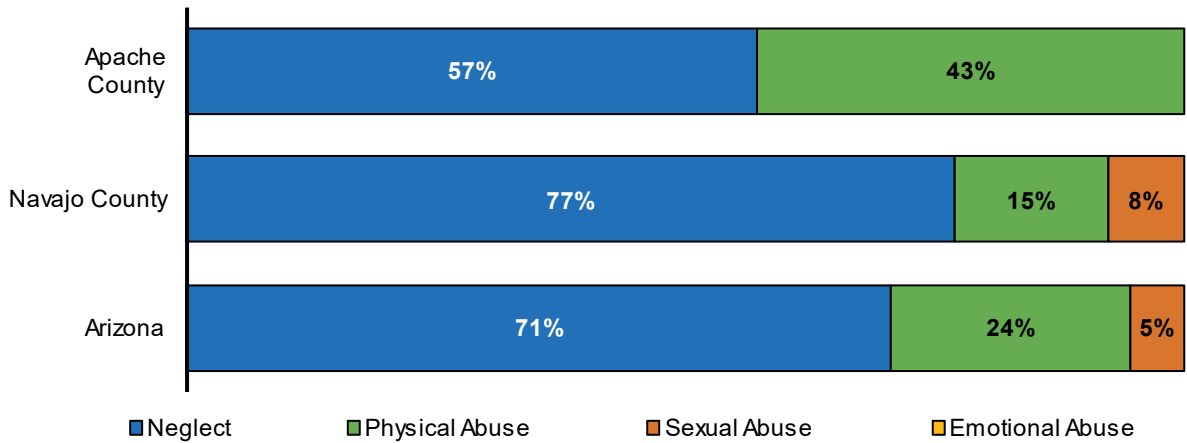
Figure 70. Children birth to age 17 removed by DCS, Jan 2020 to Dec 2022



Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Note: Only Navajo & Apache counties combined shown due to small numbers in Apache County.

Figure 71. Substantiated maltreatment reports by type for children birth to age 17, July-Dec 2022



Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Note: Statewide, 0.1% of substantiated maltreatment reports (fewer than 5 in the given time period) were due to emotional abuse.

Foster care

The Family First Prevention Services Act, signed into federal law on February 9, 2018, aims to ensure children are placed in the least restrictive, most family-like setting appropriate to their unique needs when foster care is needed. One effect of the Family First Prevention Services Act has been an increased focus on kinship placements, which are placements of children with relatives or close family friends.³⁴³ In recent years, the number of unlicensed kinship homes has even exceeded the number of foster homes in the state. This increase is likely related to several changes at DCS, including efforts to reduce barriers to licensure (e.g., waiving some fingerprint clearance card requirements) and funds to assist kinship caregivers with meeting licensing requirements (e.g., purchasing car seats). Additionally, an increase in the monthly kinship stipend (from \$75/month to \$300/month) for unlicensed kinship homes can help support relatives, such as grandparents, who are caring for children even if they are not currently able to pursue becoming a licensed foster home.³⁴⁴

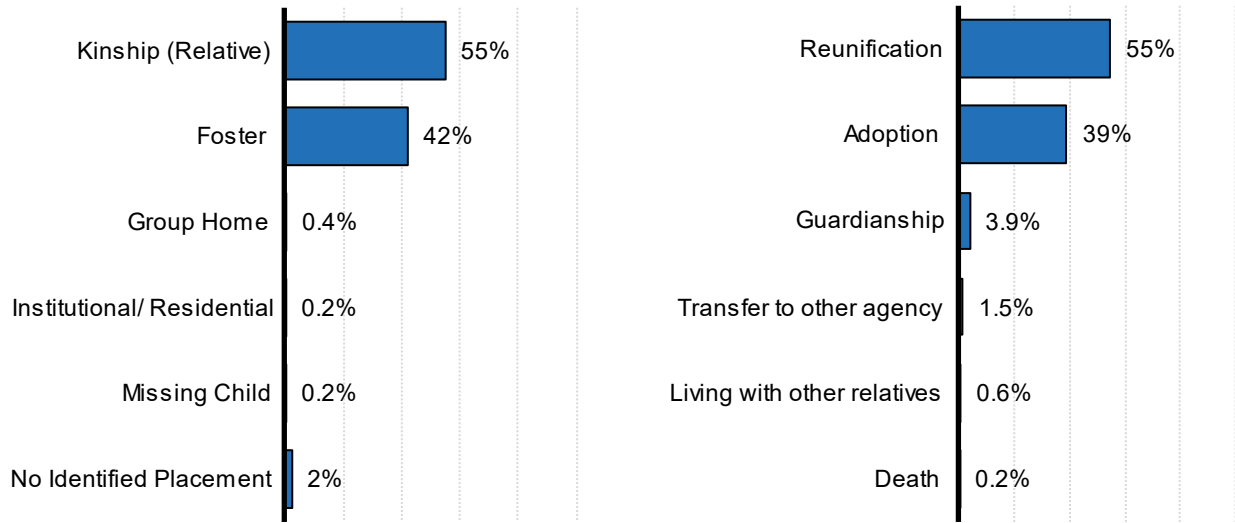
How Arizona is faring

- In the last six months of 2022, more than half (55%) of young children birth to age 5 placed in out-of-home care by DCS across Arizona were able to remain with family through a kinship placement. Children in DCS custody most often exited out-of-home care to be reunified with their parents (55%) or adopted (39%) (Figure 72).
- The number of licensed kinship foster homes in Arizona steadily declined between January 2018 and June 2022, though there was an uptick again in the latter half of 2022. Generally, fewer than one in five kinship homes are licensed, and the number of unlicensed kinship homes increased

slightly overall during the same period and exceeded the number of community foster homes during the most intense years of the pandemic (Figure 73).

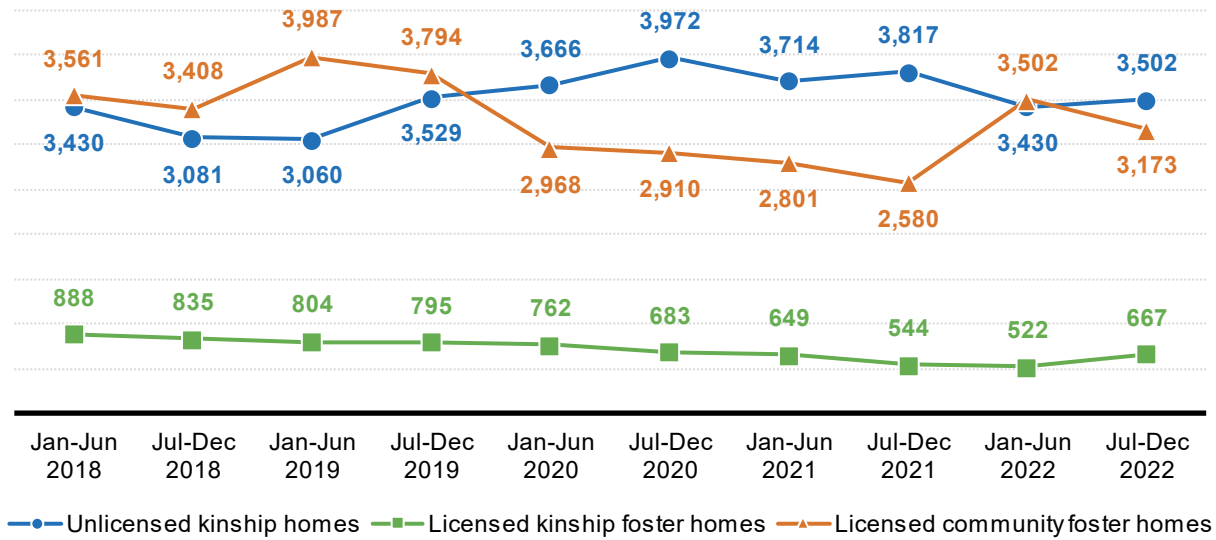
Figure 72. Types of placement and outcomes for children birth to age 5 in DCS custody in Arizona, July-Dec 2022

Placement type for children ages 0-5 in DCS custody Case outcome for children 0-5 exiting out-of-home care



Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Figure 73. Licensed foster homes and unlicensed kinship homes in Arizona, Jan 2018 to Dec 2022



Source: Department of Child Safety (2023). Semiannual child welfare reports, Sept 2018 to March 2023. Retrieved from <https://dcs.az.gov/reports>

Additional data tables related to *Family Support and Literacy* can be found in Appendix 1 of this report.

APPENDIX 1: ADDITIONAL DATA TABLES

Population Characteristics

Table 28. Population projections for children birth to age 4, 2030 to 2060

Geography	Population ages 0-4, 2020 Census	Population ages 0-4, 2030 (projected)	Population ages 0-4, 2040 (projected)	Population ages 0-4, 2050 (projected)	Population ages 0-4, 2060 (projected)
Navajo/Apache Region	3,815	<i>Regional data not available</i>			
Apache County	3,861	3,846	3,354	2,567	2,336
Navajo County	6,446	6,207	6,042	5,237	4,788
Arizona	392,370	459,822	499,925	497,031	525,849

Source: Arizona Office of Economic Opportunity (2022). Arizona Population Projections: 2022 to 2060, Medium Series

Table 29. Race and ethnicity of the population of all ages, 2020 Census

Geography	Estimated population (all ages)	Hispanic or Latino	White, not Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Two or more races
Navajo/Apache Region	73,563	14%	78%	1%	9%	2%	8%
Apache County	66,021	6%	22%	1%	73%	1%	4%
Navajo County	106,717	10%	44%	1%	47%	1%	6%
Arizona	7,151,502	31%	57%	6%	6%	5%	14%
United States	331,449,281	19%	62%	14%	3%	8%	10%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages in each row may sum to more or less than 100% because (a) persons reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) persons reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Table 30. Race and ethnicity of children birth to age 4

Geography	Estimated number of children (birth to 4 years old)	Hispanic or Latino	White, not Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Two or more races
Navajo/Apache Region	3,815	21%	69%	2%	14%	3%	13%
Apache County	3,861	7%	17%	1%	79%	1%	6%
Navajo County	6,446	13%	34%	2%	57%	2%	8%
Arizona	392,370	44%	42%	10%	8%	7%	21%
United States	18,400,235	25%	54%	18%	4%	9%	16%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), P6, P7, P8, P9, P12, P12A-W.

Note: The six percentages in each row may sum to more or less than 100% because (a) children reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) children reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Table 31. Race and ethnicity for the mothers of babies born in 2020 and 2021

Geography	Calendar year	Number of births	Mother was non-Hispanic White	Mother was Hispanic or Latina	Mother was Black or African American	Mother was American Indian or Alaska Native	Mother was Asian or Pacific Islander
Navajo/Apache Region	2020	878	64%	18%	0.1 to 0.6%	17%	1%
	2021	818	70%	18%	0%	10%	1%
Navajo County	2020	1,305	37%	12%	1%	50%	1%
	2021	1,210	40%	11%	1%	48%	48%
Apache County	2020	785	18%	6%	0%	75%	1%
	2021	762	19%	7%	0%	73%	1%
Arizona	2020	76,781	43%	41%	6%	5%	4%
	2021	77,857	43%	41%	6%	5%	4%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: The five percentages in each row should sum to 100%, but may not because of rounding. Mothers who report more than one race or ethnicity are assigned to the one which is smaller. Mothers of twins are counted twice in this table.

Table 32. Children birth to age 5 living with parents who are foreign-born, 2017-2021 ACS

Geography	Estimated number of children (birth to 5 years old) living with one or two parents	Number and percent living with one or two foreign-born parents	
		Number	Percent
Navajo/Apache Region	5,021	283	6%
Apache County	4,817	151	3%
Navajo County	7,934	167	2%
Arizona	473,732	115,267	24%
United States	22,399,131	5,504,770	25%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B05009

Note: The term "parent" here includes stepparents.

Table 33. Language spoken at home (by persons ages 5 and older), 2017-2021 ACS

Geography	Estimated population (age 5 and older)	Speak only English at home	Speak Spanish at home	Speak languages other than English or Spanish at home
				Percent
Navajo/Apache Region	68,042	87%	9%	4%
Apache County	62,250	45%	3%	52%
Navajo County	99,597	65%	5%	30%
United States	310,302,360	78%	13%	8%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16001

Note: The three percentages in each row may not sum to 100% because of rounding. The American Community Survey (ACS) no longer specifies the proportion of the population who speak Native North American languages for geographies smaller than the state. In Arizona, Navajo and other Native American languages (including Apache, Hopi, and O'odham) are the most commonly spoken (2%), following English (73%) and Spanish (20%).

Table 34. English-language proficiency (for persons ages 5 and older), 2017-2021 ACS

Geography	Estimated population (age 5 and older)	Speak only English at home	Speak another language at home, and speak English very well	Speak another language at home, and do not speak English very well
Navajo/Apache Region	68,042	87%	11%	3%
Apache County	62,250	45%	40%	15%
Navajo County	99,597	65%	28%	7%
Arizona	6,666,597	73%	18%	8%
United States	310,302,360	78%	13%	8%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16001

Note: The three percentages in each row should sum to 100% but may not because of rounding.

Table 35. Limited-English-speaking households, 2017-2021 ACS

Geography	Estimated number of households	Number and percent of limited-English-speaking households	
Navajo/Apache Region	26,883	382	1%
Apache County	19,443	3,453	18%
Navajo County	36,567	1,929	5%
Arizona	2,683,557	99,159	4%
United States	124,010,992	5,241,326	4%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table C16002

Note: A "limited-English-speaking" household is one in which no one over the age of 13 speaks English very well.

Table 36. Grandchildren birth to age 5 living in a grandparent's household, 2020 Census

Geography	Estimated number of children (birth to 5 years old) living in households	Number and percent living in their grandparent's household	
		Number	Percent
Navajo/Apache Region	4,714	652	14%
Apache County	4,765	1,709	36%
Navajo County	7,932	2,326	29%
Arizona	480,744	64,792	13%
United States	22,401,565	2,520,305	11%

Source: U.S. Census Bureau (2023). 2020 Decennial Census, Demographic and Housing Characteristics (DHC), Tables P14, PCT11.

Note: This table includes all children (under 6 years old) living in a household headed by a grandparent, regardless of whether the grandparent is responsible for them, or whether the child's parent lives in the same household.

Economic Circumstances

Table 37. Median annual family income, 2017-2021 ACS

Geography	Median annual income for all families	Median annual income for all families with children under 18 years old	Median annual income for married-couple families with children under 18 years old	Median annual income for single-male-headed families with children under 18 years old	Median annual income for single-female-headed families with children under 18 years old
Apache County	\$42,700	\$37,200	\$54,700	\$29,700	\$25,300
Navajo County	\$53,400	\$46,400	\$70,900	\$31,300	\$21,800
Arizona	\$78,800	\$75,100	\$100,000	\$49,100	\$35,000
United States	\$85,000	\$82,800	\$110,000	\$50,900	\$32,600

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B19126

Note: Half of the families in the population are estimated to have incomes above the median value, and the other half have incomes below the median.

Table 38. Children birth to age 5 living at selected poverty thresholds, 2017-2021 ACS

Geography	Estimated number of children (birth to 5 years old) who live with parents or other relatives	Percent of children under 50% of the poverty level	Percent of children between 50% and 99% of the poverty level	Percent of children between 100% and 184% of the poverty level	Percent of children at or above 185% of the poverty level
Navajo/Apache Region	5,088	15%	14%	26%	45%
Apache County	5,051	27%	24%	19%	30%
Navajo County	8,221	23%	13%	26%	38%
Arizona	486,513	9%	11%	19%	61%
United States	22,940,195	9%	10%	16%	65%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B17024

Note: The four percentages in each row should sum to 100% but may not because of rounding. In 2021, the poverty threshold for a family of two adults and two children was \$27,479; for a single parent with one child, it was \$18,677. The 185% thresholds are \$50,836 and \$34,552, respectively.

Table 39. Families with children birth to age 5 receiving TANF, state fiscal years 2018 to 2022

Geography	Households with one or more children (ages 0-5)	Number of families with children (ages 0-5) participating in TANF					Percent of households with young children (ages 0-5) participating in TANF in SFY 2022
		SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	
Navajo/Apache Region	3,513	56	64	67	81	94	3%
Apache County	3,398	17 to 25	2 to 18	12 to 20	16	31	1%
Navajo County	5,602	140	132	124	125	104	2%
Arizona	345,601	10,538	9,360	9,947	9,881	9,884	3%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Table 40. Children birth to age 5 receiving TANF, state fiscal years 2018 to 2022

Geography	Number of young children (ages 0-5) in the population	Number of young children (ages 0-5) participating in TANF					Percent of young children (ages 0-5) participating in TANF in SFY 2022
		SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	
Navajo/Apache Region	4,714	77	90	100	115	133	3%
Apache County	4,765	2 to 18	2 to 18	16 to 24	22	44	1%
Navajo County	7,932	186	175	165	172	141	2%
Arizona	480,744	14,659	13,029	13,747	13,654	13,592	3%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Table 41. Families participating in SNAP, state fiscal years 2018 to 2022

Geography	Households with one or more children (ages 0-5)	Number of families participating in SNAP					Percent of households with young children (0-5) participating in SNAP in SFY 2022
		SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	
Navajo/Apache Region	3,513	1,793	1,692	1,625	1,663	1,622	46%
Apache County	3,398	3,393	3,172	2,921	2,694	2,523	74%
Navajo County	5,602	4,400	4,089	3,855	3,601	3,374	60%
Arizona	345,601	151,816	140,056	132,466	131,063	128,460	37%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Table 42. Children participating in SNAP, state fiscal years 2018 to 2022

Geography	Number of young children (ages 0-5) in the population	Number of children (0-5) participating in SNAP					Percent of young children (0-5) participating in SNAP in SFY 2022
		SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	
Navajo/Apache Region	4,714	2,732	2,581	2,440	2,456	2,429	52%
Apache County	4,765	5,061	4,778	4,309	3,906	3,710	78%
Navajo County	7,932	6,724	6,195	5,789	5,380	5,074	64%
Arizona	480,744	229,275	211,814	198,961	194,771	190,968	40%

Sources: Arizona Department of Economic Security (2023). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2023). 2020 Decennial Census, DHC, Table P14 & P20.

Table 43. Women enrolled in WIC, 2018 to 2022

Geography	Enrolled Women, 2018	Enrolled Women, 2019	Enrolled Women, 2020	Enrolled Women, 2021	Enrolled Women, 2022
Navajo/Apache Region	811	806	801	706	682
Apache County	179	183	180	179	178
Navajo County	759	742	741	645	632
Arizona	72,098	68,312	63,111	59,588	60,866

Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Note: Enrolled women include both pregnant and breastfeeding women.

Table 44. Women participating in WIC, 2018 to 2022

Geography	Participating Women, 2018	Participating Women, 2019	Participating Women, 2020	Participating Women, 2021	Participating Women, 2022
Navajo/Apache Region	766	760	761	673	658
Apache County	168	174	171	170	169
Navajo County	712	693	703	617	610
Arizona	67,687	64,225	59,477	56,953	58,456

Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Note: Participating women include both pregnant and breastfeeding women. Women are counted as 'participating' if they received benefits during the time period in question.

Table 45. Children birth to age 4 enrolled in WIC, 2018 to 2022

Geography	Enrolled infants and children, 2018	Enrolled infants and children, 2019	Enrolled infants and children, 2020	Enrolled infants and children, 2021	Enrolled infants and children, 2022
Navajo/Apache Region	2,284	2,317	2,245	2,089	1,992
Apache County	563	554	545	528	504
Navajo County	2,045	2,090	2,031	1,907	1,838
Arizona	187,737	178,300	167,186	162,360	163,893

Source: Arizona Department of Health Services (2021). [WIC Dataset]. Unpublished data.

Table 46. Children birth to age 4 participating in WIC, 2018 to 2022

Geography	Participating infants and children, 2018	Participating infants and children, 2019	Participating infants and children, 2020	Participating infants and children, 2021	Participating infants and children, 2022
Navajo/Apache Region	2,087	2,163	2,151	1,987	1,879
Apache County	498	511	497	503	473
Navajo County	1,871	1,955	1,962	1,811	1,734
Arizona	169,372	161,287	154,501	153,835	155,856

Source: Arizona Department of Health Services (2021). [WIC Dataset]. Unpublished data.

Note: Children are counted as 'participating' if they received benefits during the time period in question.

Table 47. Persons of all ages in households with and without computers and internet connectivity, 2017-2021 ACS

Geography	Estimated number of persons (all ages) living in households	Have a computer and internet	Have a computer but no internet	Do not have a computer
Navajo/Apache Region	70,145	87%	8%	5%
Apache County	65,098	46%	22%	32%
Navajo County	103,846	70%	15%	14%
Arizona	6,930,677	90%	6%	4%
United States	321,899,278	90%	6%	4%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each row should sum to 100% but may not because of rounding.

Table 48. Children birth to age 17 in households with and without computers and internet connectivity, 2017-2021

Geography	Estimated number of children (ages 0-17) living in households	Have a computer and internet	Have a computer but no internet	Do not have a computer
Navajo/Apache Region	17,124	92%	6%	2%
Apache County	17,884	49%	26%	25%
Navajo County	28,301	73%	15%	13%
Arizona	1,611,069	92%	6%	2%
United States	74,041,861	93%	5%	2%

Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B28005

Note: The three percentages in each row should sum to 100% but may not because of rounding.

Educational Indicators

Table 49. Migrant students (grades PS-12) enrolled in public and charter schools, 2019-20 to 2021-22

Geography	Number of migrant students			Percent of students who were migrant students		
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
Navajo/Apache Region Schools	<i>Regional data not available</i>					
Apache County	<11	<11	<11	<11	<11	<2%
Navajo County	<11	<11	<11	<11	<11	<2%
Arizona Schools	4,498	3,598	6,280	<2%	<2%	<2%

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Migrant students are those students participating in the Arizona Migrant Education Program, a federally-funded, state-run program that provides supplemental services to the children of migrant farmworkers.

Table 50. Kindergarten to 3rd grade students with chronic absences, 2019-20 to 2021-22

Geography	K-3 Students with chronic absences			Percent of K-3 students with chronic absences		
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
Navajo/Apache Region	N/A	523	893	N/A	17%	10%
Apache County schools	469	691	1,054	16%	30%	51%
Navajo County schools	538	1,037	1,558	11%	26%	35%
Arizona	25,382	56,547	100,955	8%	21%	34%

Source: Arizona Department of Education (2023). [Absenteeism Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: Students are considered chronically absent if they miss more than 10% of the school days in a school year. This table includes children who are absent due to chronic illness. Regional data were not available for 2019-20 due to difference in how data were pulled in the prior RNA cycle.

Table 51. 4-year and 5-year graduation rates, 2022

Geography	4-Year senior cohort (2022)	4-Year graduates (2022)	4-Year graduation rate (2022)	5-Year graduates (2022)	5-Year graduation rate (2022)
Navajo/Apache Region	1,102	923	84%	N/A	N/A
Apache County	816	626	77%	N/A	N/A
Navajo County	1,437	1,162	81%	N/A	N/A
Arizona Schools	89,404	67,692	76%	71,277	79%

Source: Arizona Department of Education (2023). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The 2022 4-year senior cohort is the number of students who are expected to graduate in 2022 given the number of students who entered school 4 years prior. At the time data for this report were accessed from ADE, 2022 5-year graduation rates had not yet been released, so no regional estimates are available.

Early Learning

Table 52. School enrollment for children ages 3 to 4, 2017-2021 ACS

Geography	Estimated number of children (3 or 4 years old)	Number and percent enrolled in school	
Navajo/Apache Region	2,012	505	25%
Apache County	1,794	737	41%
Navajo County	3,062	927	30%
Arizona	176,033	63,974	36%
United States	8,100,136	3,719,992	46%

Source: U.S. Census Bureau. (2023). American Community Survey 5-year estimates 2017-2021, Table B14003

Note: In this table, "school" may include nursery school, preschool, or kindergarten.

Table 53. Quality First Programs, state fiscal year 2023

Geography	Child care providers served	Child care providers with a 3–5-star rating	Percent of child care providers with a 3–5-star rating
Navajo/Apache Region	13	4	9
Apache County	County data not available		
Navajo County	County data not available		
Arizona	1,434	982	68%

Source: First Things First (2023). Quality First Summary Data. Unpublished data.

Table 54. Median monthly charge for full-time center-based child care, 2022

Geography	Licensed centers			Public schools		
	One infant	One 1- or 2-year-old	One 3- to 5-year-old	One infant	One 1- or 2-year-old	One 3- to 5-year-old
Navajo/Apache Region	<i>Regional data not available</i>					
Apache & Navajo counties	\$945	\$840	\$735	\$1,050	\$987	\$644
Arizona	\$949	\$826	\$727	\$1,011	\$880	\$701

Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Table 55. Median monthly charge for full-time home-based child care, 2022

Geography	Certified family homes			Small group homes		
	One infant	One 1- or 2-year-old	One 3- to 5-year-old	One infant	One 1- or 2-year-old	One 3- to 5-year-old
Navajo/Apache Region	<i>Regional data not available</i>					
Apache & Navajo counties	\$525	\$525	\$525	\$735	\$630	\$630
Arizona	\$662	\$627	\$618	\$761	\$725	\$713

Source: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540>

Table 56. Cost of center-based child care as a percentage of income, 2022

Geography	Median family income	Cost for an infant	Cost for a 1- to 2-year-old child	Cost for a 3- to 5-year-old child
Navajo/Apache Region	<i>Regional data not available</i>			
Apache County	\$37,200	30%	27%	24%
Navajo County	\$46,400	24%	22%	19%
Arizona	\$75,000	15%	13%	12%

Sources: Health Management Associates (2022). 2022 Child Care Market Rate Survey. Arizona Department of Economic Security. Retrieved from <https://des.az.gov/sites/default/files/media/2022-Market-Rate-Survey.pdf?time=1670616239540> & U.S. Census Bureau. (2022). American Community Survey 5-year estimates 2017-2021, Table B19126.

Note: Annual costs of care are calculated by multiplying the median daily cost of care by 252 to approximate a full year of care.

Table 57. Children receiving DES child care assistance, 2017 to 2022

Geography	Number of children receiving assistance						Percent of eligible children receiving assistance					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022
Navajo/Apache Region	88	87	90	64	75	65	93%	89%	87%	72%	88%	94%
Apache County	1 to 9	12	25	1 to 9	15	1 to 9	DS	80%	93%	DS	71%	33%
Navajo County	155	138	147	100	146	108	95%	84%	89%	71%	93%	89%
Arizona	16,922	19,813	23,155	19,909	22,359	20,099	93%	92%	92%	80%	88%	90%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Table 58. DCS-involved children receiving DES child care assistance, 2017 to 2022

Geography	Number of DCS children receiving assistance						Percent of DCS eligible children receiving assistance					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022
Navajo/Apache Region	90	78	97	61	38	36	78%	80%	78%	58%	78%	73%
Apache County	32	28	22	1 to 9	1 to 9	1 to 9	91%	78%	76%	DS	71%	90%
Navajo County	111	100	117	76	61	47	83%	79%	81%	59%	81%	73%
Arizona	12,201	12,219	11,808	7,137	8,853	8,268	88%	82%	82%	59%	81%	80%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Table 59. Eligible families not using DES child care assistance, 2017 to 2022

Geography	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022
Navajo/Apache Region	5.6%	7.9%	DS	24.7%	12.3%	5.9%
Apache County	22.2%	23.1%	DS	DS	29.4%	50%
Navajo County	5.8%	13.3%	9.1%	25.2%	6.7%	10.8%
Arizona	6.7%	7.6%	7.9%	18.3%	11.7%	9.2%

Source: Arizona Department of Economic Security (2023). [Child Care Administration dataset]. Unpublished data.

Table 60. Number of children birth to age 5 receiving DDD services, state fiscal years 2019 to 2022

Geography	SFY 2019	SFY 2020	SFY 2021	SFY 2022	Percent change from 2019 to 2022
Navajo/Apache Region	18	14	15	20	11%
Apache County	1 to 9	1 to 9	1 to 9	1 to 9	DS
Navajo County	25	21	22	27	8%
Arizona	4,005	4,078	2,438	3,691	-8%

Source: Arizona Department of Economic Security (2023). [Division of Developmental Disabilities dataset]. Unpublished data.

Table 61. Number of children birth to age 2 receiving AzEIP and/or DDD services, state fiscal years 2019 to 2022

Geography	Number of children ages 0-2 receiving services from AzEIP and/or DDD				Population ages 0-2 (Census 2020)	Estimated percent of children (ages 0-2) receiving AzEIP and/or DDD services, SFY 2022
	SFY 2019	SFY 2020	SFY 2021	SFY 2022		
Navajo/Apache Region	44	53	35	31	2,161	1.4%
Apache County	47	43	27	19	2,203	0.9%
Navajo County	96	90	47	49	3,745	1.3%
Arizona	6,376	5,721	5,916	5,876	225,737	2.6%

Source: Arizona Department of Economic Security (2023). [AzEIP dataset]. Unpublished data.

Table 62. Preschoolers with disabilities receiving services through LEAs, state fiscal years 2018 to 2022

Geography	Preschoolers enrolled in special education				
	SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022
Navajo/Apache Region	113	103	97	77	93
Apache County	68	62	66	44	36
Navajo County	150	139	139	111	120
Arizona	10,123	10,314	10,521	8,537	8,086

Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Table 63. Preschoolers with disabilities receiving services through LEAs by type of disability, 2021-22

Geography	Total Preschoolers	Developmental Delay	Speech or Language Impairment	Preschool Severe Delay	Other Disability
Navajo/Apache Region	93	46%	44%	10%	0%
Apache County	36	47%	44%	8%	0%
Navajo County	DS	38%	48%	12%	2%
Arizona	8,086	43%	30%	24%	3%

Source: Arizona Department of Education (2021). [Graduation Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Table 64. Kindergarten to 3rd grade students enrolled in special education in public and charter schools, state fiscal years 2018 to 2022

Geography	K-3rd grade students enrolled in special education				
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Navajo/Apache Region	503	491	522	449	434
Apache County	336	319	326	278	236
Navajo County	615	600	591	547	514
Arizona	36,468	37,812	38,791	37,179	37,334

Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Table 65. Kindergarten to 3rd grade students enrolled in special education in public and charter schools by primary disability, state fiscal year 2022

Geography	Total K-3rd grade students	Speech or Language Impairment	Developmental Delay	Specific Learning Disability	Autism	Other Disability
Navajo/Apache Region	434	36%	25%	20%	7%	13%
Apache County	236	31%	31%	17%	7%	14%
Navajo County	514	32%	33%	16%	6%	12%
Arizona Schools	37,334	36%	27%	12%	11%	13%

Source: Arizona Department of Education (2023). [Special Needs Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The “Other Disabilities” category includes children with emotional disturbance, deafness, deaf-blindness, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairments such as chronic medical conditions that affect a child’s ability to participate in the educational setting, traumatic brain injury, or visual impairment.

Child Health

Table 66. Prenatal care for the mothers of babies born in 2020 and 2021

Geography	Calendar year	Number of births	Mother had no prenatal care	Mother had fewer than five prenatal visits	Mother began prenatal care in the first trimester
Navajo/Apache Region	2020	878	1%	6%	71.5%
	2021	818	2%	4%	75.7%
Apache County	2020	785	3%	9%	63.7%
	2021	762	4%	9%	63.6%
Navajo County	2020	1,305	2%	9%	65.8%
	2021	1,210	3%	8%	69.0%
Arizona	2020	76,781	2%	5%	68.8%
	2021	77,857	2%	5%	71.7%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table.

Table 67. Selected characteristics of mothers giving birth, 2020 to 2021

Geography	Calendar year	Number of births	Mother was younger than 18	Mother was younger than 20	Mother smoked cigarettes during pregnancy
Navajo/Apache Region	2020	878	1%	7%	7.5%
	2021	818	1%	6%	8.8%
Apache County	2020	785	2%	7%	2.5%
	2021	762	3%	8%	3.7%
Navajo County	2020	1,305	2%	8%	5.8%
	2021	1,210	2%	8%	5.5%
Arizona	2020	76,781	1%	5%	3.6%
	2021	77,857	1%	5%	3.2%
Healthy People 2030 target					4.3%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table. The Healthy People 2030 target for maternal use of tobacco during pregnancy is 95.7% of females reporting abstaining from smoking during pregnancy.

Table 68. Births to mothers with gestational diabetes or pre-pregnancy obesity, 2020 to 2021

Geography	Calendar year	Number of births	Mother had gestational diabetes	Mother had pre-pregnancy obesity
Navajo/Apache Region	2020	878	9.3%	30%
	2021	818	6.7%	28%
Apache County	2020	785	15.8%	29%
	2021	762	18.6%	32%
Navajo County	2020	1,305	13.7%	25%
	2021	1,210	13.1%	28%
Arizona	2020	76,781	9.5%	27%
	2021	77,857	9.9%	27%

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Note: Mothers of twins are counted twice in this table.

Table 69. Selected birth outcomes, 2020 to 2021

Geography	Calendar year	Number of births	Baby weighed less than 2500 grams	Baby was preterm (less than 37 weeks)	Baby was admitted to a NICU
Navajo/Apache Region	2020	878	7.5%	11.0%	10%
	2021	818	8.8%	9.7%	10%
Apache County	2020	785	9.7%	12.2%	9%
	2021	762	8.0%	10.9%	8%
Navajo County	2020	1,305	7.0%	10.8%	8%
	2021	1,210	9.8%	11.5%	9%
Arizona	2020	76,781	7.4%	9.5%	8%
	2021	77,857	7.9%	10.0%	8%
Healthy People 2030 targets			9.4%		

Source: Arizona Department of Health Services (2023). [Vital Statistics Births dataset]. Unpublished data.

Table 70. WIC-enrolled infants ever breastfed, 2022

Geography	Infants for whom breastfeeding status is determined	Infants ever breastfed	Percent of infants ever breastfed
Navajo/Apache Region	328	279	85%
Apache County	88	75	85%
Navajo County	308	260	84%
Arizona	31,612	25,103	79%

Source: Arizona Department of Health Services (2023). [WIC dataset]. Unpublished data.

Table 71. Percent of WIC-enrolled infants ever breastfed, 2018 to 2022

Geography	Breastfeeding rate, 2018	Breastfeeding rate, 2019	Breastfeeding rate, 2020	Breastfeeding rate, 2021	Breastfeeding rate, 2022
Navajo/Apache Region	84%	82%	80%	78%	85%
Apache County	84%	78%	77%	79%	85%
Navajo County	84%	84%	81%	77%	84%
Arizona	77%	79%	78%	77%	79%

Source: Arizona Department of Health Services (2023). [WIC Dataset]. Unpublished data.

Table 72. Child care immunization exemption rates, 2018-19 to 2022-23

Geography	Children in child care with religious exemptions					Children in child care exempt from all vaccines				
	2018-19	2019-20	2020-21	2021-22	2022-23	2018-19	2019-20	2020-21	2021-22	2022-23
Navajo/ Apache Region	4.1%	7.1%	6.8%	5.6%	5.1%	3.8%	3.5%	6.3%	4.6%	5.1%
Apache County	4.0%	3.5%	1.9%	2.2%	1.5%	3.6%	2.2%	1.9%	1.6%	1.5%
Navajo County	3.0%	5.7%	5.2%	4.7%	3.7%	2.9%	2.7%	4.7%	3.3%	3.7%
Arizona	4.5%	5.0%	5.1%	5.7%	5.7%	3.0%	3.1%	3.3%	3.4%	4.0%

Source: Arizona Department of Health Services (2023). *Childcare Immunization Coverage, 2018-19 to 2022-23 School Years*. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). *Childcare Immunization Coverage by County, 2018-19 through 2022-23 School Years*. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 73. Kindergarten immunization exemption rates, 2018-19 to 2022-23

Geography	Kindergarteners with personal belief exemptions					Kindergarteners exempt from all vaccines				
	2018-19	2019-20	2020-21	2021-22	2022-23	2018-19	2019-20	2020-21	2021-22	2022-23
Navajo/Apache Region	13.7%	11.2%	9.9%	13.7%	16.3%	9.9%	9.0%	5.7%	7.9%	10.0%
Apache County	6.1%	4.9%	4.3%	9.8%	8.5%	4.4%	4.1%	3.5%	2.5%	5.9%
Navajo County	7.8%	5.8%	6.0%	6.7%	9.3%	5.7%	4.5%	4.0%	5.3%	7.0%
Arizona	5.9%	5.4%	5.4%	6.6%	7.3%	3.8%	3.4%	3.3%	3.7%	4.6%

Source: Arizona Department of Health Services (2023). *Childcare Immunization Coverage, 2018-19 to 2022-23 School Years*. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2023). *Childcare Immunization Coverage by County, 2018-19 through 2022-23 School Years*. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 74. Non-fatal hospitalizations and emergency department visits due to unintentional injuries for children birth to age 5, 2018-2022 combined

Geography	Non-fatal inpatient hospitalizations for unintentional injuries	Non-fatal emergency department visits for unintentional injuries
Navajo/Apache Region	36	2,020
Apache County	44	1,023
Navajo County	77	2268
Arizona	2,811	160,742

Source: Arizona Department of Health Services (2023). [Hospital Discharge dataset]. Unpublished data.

Note: Data on hospitalizations were geocoded to FTF regions using the address provided by parents or caregivers at the time of hospitalization; however, in cases where the address provided was not valid, hospitalizations could not be assigned to a region. County of residence is captured separately from addresses, meaning that counts in the county often exceed those seen in a particular region because they include all hospitalizations regardless of address validity.

Family Support & Literacy

Table 75. Number of deaths with opiates or opioids contributing, 2018-2021 combined

Geography	Number of deaths with opiates or opioids contributing, 2018-2021
Navajo/Apache Region	43
Apache County	40
Navajo County	69
Arizona	6,315

Source: Arizona Department of Health Services (2023). [Vital Statistics dataset]. Unpublished data.

Note: About 35% of overdose deaths statewide were missing address information and thus could not be geocoded to an FTF region, but county assignments were available from death certificates.

Table 76. Substantiated maltreatment reports by type for children birth to age 17, July-Dec 2022

Geography	Total substantiated maltreatment reports	Neglect	Physical abuse	Sexual abuse	Emotional abuse
Navajo/Apache Region	<i>Regional data not available</i>				
Apache County	<10	57%	43%	0%	0%
Navajo County	26	77%	15%	8%	0%
Arizona	676	71%	24%	5%	0.1%

Source: Department of Child Safety (2023). Semiannual child welfare report, March 2023. Retrieved from <https://dcs.az.gov/reports>

Table 77. Children birth to age 17 removed by the Department of Child Services (DCS), Jan 2020 to Dec 2022

Geography	Children removed (Jan 2020-Jun 2020)	Children removed (Jul 2020- Dec 2020)	Children removed (Jan 2021-Jun 2021)	Children removed (Jul 2021-Dec 2021)	Children removed (Jan 2022- Jun 2022)	Children removed (Jul 2022-Dec 2022)
Navajo/Apache Region	<i>Regional data not available</i>					
Apache County	24	<10	13	20	12	<10
Navajo County	35	33	30	29	28	51
Arizona	4,616	4,967	4,144	3,894	3,415	3,274

Source: Department of Child Safety (2023). Semiannual child welfare report, September 2023. Retrieved from <https://dcs.az.gov/reports>

APPENDIX 2: METHODS AND DATA SOURCES

U.S. Census and American Community Survey Data. The U.S. Census³⁴⁵ is an enumeration of the population of the United States. It is conducted every ten years, and includes information about housing, race, and ethnicity. The 2020 U.S. Census data are available by census block. There are about 108,000 inhabited blocks in Arizona, with an average population of 66 people each. The Census data for the Navajo/Apache Region presented in this report were calculated for most indicators by identifying each block in the region and aggregating the data across all of those blocks. With the implementation of new privacy measures by the U.S. Census, some data previously available at the block level, such as grandchildren living in a grandparent's households or counts of households with children birth to age 5, are now only published at the block group or tract level. Regional estimates for these indicators were calculated by aggregating data over the census tracts which are wholly or partially contained in the region. Data from partial census tracts were apportioned according to the percentage of the 2020 Census population in that tract living inside the region.

The American Community Survey (ACS)³⁴⁶ is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-to-face interviews. It covers many different topics, including income, language, education, employment, and housing. ACS data are available by census tract. Arizona is divided into about 1,750 census tracts, with an average of about 3,900 people in each. The ACS data for the Navajo/Apache Region were calculated by aggregating over the census tracts which are wholly or partially contained in the region. The data from partial census tracts were apportioned according to the percentage of the 2020 Census population in that tract living inside the region. The most recent and most reliable ACS data are averaged over the past five years; those are the data included in this report. They are based on surveys conducted from 2017 to 2021. In general, the reliability of ACS estimates is greater for more populated areas. Statewide estimates, for example, are more reliable than county-level estimates.

Education Data from ADE. Education data from the Arizona Department of Education (ADE) included in this report were obtained through a custom tabulation of unredacted data files conducted by the vendor on a secure ADE computer terminal in the fall of 2023. The vendor worked with the regional director to create a list of all public and charter schools in the region based on the school's physical location within the region as well as local knowledge as to whether any schools located outside the region served a substantial number of children living within the region. This list was used to assign schools and districts to the region as well to aggregate school-level data to the region-level. This methodology differs slightly from the methods that ADE uses to allocate school-level data to counties, so county and region totals may vary in some tables. Data were presented over time where available; however, due to changes in the ADE data system as well as the effects of the COVID-19 pandemic on data collection and definitions over the past three years, some indicators could not be presented as a time series.

Child Care Capacity Calculations. Lists of child care providers are maintained by multiple state agencies in Arizona, including the Arizona Department of Health Services (ADHS), which licenses child care centers; the Arizona Department of Economic Security (DES), which maintains the Child Care Resource and Referral (CCR&R) list; and First Things First (FTF), which administers the Quality

First program. ADHS child care licensing database was used as the primary source for child care capacity calculations in this report, as analyses of both statewide and region-level data showed that most child care slots in regulated providers in the region are provided by centers. Centers that only serve children ages 5-12 were removed from child care capacity calculations, as these are typically before- & after-school programs that only serve school-age children. For all tables, providers were geocoded to regions using addresses or coordinates provided in the state agency datasets to assign them to regions. Comparisons of child care capacity to the young child population are meant to provide a relative assessment of the abundance or scarcity of child care supply relative to potential demand. The child care tables in this report do not reflect the capacity of unlicensed, unregulated or informal child care providers in the region. The estimated supply may also over-estimate availability in regulated care as it did not account for child care providers that operate under licensed capacity by choice or children who enroll in multiple facilities (e.g., a child who attends part-day Head Start or school-based preschool in the morning and a child care center in the afternoon).

Change Calculations. Unless otherwise specified, changes in counts of data over time (i.e., percent increase or decrease) are calculated by subtracting the earlier number (e.g., a 2010 count) from the later number (e.g. the 2020 count) and dividing the result by the earlier number (e.g. the 2010 count). This calculation provides the percent change between the most recent count and the prior count, relative to the prior count.

Data Availability. State agency data in this report were provided to FTF by agency staff through a data request process initiated in May 2023 and extending to January 2024. Wherever possible, data were requested for multiple years to allow for the visualization of trends as well as for the most recent year available. However, due to both the constraints of agency staff and agency-maintained datasets as well as the timing of requests, not all data were available on the same time and geographic scales. This report attempts to include the most recent and complete data available, with notes indicating where data were not available for particular time periods or geographies.

Data Suppression. To protect the confidentiality of program participants, the FTF Data Dissemination and Suppression Guidelines preclude our reporting of social service and early education programming data if the count is less than 10 and preclude our reporting data related to health or developmental delay if the count is less than 6. In addition, some data received from state agencies are suppressed according to their own guidelines. ADHS does not report counts between 1 and 5; DES does not report counts between 1 and 9; ADE does not report counts less than 11. Additionally, both ADE and DES require suppression of the second-smallest value or the denominator in tables where a reader might be able to use the numbers provided to calculate a suppressed value. Throughout this report, information which is not available because of suppression guidelines is indicated by entries of “1-5” or “1-9” or “<11” for counts, or “DS” (data suppressed) for percentages. Data are sometimes not available for particular regions, either because a program did not operate in the region or because data are only available at the county level. Cases where data are not available will be indicated by an entry of “N/A” or a table row note that states “regional data not available.”

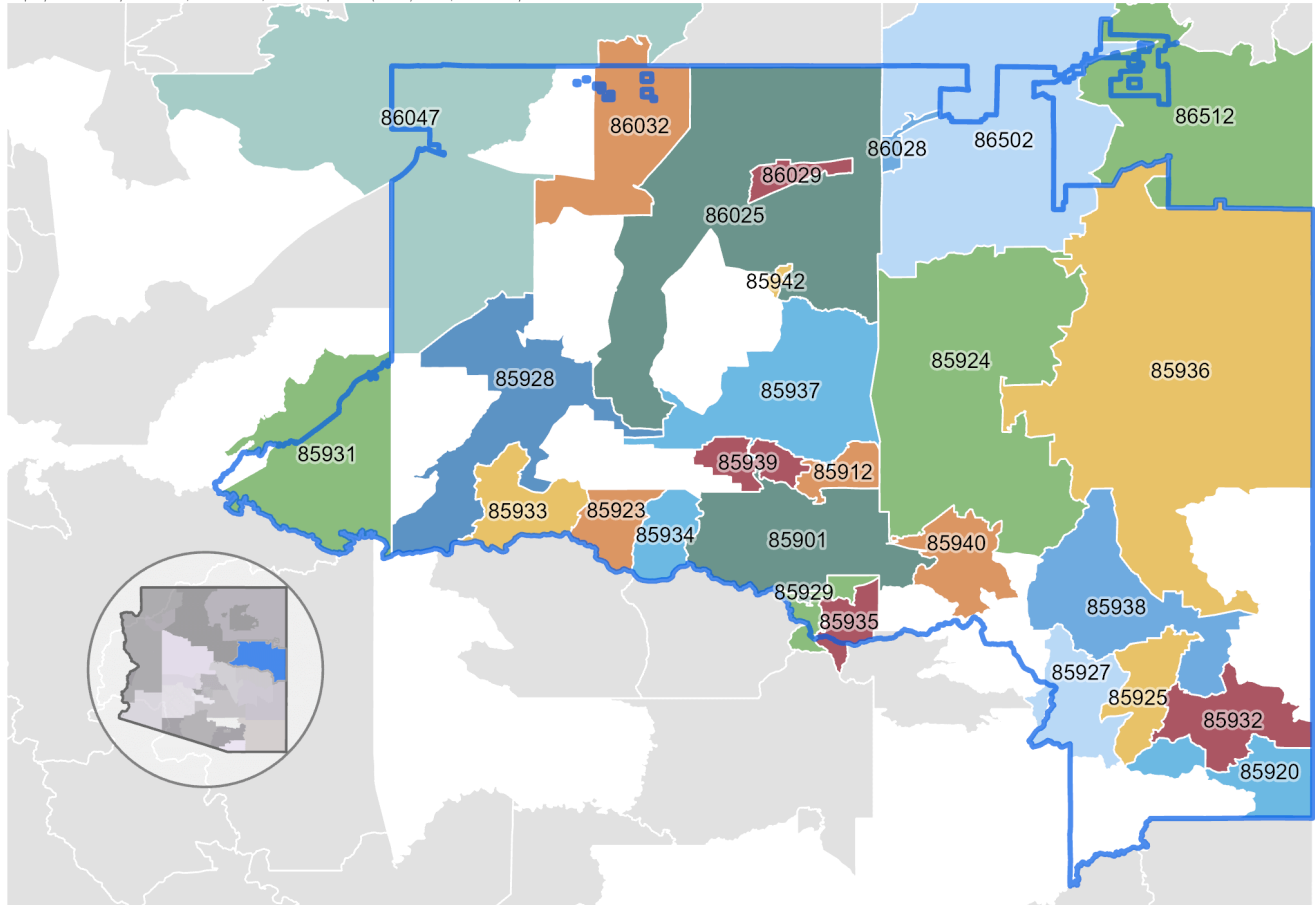
For some data, an exact number was not available because it was the sum of several numbers provided by a state agency, and some numbers were suppressed in accordance with agency guidelines or because the number was suppressed as a second-smallest value that could be used to calculate a suppressed

value. In these cases, a range of possible numbers is provided, where the true number lies within that range. For example, for data from the sum of a suppressed number of children enrolled in Child-only Temporary Assistance for Needy Families Cash Assistance Program (TANF) and 12 children enrolled in a household with TANF, the entry in the table would read “13 to 21.” This is because the suppressed number of children in Child-only TANF is between 1 and 9, so the possible range of values is the sum of the known number (12) and 1 on the lower bound to the sum of the known number (12) plus 9 on the upper bound. Ranges that include numbers below the suppression threshold of less than 6 or 10 may still be included if the upper limit of the range is above 6 or 10. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.

APPENDIX 3: ZIP CODES OF THE NAVAJO/APACHE REGION

Figure 74. Zip Code Tabulation Areas (ZCTAs) in the Navajo/Apache Region

Map by Community Research, Evaluation, & Development (CRED) Team, University of Arizona



Source: Custom map by the Community Research, Evaluation, & Development (CRED) Team using shapefiles obtained from First Things First and the U.S. Census Bureau 2020 TIGER/Line Shapefiles (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php>)

Table 78. Zip Code Tabulation Areas (ZCTAs) in the Navajo/Apache Region

Zip Code Tabulation Area (ZCTA)	Population (all ages)	Percent of this ZCTA's total population living in the Navajo/Apache Region	This ZCTA is shared with
Navajo/Apache Region	73,563		
85901	18,701	100%	
85912	269	100%	
85920	677	100%	
85923	499	100%	
85924	2,851	100%	
85925	4,332	100%	
85927	172	98%	White Mountain Apache Tribe Region
85928	752	100%	
85929	8,031	100%	White Mountain Apache Tribe Region
85931	164	92%	Coconino Region
85932	481	100%	
85933	3,639	100%	
85934	601	100%	
85935	3,686	93%	White Mountain Apache Tribe Region
85936	4,217	100%	
85937	8,434	100%	
85938	2,100	100%	
85939	4,213	100%	
85940	1,580	100%	
85942	64	100%	
86025	5,358	100%	
86028	34	100%	
86029	178	100%	
86032	1,367	97%	Navajo Nation Region
86047	699	5%	Coconino Region, Navajo Nation Region
86502	56	5%	Navajo Nation Region
86512	345	16%	Navajo Nation Region

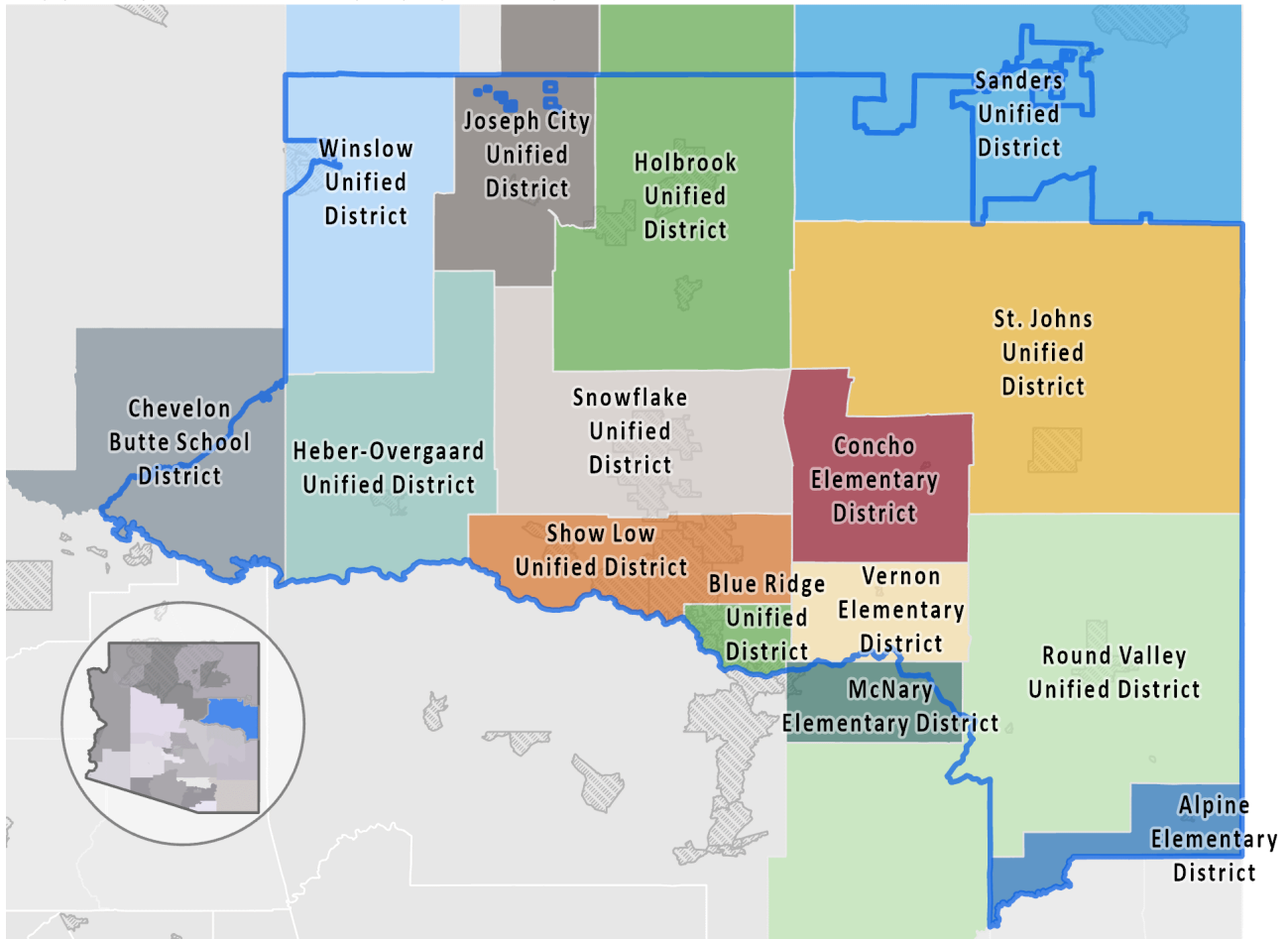
Source: U.S. Census Bureau (2020). 2020 Decennial Census, Demographic and Housing Characteristics, Table P1

Note: With the implementation of differential privacy in the 2020 Census, small area estimates now have injected 'noise' (error) to prevent accidental disclosure of Census responses. Geographies that are not primary census geographies, like ZCTAs, have noisier (or less accurate) estimates than primary geographies, like tracts. ZCTA 85930 overlaps the Navajo/Apache Region, but the portions of the ZCTA in the region is unpopulated.

APPENDIX 4: SCHOOL DISTRICTS OF THE NAVAJO/APACHE REGION

Figure 75. School Districts in the Navajo/Apache Region

Map by Community Research, Evaluation, & Development (CRED) Team, University of Arizona



Source: Custom map by the Community Research, Evaluation, & Development (CRED) Team using shapefiles obtained from First Things First and the U.S. Census Bureau 2020 TIGER/Line Shapefiles (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php>)

Table 79. School Districts and Local Education Agencies (LEAs) in the Navajo/Apache Region

Name of district or Local Education Agency (LEA)	Number of schools	Grades served
Navajo/Apache Region	64	PS-12
Alpine Elementary District	1	K-8
Blue Ridge Unified School District No. 32	4	PS-12
Concho Elementary District	1	PS-8
Heber-Overgaard Unified District	4	PS-12
Holbrook Unified District	4	PS-12
Joseph City Unified District	3	PS-12
Round Valley Unified District	4	PS-12
Sanders Unified District	3	PS-12
Show Low Unified District	8	PS-12
Snowflake Unified District	7	PS-12
St Johns Unified District	4	PS-12
Vernon Elementary District	1	K-8
Navajo County Accommodation District #99	1	6-12
Northern Arizona Vocational Institute of Technology	14	9-12
Arizona Agribusiness & Equine Center, Inc.	1	9-12
Career Development, Inc.	1	7-12
Edkey, Inc. (Sequoia Village School)	3	K-12

Source: Arizona Department of Education (2023). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

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