

 **FIRST THINGS FIRST**

Navajo Nation Region



**2022**

NEEDS AND ASSETS  
**REPORT**

**NAVAJO NATION  
REGIONAL PARTNERSHIP COUNCIL  
2022  
NEEDS AND ASSETS  
REPORT**

Funded by the  
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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 wellbeing in our communities and our state.

This Needs and Assets Report for the Navajo Nation 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 First Things First Navajo Nation 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 Nation 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 5 in communities throughout the region.

# ACKNOWLEDGMENTS

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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 Nation Region.

Lastly, we want to acknowledge the current and past members of the Navajo Nation 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 Nation Region.*** The Navajo Nation is a sovereign nation that extends into the states of Arizona, New Mexico and Utah, covering 27,000 square miles. The Navajo Nation is home to the Navajo people, also known as Diné, *The People*. Window Rock is the capital of the Navajo Nation from which three branches of government administer the Navajo Tribal Code. Local governmental authority lies with 110 Chapters in which local business is conducted and tribal voting occurs. The boundaries of the First Things First Navajo Nation Region mirror the Arizona-only portion of the Navajo Nation.

***Population Characteristics.*** The 2010 Decennial Census has the most recent detailed estimate of the population by age residing in the Navajo Nation Region as of the writing of this report. U.S. Census 2020 data for the breakdown of children birth to 5 in the region were not available; those files are expected to be released by mid-2023. However, limited redistricting data have been released from the 2020 U.S. Census showing that in the period between the decennial counts, the overall population of the region decreased by 7%: in 2020, there were 94,511 residents in the region, compared to 101,835 in 2010. Among children birth to 17, there was an even higher population decrease (25%), from 34,583 in 2010, to 25,998 in 2020. The birth rate in the region has declined over time. In 2019, there were 1,201 babies born in the region, a substantial decrease from 1,436 babies born in 2014. This declining trend might help explain the difference in the overall number of children in the U.S. Census 2010 and 2020.

The majority of the population in the region (97%) identifies as American Indian (alone or in combination), a higher proportion compared to all Arizona reservations combined (93%). The region's racial and ethnic composition also varies from other Arizona reservations in the proportion of residents who identify as Hispanic or Latino, which is 1% in the Navajo Nation Region compared to 6% across all Arizona reservations. Nearly all young children birth to 4 in the region (97%) were identified as American Indian or Alaska Native. Similar to the adult population, a smaller share of young children in the region were identified as Hispanic or Latino (3%) compared to children in all Arizona reservations combined (9%).

Over two-thirds (68%) of the Navajo Nation Region's residents speak a language other than English or Spanish at home (most likely the Navajo or Diné language), compared to 51% in all Arizona reservations. In 2019-20, 563 children enrolled in Arizona Department of Education school districts within the region reported use of the Navajo language when completing the Home Language Survey. Use of the Navajo language could either be by adults in the child's home or actively by the student (whether in the present or the past). Two recent assessments have been developed by the Navajo Department of Diné Education to capture progress in the acquisition of the Navajo language among students on the Navajo Nation. The first of these assessments is the Diné Content Standards Assessment tool (ONLC-T), which measures academic outcomes in grades 4, 8 and 12. The second is the Diné Language Proficiency Assessment (DLPA), which measures Navajo language proficiency and growth.

Nearly two-thirds (63%) of children ages birth to 5 in the Navajo Nation Region live with a single parent, a similar proportion found across all Arizona reservations (62%). About one-third of young

children (30%) live with two married parents (or a parent and a stepparent), also a similar proportion to that in Arizona reservations (28%). An estimated 7% of young children in the region are living with relatives other than their parents (such as grandparents, uncles, and aunts), and the remaining 1% are living with non-relatives including foster parents. An important limitation of the American Community Survey (ACS) data, from which this is drawn, is the fact that it does not allow for the identification of both parents being present in the household if they are unmarried. Therefore, a full count of the number of children living with both parents is not available from ACS data.

The ACS estimates that nearly half (45%) of young children in the Navajo Nation Region live in their grandparent's household, indicating a high prevalence of multi-generational households. A higher proportion of grandparents in the region who are responsible for their grandchildren (under the age of 18) are not proficient English speakers (29%), compared to 19% across all reservations. The proportion of grandparents who do not speak English “very well” ranges from 16% in the Western Agency, to 54% in the Chinle Agency. Grandparents with limited English proficiency who are their grandchildren’s primary care provider may experience barriers to accessing health care and social services for their grandchildren, as well as barriers to engaging in important interactions at schools. Other circumstances such as presence of the child’s parent(s) in the home also vary across Navajo Nation agencies: the Chinle Agency has the highest percentage of grandparents who do not have the child’s parents in the household (54%), compared to only 18% in the Western Agency. The combination of certain grandparent characteristics may result in the need for additional services for those residing in certain regions. For instance, grandparents in the Chinle Agency may have a higher need for support because they are less likely to have the child’s parents in the home, and because they are more likely to need services provided in the Navajo language.

***Economic Circumstances.*** The American Community Survey (ACS) estimates that the median family income (for families with or without children) for the Navajo Nation Region is \$35,700, with married-couple families with children having a higher median income of \$49,900. Financial hardship is, however, substantially larger for single-parent headed families in the region, as their median income is about half that of married-couple families. Nearly half (47%) of families with children (ages birth to 17) in the Navajo Nation Region are headed by a single parent. Those children are more likely to live in families with low incomes that are insufficient to meet their basic needs and that may require additional support from safety-net programs in the region.

About half of young children birth to 5 in the region live in poverty (49%), as do 39% of the overall population. Poverty rates vary by agency: the Chinle Agency has the highest rates for both the overall population (45%) and children birth to 5 (57%). Nearly three out of four young children (73%) live in households with incomes under 185% of the federal poverty level meaning they may be eligible for safety net programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (Navajo Nation WIC). The number of children ages birth to 5 served by the Navajo Nation Department for Self Reliance (the Navajo Nation Temporary Assistance for Needy Families or TANF program) across the entire Navajo Nation steadily increased in Federal Fiscal Year (FFY) 2019 and the first part of FFY 2020 but started to decline in February 2020. This reduction in participation was due to

the impact of the COVID-19 pandemic. The overall increasing trend in the number of young children and families participating in TANF in the region differs from a statewide decrease in participation between State Fiscal Year (SFY) 2016 and 2019.

The number of children participating in other safety net programs designed to combat food insecurity declined in the Navajo Nation Region despite the economic stresses of the pandemic. The number of young children who participated in the Supplemental Nutrition Assistance Program (SNAP) fell from 5,664 in SFY 2017 to 4,344 in SFY 2020. The number of infants and children enrolled in the Navajo Nation WIC program steadily declined from 8,778 in 2019 to 8,450 in 2020. Despite the declines in the number of children enrolled, participation rates for all groups (women, infants and children) in the Navajo Nation WIC program increased between 2019 and 2020, which means that a higher proportion of participants were able to use the benefits the program provided.

According to the ACS, the unemployment rate in the Navajo Nation Region was 15%, slightly lower than the rate across all Arizona reservations (17%). Nearly two-thirds (41%) of working-age teens and adults are working or actively looking for work, a lower proportion than across all Arizona reservations (45%). Nearly half (44%) of children birth to 5 in the Navajo Nation Region live in households where all present parents are in the workforce (that is, are employed, or actively seeking paying work), a proportion that is lower than in all Arizona reservations (51%). These families may have particularly struggled with pandemic-related child care disruptions.

The share of children birth to 17 with access to both a computer and the internet at home (27%) was lower in the region than in all Arizona reservations (31%) before the pandemic. Access to this technology varies somewhat across agencies. The proportion of households that do not have access to either a computer or the internet, for instance, is highest in the Chinle Agency (56%) and lowest in the Northern Agency (47%). About one-third of children birth to 17, live in households with both a computer and internet access. Key informants pointed out that the internet connection in many areas in the region is poor; the bandwidth was not enough to support all the people in the home that needed access to the internet during the pandemic, including multiple children and adult having to connect at the same time. Challenges with connectivity imposed serious limitations on children's ability to participate in virtual learning.

***Educational Indicators.*** The primary and secondary educational system in the Navajo Nation Region is comprised of Grant schools, Bureau of Indian Education (BIE) schools and schools managed by the Arizona Department of Education (ADE). In school year 2020-21 there were 31,227 children enrolled in all grades in the various schools that comprise the educational system in the entire Navajo Nation. Data specific to the Arizona portion of the Navajo Nation indicate that 3,541 children were enrolled in preschool through 3<sup>rd</sup> grade in Navajo Nation public and charter schools under ADE as of October 1, 2019.

School attendance and academic engagement early in life can significantly impact the direction of a child's schooling. Chronic absences in children enrolled in grades K-3 in the Navajo Nation Region in



the 2018-19 school year (33%) were substantially higher than those seen across the state (13%), with substantial variability in chronic absenteeism across ADE school districts.

When 3<sup>rd</sup> grade students in schools in the Navajo Nation Region took AzMERIT assessments in the 2018-19 school year, 21% received passing scores on English Language Arts (ELA) and 26% had passing scores on math. The combined Reading/Language Arts passing rate for all BIE schools that year was 15%. Passing scores varied widely by school, ranging from 0% to 29%. The combined math passing rates for BIE schools was 11%, and also varied by school, with a low of 0% to a high of 25% of students achieving a passing score. Assessment data specific for 3<sup>rd</sup> grade students in Grant schools on the Navajo Nation Region show that 8% obtained a passing ELA score and 9% a math passing score.

The 4-year and 5-year graduation rates in the ADE schools on the Navajo Nation Region overall in 2019 (79% and 84%) were similar than across Arizona as whole (79% and 83%) and exceeded those seen for all American Indian students enrolled in Arizona public and charter schools (69% and 75%). Graduation rates varied by district/school, with Chinle Unified having overall lower rates and Shonto Preparatory Technology High School having the highest rates (73% and 94%).

The ACS estimates that almost one-quarter of adults in the region (24%) have less than a high-school education, more than one-third (36%) have a high-school diploma with no further education and the remaining 41% have more than a high-school education.

***Early Learning.*** Child care and early education opportunities for families in the Navajo Nation Region include center and home-based child care services under the Navajo Nation Child Care Development Fund (CCDF); Navajo Head Start and Early Head Start; the Bureau of Indian Education (BIE) Family and Child Education (FACE) program; school-based preschool programs; and informal care through family and friends.

In Federal Fiscal Year (FFY) 2020, 396 children ages birth to 5 received child care services through CCDF in the entire Navajo Nation, most of whom were 3 (N=86) and 4-year-old (N=84). Only 25 infants were served by CCDF that year. CCDF is comprised of five regions: three of which, the Chinle, Fort Defiance, and Tuba City Regions primarily serve communities on the Arizona portion of the Navajo Nation, and together served a total of 260 children ages birth to 5 in FFY 2020, representing two-thirds (66%) of all young children receiving services.

Navajo Head Start administers two programs: Head Start and Early Head Start (EHS). Head Start provides services to young children across five Head Start districts: (1) Shiprock, (2) Crownpoint, (3) Window Rock, (4) Chinle and (5) Kayenta/Tuba City. Arizona communities are primarily served by the Window Rock, Chinle and Kayenta/Tuba City Districts. Window Rock has the largest funded enrollment (N=363), followed by Chinle (N=293) and Kayenta/Tuba City (N=237). Twelve of the 37 Early Head Start slots are in the Window Rock District and on the Diné College Campus in Tsaile, Arizona. The remaining eight Early Head start slots are part of the Chinle District. In 2020-21, the Head Start cumulative enrollment (i.e. the total number of children that participated in the program during that year) was 1,203, lower than the funded enrollment of 1,313 slots. This lower participation is likely due to the impact of the COVID-19 pandemic.

FACE is an early childhood and parental involvement program for American Indian families in schools sponsored by BIE with center-based and home-based components. The home-based component includes educational visits and screenings by parent educators. The center-based preschool component includes an early childhood education program for children ages 3 to 4, adult education for the children's parents, and Parent and Child Time. In Program Year 2019 there were eight FACE programs in the Navajo Nation Region. Center-based services were provided to 117 children and 123 adults, and a total of 303 children and 289 adults participated in home-based services that year.

There are 15 school-based preschool programs in the Navajo Nation Region. Of these, one program was based in a private school. The remaining 14 preschool programs are public school-based, and collectively have a total enrollment of 700 children.

Quality First is Arizona's Quality Rating and Improvement System for early child care and preschool providers. As of 2020, there were 23 child care providers in the Navajo Nation Region participating in Quality First with a total combined enrollment of 687 children. Of the 23 participating providers, 17 met quality standards (3-star rating or higher) and provided services to 484 children.

The Navajo Nation Growing in Beauty program is the Arizona Early Intervention Program (AzEIP) provider for the Navajo Nation Region, providing services for families of young children (birth to 2) with disabilities or developmental delays. AzEIP may refer families to the Division of Developmental Disabilities (DDD) if the child has or is at risk for developing a qualifying disability, including cerebral palsy, epilepsy, autism spectrum disorder or an intellectual or cognitive disability. In SFY 2020, 44 children ages birth to 2 received services from AzEIP or DDD, a decrease of 23% from the 57 young children served in SFY 2019. Children in the Navajo Nation Head Start and Early Head Start Program receive developmental, sensory, and behavioral screenings. In school year 2018-19, 62 children had an Individualized Education Program. Over half (55%) were diagnosed with having a developmental delay as their primary disability, and about one-third (35%) were diagnosed with speech or language impairments. In 2019-20, over half (55%) of preschoolers in school-based special education programs in the Navajo Nation Region had a developmental delay; 20% had a preschool severe delay; and 23% had a speech or language impairment.

**Child Health.** Families in the Navajo Nation Region can access health care services through facilities operated by the Indian Health Service (IHS) and tribally-operated hospitals and clinics. An estimated 23% of young children in the region are uninsured, a higher rate than that in all Arizona reservations combined (17%). About three-quarters of births in the region were paid for by AHCCCS between 2014 and 2016. This proportion increased to 81% in 2017 and remained relatively stable for the next two years. In 2019, 80% of births were covered by AHCCCS and 7% by IHS. Consistently across years, a higher share of the births in the region were paid for by AHCCCS than in all Arizona reservations. Tribes can benefit when their healthcare system bills AHCCCS, Medicare, or private insurance for health care services and uses collections from these third-party payors to support and improve ongoing tribally-managed healthcare operations.

Of the 1,201 births in the Navajo Nation Region in 2019, only 60.2% were to mothers who received prenatal care in the first trimester, which is noticeably lower than in all Arizona reservations (75.3%)

and far below the Healthy People 2020 target of 84.8% or more. The share of births to women who had fewer than five prenatal care visits (15%) was lower in the region compared to births across all Arizona reservations combined (20%). Equal proportions of births were to mothers who had no prenatal care at all in the region and in reservation lands across the state (6%). Rates of inadequate prenatal care (i.e. mother did not have any prenatal care or mother had fewer than five prenatal care visits) in the region have generally been lower than across all Arizona reservations but there was a notable increase from 2018 to 2019 (from 3% to 6%) in the Navajo Nation Region. Continued efforts around health education and outreach to expectant mothers can help prevent this increasing trend in rates from continuing.

In terms of infant health outcomes, there has been an overall increase in the rates of low-birthweight births in the region from 5.6 % in 2014 to 7.7% in 2019. Despite this increasing trend, the region has met the Healthy People 2020 target of less than 7.8% of babies born at low birthweight. The rate of babies admitted into the NICU more than doubled from 2.9% in 2014 to 7.1% in 2019. Across all Arizona reservations, on the other hand, the proportion of NICU admissions increased only slightly over the same period (from 6.7% to 7.7%).

Breastfeeding rates among infants in the Navajo Nation WIC program were higher in the period of 2016-2018 than among infants in the Arizona WIC program indicating high breastfeeding rates are a strength in the region. About two in five infants (44%) in the Navajo Nation WIC program were breastfed, whether partially (23%) or fully (21%). In comparison, only 30% of infants in the Arizona state WIC program were breastfed (20% partially and 10% fully). According to the 2020 Navajo Nation Maternal and Child Health Needs Assessment, 23.5% of children ages 2 to 5 in the Navajo IHS Area had obesity, a rate slightly above the national IHS goal of 23%. In the Navajo IHS Area there was a 24% reduction in the prevalence of early childhood caries, from 78% in the 2010 IHS Oral Health Survey, to 59.5% in the 2018-19 survey. The Navajo IHS Area also had a reduction in the prevalence of untreated decay. While these are positive trends for children in the region, prevalence rates of early childhood caries in the Navajo IHS Area continue to be relatively high. This suggest a continued need for timely oral health care for young children.

In 2018, 57% of children ages 19 to 35 months in the Navajo IHS Area were up-to-date in their immunizations, meeting the National IHS goal of 45.6%. Immunization rates, however, varied widely within the Navajo IHS Area, with Chinle having the highest rate (85%), and Kayenta the lowest with only about half (51%) of children being up-to-date on their immunizations. In the Navajo Nation Region, 10 infants died in 2019 resulting in an infant mortality rate of 8.3 per 1,000 live births. This rate puts the region above the Healthy People 2020 target for infant mortality of 6.0 per 1,000 live births.

***Family Support and Literacy.*** Home visitation services are offered by the Navajo Nation Office of Special Education and Rehabilitation Services Growing in Beauty program. In 2020, 159 families with young children participated in the Home Visitation program with funding from First Things First. A total of 199 children were served, and 20 families graduated from the program that year.



# ABOUT THIS REPORT

The data contained in this report come from a variety of sources including regional, state and federal agencies. Federal government sources include limited data from the 2010 U.S. Census and the 2020 U.S. Census. Because the 2010 U.S. Census is now a decade old, it is used minimally in this report.<sup>i</sup> The Census Bureau expects to release detailed tables from the 2020 U.S. Census in early 2023,<sup>ii</sup> therefore only data for total population counts and the number of children birth to 17 are included. This report also uses data from the 2015-2019 American Community Survey (ACS) 5-Year Estimates. Important information about the limitations of U.S. Census and American Community Survey data in tribal communities is included in *Appendix 2: Methods and Data Sources*.

Data were provided to First Things First (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 especially for the Needs & Assets process and are more detailed than the data that are published by these agencies for the general public. Whenever possible, this report uses data tailored to the region, but in some cases, there are only county-level or statewide data available to report.

In addition to these public sources this report includes: 1) quantitative data obtained from various Navajo Nation departments and agencies with approval from the Navajo Nation in a Memorandum of Understanding for multiple data collection approved by the Office of the Navajo Nation President and Vice President; and 2) findings from qualitative data collection conducted specifically for this report through key informant interviews with service providers in the region. Not all data will be available at the FTF regional level because not all data sources analyze their data based on FTF regional boundaries. When regional data are unavailable, this will be noted by N/A

First Things First Navajo Nation Regional Partnership Council members and other local stakeholders participated in facilitated data discussions on March 2<sup>nd</sup>, March 29<sup>th</sup> and April 25<sup>th</sup> of 2022 of selected data included in this report. During these sessions they shared their local knowledge and perspective in interpreting the data collected. Perspectives and feedback from participating session members are included as key informant perspectives within this report.

In most tables in this report, the top rows of data correspond to the First Things First Navajo Nation Region. When available, the next three rows show data for the New Mexico and Utah parts of the Navajo Nation as well as the Navajo Nation as a whole. Per recommendation of the First Things First Navajo Nation Regional Partnership Council, the following five rows include data for each of the five agencies within the Nation: Chinle, Eastern, Fort Defiance, Northern and Western. Although the Eastern Agency lies outside of the First Things First Navajo Nation Region, data for this geography are included

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<sup>i</sup> Only Table 1 ("Population and households") and Figure 1 ("Share of children birth to 5 by sub-region") use 2010 Census data.

<sup>ii</sup> U.S. Census Bureau (2021). *About 2020 Census Data Products, Demographic and Housing Characteristics File*. Accessed at <https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/release/about-2020-data-products.html>

in tables in this report where available. The last two rows show data that are useful for comparison purposes: all Arizona reservations combined, 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 "<10" or "<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 "[11 to 27]" 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.

For more detailed information on data sources, methodology, suppression guidelines, and limitations, please see also *Appendix 2: Methods and Data Sources*.

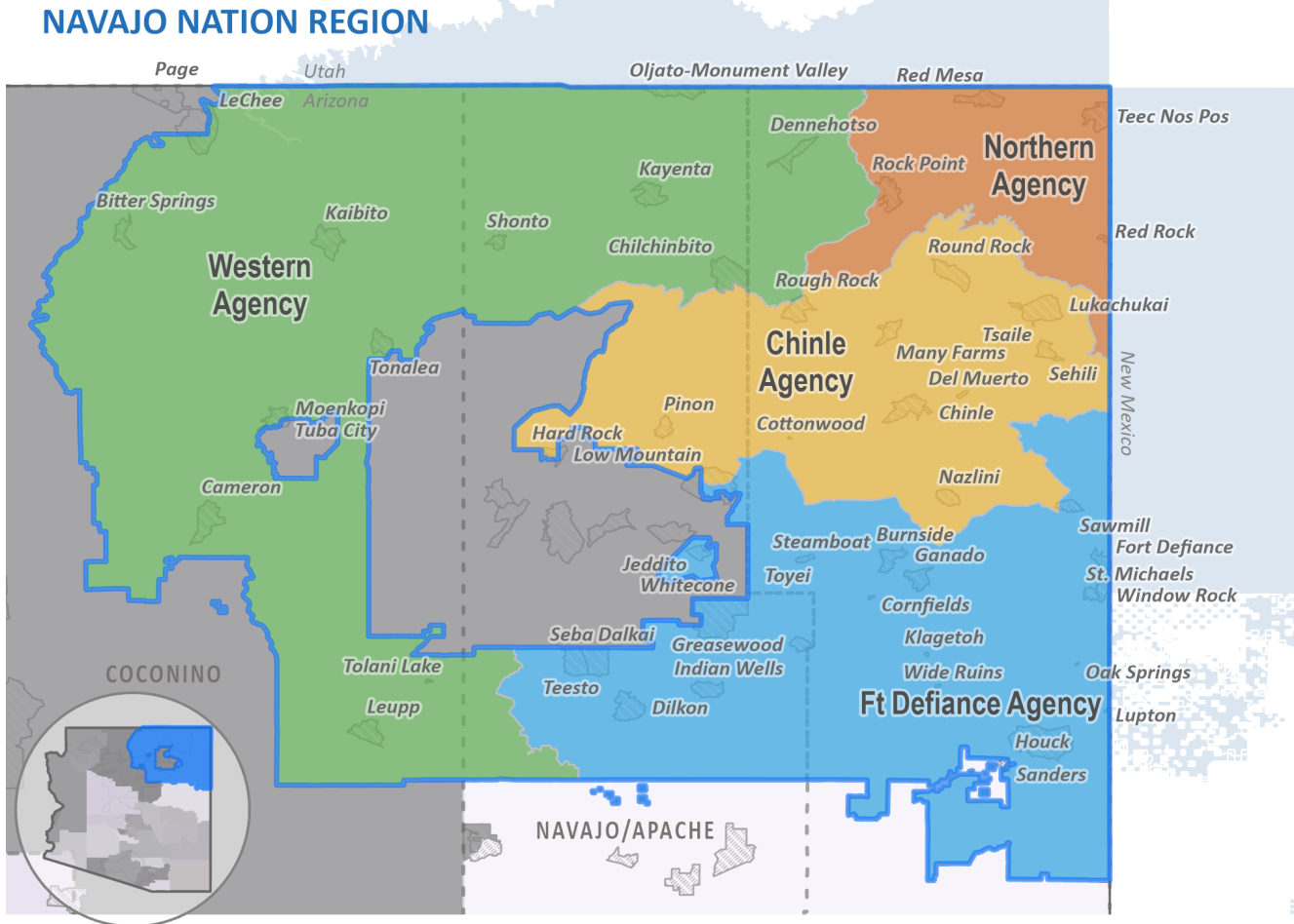
# THE NAVAJO NATION REGION

When First Things First (FTF) was established by the passage of Proposition 203 in November 2006, the government-to-government relationship with federally-recognized tribes was acknowledged. Each Tribe with tribal lands located in Arizona was given the opportunity to participate within a FTF designated region or to elect to be designated as a separate region. The Navajo Nation Region was one of 10 Tribes that chose to be designated as its own region. This decision must be ratified every two years, and the Navajo Nation has opted to continue to be designated as its own region.

The Navajo Nation is a sovereign nation that extends into the states of Arizona, New Mexico and Utah, covering 27,000 square miles. The Navajo Nation is home to the Navajo people, also known as Diné, *The People*. Window Rock is the capital of the Navajo Nation from which three branches of government administer the Navajo Tribal Code. Local governmental authority lies with 110 Chapters in which local business is conducted and tribal voting occurs. The boundaries of the First Things First Navajo Nation Region mirror the Arizona-only portion of the Navajo Nation (see Figure 1 below).

Figure 1. The First Things First Navajo Nation Region

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



Source: 2010 TIGER/Line Shapefiles prepared by the U.S. Census. Map produced by CRED.





## **POPULATION CHARACTERISTICS**

# POPULATION CHARACTERISTICS

## Why It Matters

Families with young children often utilize community resources such as early education, health care facilities and social services to help their children thrive.<sup>1,2,3,4,5</sup> Accurate and up-to-date information about the characteristics of families is critical for ensuring policy makers and program providers can determine what resources are needed in their regions, including where these services should be located and how to tailor offerings to the specific needs of those who are likely to use them. Having reliable access to child care, health care and social services has been shown to improve children's health and educational outcomes.<sup>6,7,8,9</sup>

Knowing the languages spoken and linguistic heritage of a community also helps decision-makers and program providers understand what families with young children need. Households where multiple languages are spoken pose a unique balance of benefits for child learning and barriers to parental engagement. Acknowledging and valuing linguistic heritage (such as through language preservation efforts) and recognizing needs for resources and services in languages other than English should remain important considerations for organizations and agencies across Arizona.<sup>10,11</sup> Language preservation and revitalization are critical to strengthening culture in Native communities, addressing issues of educational equity, and to the promotion of social unity, community well-being, and Indigenous self-determination.<sup>12,13</sup> Special consideration should be given to respecting and supporting the numerous Native American languages spoken, particularly in tribal communities around the state.

In addition to growing racial, ethnic and social diversity, U.S. and Arizona families are becoming more diverse in terms of family structure.<sup>14</sup> Many children live in single-parent households, and it is increasingly common for children to live in kinship care (care of children by someone other than their parents, such as relatives or close friends).<sup>15,16</sup> Though it varies from one Native community to another, extended, multigenerational families, and kinship care are common in Native communities.<sup>17,18</sup> The strengths associated with this family structure—mutual help and respect—can provide members of these families with a network of support which can be very valuable when dealing with socio-economic hardships.<sup>19</sup> Grandparents are often central to these multigenerational households, in many cases sharing and strengthening Native language, history, and culture.<sup>20,21</sup>

As family structure changes, so can family strengths and challenges that impact child development, such as poverty, access to health and education resources and the quality of a child's interactions with adult caregivers.<sup>22,23,24,25</sup> Regardless of their family structure, all young children benefit from nurturing relationships with adults. Research has identified that these early relationships are a primary influence on brain development.<sup>26</sup> Ensuring that children have adult caregivers who consistently engage in high quality interactions beginning in infancy can help protect young children from negative effects of stress and adversity and builds a foundation in the brain for all the learning, behavior and health that follow.<sup>27,28</sup> Program and policy decisions that are informed by data on the structure and stability 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.

## What the Data Tell Us

### Population, Race, and Ethnicity

According to the 2010 U.S. Census, the total population of the First Things First Navajo Nation Region (i.e. the Arizona portion of the Navajo Nation) was 101,835, of whom 10,894 were children under the age of 6. The percent of households in the Navajo Nation Region that included at least one young child (24%) was slightly lower than in all Arizona reservations (26%) (Table 1).

Table 1. Population and households in the 2010 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)	
<b>Navajo Nation Region</b>	<b>101,835</b>	<b>10,894</b>	<b>29,232</b>	<b>7,159</b>	<b>24%</b>
Navajo Nation (New Mexico part)	65,764	6,712	19,034	4,499	24%
Navajo Nation (Utah part)	6,068	729	1,680	466	28%
Navajo Nation (entire)	173,667	18,335	49,946	12,124	24%
Chinle Agency	27,823	3,134	8,047	2,065	26%
Eastern Agency	33,316	3,361	9,570	2,242	23%
Fort Defiance Agency	43,940	4,452	13,031	2,932	23%
Northern Agency	30,945	3,223	9,035	2,170	24%
Western Agency	37,643	4,165	10,263	2,715	26%
All Arizona Reservations	178,131	20,511	50,140	13,115	26%
Arizona	6,392,017	546,609	2,380,990	384,441	16%
United States	308,745,538	24,258,220	116,716,292	17,613,638	15%

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14, & P20

Note: The total population of Arizona in the 2020 Decennial Census is 7,151,502, which is a 12% increase from 2010. The total population of the Navajo Nation decreased by 5%, from 173,667 to 165,158.

Even though the 2010 Decennial Census had the most recent detailed estimate of the population by age residing in the Navajo Nation Region as of the writing of this report, limited redistricting data have been released from the 2020 U.S. Census. These data show that in the period between the decennial counts, the total population of the region decreased by 7%: In 2020, there were 94,511 residents in the region, compared to 101,835 in 2010. Among children birth to 17, there was an even higher population decrease

(25%), from 34,583 in 2010, to 25,998 in 2020 (Table 2). Additional data from the 2020 U.S. Census were not available, including the breakdown of children birth to 5 in the region; those files will be released by mid-2023.

*Appendix 2. Methods and Data Sources* at the end of this report outlines important considerations related to Census undercounts in tribal communities. In addition to these general considerations, key informants in the region expressed concern about the accuracy of the Census 2020 population counts because of the impact of the COVID-19 pandemic on data collection in the Navajo Nation.

Table 2. Population change, U.S. Census, 2010 and 2020

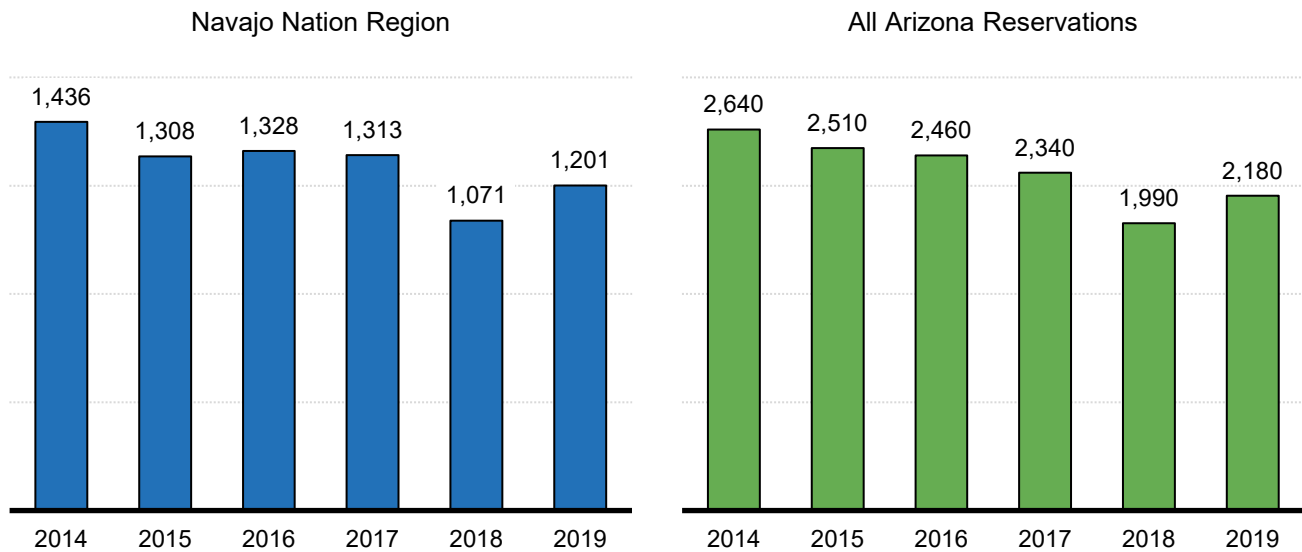
Geography	Total 2010 population	Total 2020 population	Change from 2010 to 2020 in total population	2010 Children (ages 0-17)	2020 Children (ages 0-17)	Change from 2010 to 2020 in children
<b>Navajo Nation Region</b>	<b>101,835</b>	<b>94,511</b>	<b>-7%</b>	<b>34,583</b>	<b>25,998</b>	<b>-25%</b>
Navajo Nation Reservation (entire)	173,667	165,158	-5%	57,844	45,552	-21%
All Arizona Reservations	178,131	173,499	-3%	61,082	51,848	-15%
Arizona	6,392,017	7,151,502	+12%	1,629,014	1,609,526	-1%
United States	308,745,538	331,449,281	+7%	74,181,467	73,106,000	-1%

Source: Source: U.S. Census Bureau. (2010). *2010 Decennial Census, Summary File 1, Tables P1, P14, & P20*. U.S. Census Bureau. (2021). *2020 Decennial Census, Redistricting Data PL 94-171, Tables P1, P2, P3, P4, & H1*.

Note: These data are drawn from the redistricting file, which is the only Decennial Census data available at the sub-county level at the time of publication. More detailed data files from the 2020 Census are expected to be released in late 2022 and early 2023.

The decline in the number of babies born in the Navajo Nation Region over recent years mirrors a trend across all Arizona reservations. In 2019, there were 1,201 babies born in the region, a substantial decrease from 1,436 babies born in 2014 (Figure 2). This declining trend in the number of babies born over time might also explain the difference in the overall number of children in the region according to the 2010 and 2020 U.S. Census. Data on the number of births in the region, however, do show an increase from 2018 to 2019. Key informants noted that there has been a recent increase in the number of families moving back on to the reservation. Birth data in the coming years will help determine if this trend continues and whether it has an impact on the number of children being born and residing in the region.

Figure 2. Number of babies born, 2014 to 2019



Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2014-2019. Retrieved from <https://pub.azdhs.gov/health-stats/report/hspam/index.php>

Note: 'All Arizona Reservations' data reflects only births to American Indian mothers residing on Arizona reservations.

The U.S. Census Bureau made design improvements to the race and ethnicity questions in the Census 2020 to allow individuals to more accurately and thoroughly report how they self-identify.<sup>29</sup> Overall, these changes show that the U.S. population as a whole is more diverse than what the Census Bureau had measured in the past: the multi-racial population in the country increased substantially since 2010, with a 276% increase in the Census 2020. For the American Indian and Alaska Native population specifically, between 2010 to 2020 there was a 27% increase in the number of individuals who identify as American Indian or Alaska Native alone. In that same period, the number of people reporting their race as American Indian or Alaska Native in combination<sup>iii</sup> grew by 160% nationally.<sup>30</sup>

As of the writing of this report, U.S. Census 2020 data were available for the racial and ethnic breakdown of the Navajo Nation Region population as a whole, but not for that of young children. Table 3 shows that, according to Census 2020 data, the majority of the population in the region (97%) identifies as American Indian (alone or in combination), a higher proportion compared to all Arizona reservations combined (93%). The region's racial and ethnic composition varies from other Arizona reservations in the proportion of residents who identify as Hispanic or Latino, which is 1% in the Navajo Nation Region compared to 6% across all Arizona reservations. In addition, only 3% of residents in the region identify as White, with 5% across Arizona reservations.

<sup>iii</sup> "Alone" refers to individuals who reported only American Indian/Alaska Native as their race. "In combination" means that these individuals selected American Indian/Alaska Native as their race and one or more other races such as Black/African American or White.

Table 3. Race and ethnicity of the population of all ages, 2020 Census

Geography	Estimated population (all ages)	Hispanic or Latino	White, not Hispanic or Latino (alone or in combination)	Black or African-American (alone or in combination)	American Indian or Alaska Native (alone or in combination)	Asian or Pacific Islander (alone or in combination)	Two or more races (alone or in combination)
<b>Navajo Nation Region</b>	<b>94,511</b>	<b>1%</b>	<b>3%</b>	<b>1%</b>	<b>97%</b>	<b>1%</b>	<b>2%</b>
Navajo Nation (entire)	165,158	2%	3%	1%	97%	1%	2%
All Arizona Reservations	173,499	6%	5%	1%	93%	1%	3%
Arizona	7,1515,02	31%	57%	6%	6%	5%	17%
United States	331,449,281	19%	62%	14%	3%	8%	10%

Source: U.S. Census Bureau. (2021). 2020 Decennial Census, Redistricting Data PL 94-171, Tables P1, P2, P3, P4, & H1.

Note: These data are drawn from the redistricting file, which is the only Decennial Census data available at the sub-county level at the time of publication. More detailed data files from the 2020 Census are expected to be released in late 2022 and early 2023. The total across rows will sum to more than 100% because each individual is counted in every category they identify in (thus someone who identifies as American Indian and Hispanic is counted in both the Hispanic and American Indian columns).

According to the 2015-2019 American Community Survey (ACS), in both the Navajo Nation Region (97%) and reservation lands across Arizona (91%), nearly all young children birth to 4 were identified as American Indian or Alaska Native. Similar to the adult population, a smaller share of young children in the region were identified as Hispanic or Latino (3%) compared to children in all Arizona reservations combined (9%). The proportion of multiracial children is also lower in the region (2%) than in all Arizona reservations (4%) (Table 4). Please note the categories in the table below are not exclusive, meaning that children are counted in each category with which they were identified.

The race and ethnicity of mothers giving birth in the region is similar to ACS estimates of race and ethnicity for all ages and those of young children. According to the Arizona Department of Health Services<sup>iv</sup>, in 2019 most mothers (96%) giving birth in the region identified as American Indian or Alaska Native.

<sup>iv</sup> Please note that the way ADHS defines race and ethnicity differs slightly than the methods used in the Census 2020 and 2015-2019 ACS data presented in this report. ADHS uses a bridging method to place individuals into the smallest race/ethnicity category with which they identify. Individuals who identify as Hispanic or Latina and any other race besides White will appear in the specific race category that they identify with, while White and Hispanic or Latina individuals are counted as Hispanic or Latina. Thus, a mother who identifies as both Hispanic or Latina and American Indian will be counted in the American Indian category.

Table 4. Race and ethnicity of children birth to 4, 2015-2019 ACS

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
<b>Navajo Nation Region</b>	<b>7,431</b>	<b>3%</b>	<b>0%</b>	<b>0%</b>	<b>97%</b>	<b>0%</b>	<b>2%</b>
Navajo Nation (New Mexico part)	4,140	5%	1%	0%	95%	0%	4%
Navajo Nation (Utah part)	573	1%	1%	0%	97%	1%	1%
Navajo Nation (entire)	12,144	4%	0%	0%	96%	0%	3%
Chinle Agency	2,200	1%	1%	0%	97%	0%	2%
Eastern Agency	2,022	6%	0%	0%	95%	0%	4%
Fort Defiance Agency	2,757	6%	0%	1%	94%	0%	4%
Northern Agency	2,010	4%	1%	0%	95%	1%	3%
Western Agency	3,155	2%	0%	0%	98%	0%	1%
All Arizona Reservations	15,185	9%	1%	0%	91%	0%	4%
Arizona	433,968	45%	38%	5%	6%	3%	9%
United States	19,767,670	26%	50%	14%	1%	5%	8%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B01001, B01001b, B01001c, B01001d, B01001e, B01001g, B01001h, & B01001i

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 5. Race and ethnicity for the mothers of babies born in 2018 and 2019

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 Nation Region	2018	1,071	4%	0%	0%	95%	0%
	2019	1,201	3%	1%	0%	96%	1%
All Arizona Reservations	2018	1,990	N/A	N/A	N/A	N/A	N/A
	2019	2,180	N/A	N/A	N/A	N/A	N/A
Arizona	2018	80,539	43%	41%	6%	6%	4%
	2019	79,183	43%	41%	6%	6%	4%

Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from <https://pub.azdhs.gov/health-stats/report/hspam/index.php>

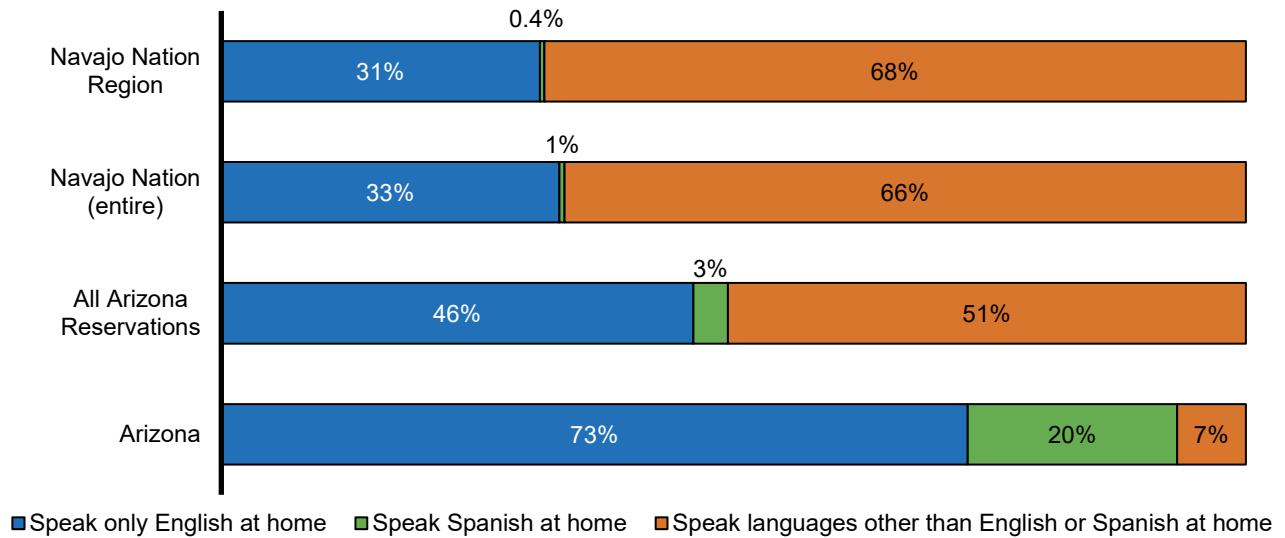
Note: The five percentages in each row should sum to 100%, but may not because of rounding. Mothers who report more than one race or ethnicity are assigned to the one which is smaller. Mothers of twins are counted twice in this table. Please note that 'All Arizona Reservations' row reflects only births to American Indian mothers residing on Arizona reservations.

## Language Use

The ACS estimates that 68% of the Navajo Nation Region’s residents speak a language other than English or Spanish at home, a proportion that is notably higher than that in all Arizona reservations (51%) (Figure 3). The most recent estimates from the ACS no longer specify the proportion of the population who speak Navajo for geographies smaller than the state as it did in the past. However, based on ACS data included in previous Needs and Assets Reports for the Navajo Nation Region, it is likely that the other language spoken at home in the region is primarily Navajo.<sup>31</sup> The proportion of residents speaking a language other than English or Spanish at home (presumably Navajo) in the five agencies is similar to that in the region, ranging from 65% in the Eastern Agency to 71% percent in the Chinle Agency. Nearly one-third of the region’s residents (31%) report speaking only English at home (Figure 4).



Figure 3. Language spoken at home (by persons ages 5 and older), 2015-2019 ACS

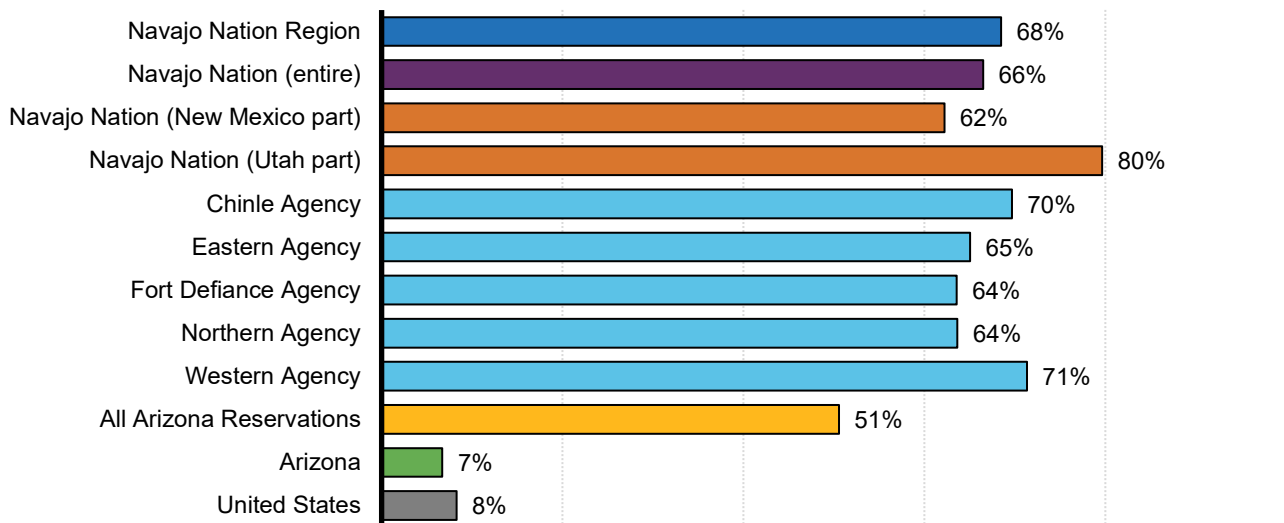


Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16001

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. Based on ACS data included in previous Needs and Assets Reports for the Navajo Nation Region, it is likely that the other languages spoken at home in the region is primarily Navajo. See

<https://files.firstthingsfirst.org/regions/Publications/Regional%20Needs%20and%20Assets%20Report%20-%202018%20-%20Navajo%20Nation.pdf>

Figure 4. Proportion of the population (ages 5 and older) who speak a language other than English or Spanish at home, 2015-2019 ACS



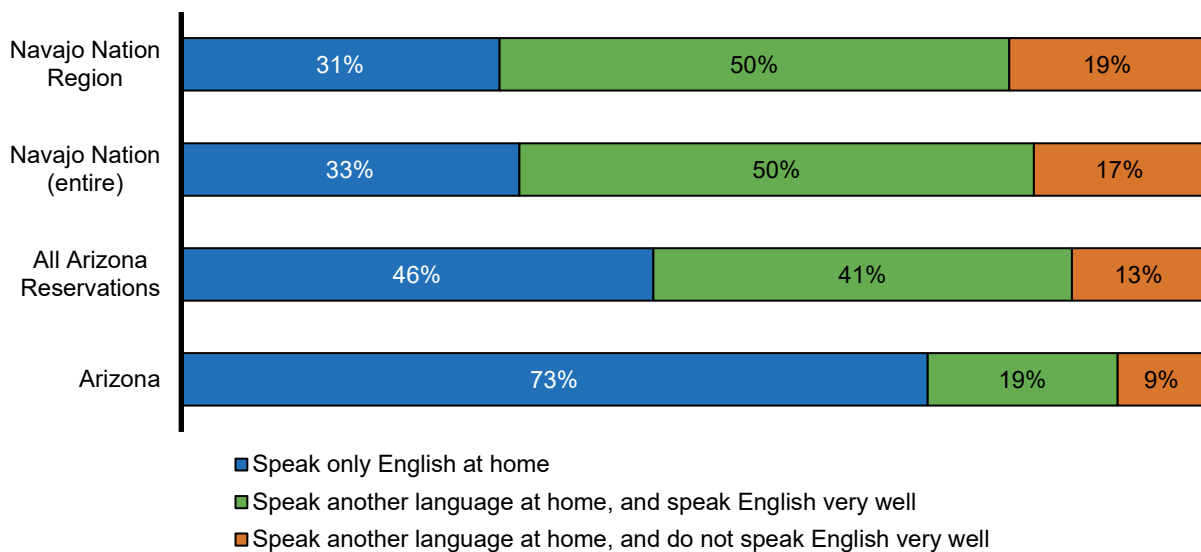
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16001

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

Many residents of the Navajo Nation Region who speak a language other than English at home report that they speak English “very well,”<sup>v</sup> meaning they are proficiently bilingual or multilingual. This is the case for 50% of Navajo Nation Region residents ages 5 and older, a higher proportion compared to all Arizona reservations (41%). Young children can benefit from exposure to multiple languages; mastery of more than one language is an asset in school readiness and academic achievement, and offers cognitive and social-emotional benefits in early school and throughout their lifetime.<sup>32,33,34,35</sup>

In addition to those who are multilingual, almost one in five (19%) residents in the region speak another language at home and do not speak English “very well,” a higher proportion than in all Arizona reservations (13%). In the Chinle Agency, this is true for nearly one in three residents (31%) (Figure 6). Parents and caregivers with limited English proficiency may experience barriers to accessing health care and social services, as well as barriers to engaging in important interactions at their children’s schools; these barriers can affect a family’s ability to promote positive child development. The availability of bi- or multi-lingual staff and resources can help support these families.<sup>36,37</sup>

Figure 5. English-language proficiency (for persons ages 5 and older), 2015-2019 ACS

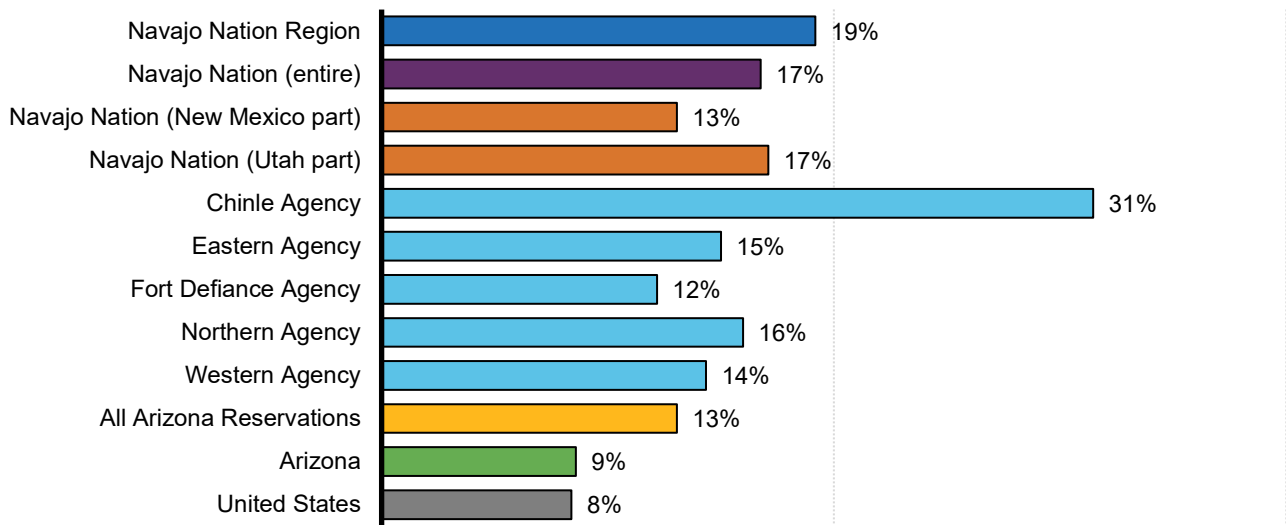


Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16001

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

<sup>v</sup> “Very well” refers to the self-rated ability to speak English in response to the American Community Survey question “How well does this person speak English?”. Other response options include: “well,” “not well” and “not at all.” See <https://www.census.gov/topics/population/language-use/about.html>

Figure 6. Proportion of the population who speak another language at home and speak English less than very well, 2015-2019 ACS

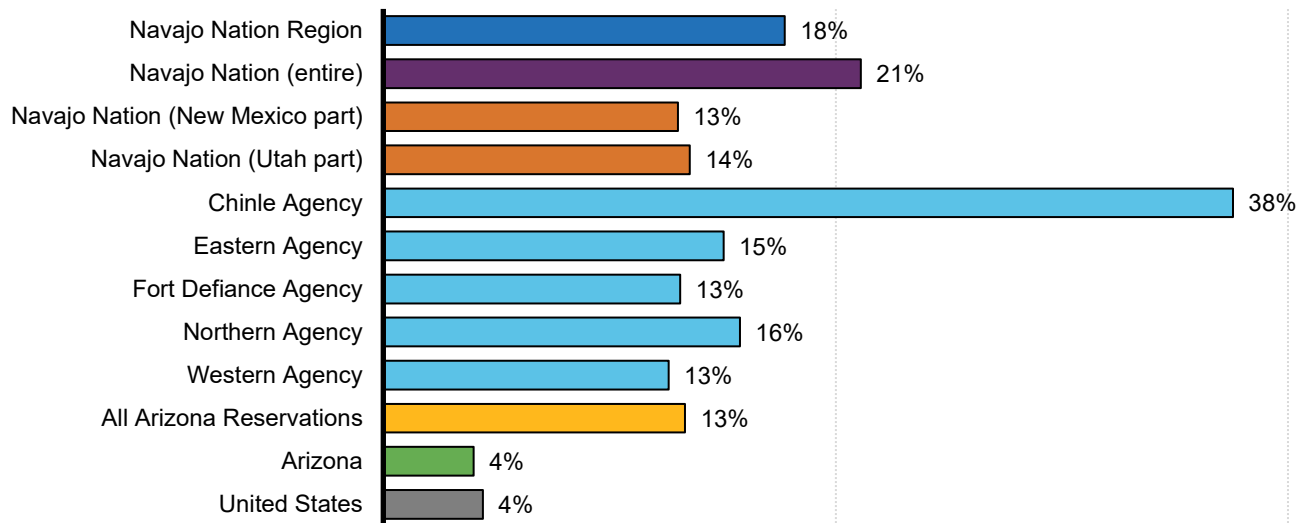


Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16001

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

At the household level, 18% of the households in the Navajo Nation Region are identified as "limited-English-speaking," which means that no adult or teenager in the home speaks English very well. This proportion is higher than that across all Arizona reservations (13%). The share of "limited-English-speaking" households is particularly high in the Chinle Agency (31%) (Figure 7).

Figure 7. Proportion of households that are limited-English-speaking, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16002

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

According to the Navajo Nation Department of Diné Education (DoDE) Office of Educational Research and Statistics, the Oral Diné Language Assessment Results (ODLA) had been previously administered in about 20 K-12 schools on the Navajo Nation. Table 6 shows results from the last three years of administration of this test (2015-16 to 2017-18). In all years, the majority of students were non-proficient in the pre-test and remained non-proficient in the post-assessment. In 2018-17, for instance, of the 2,299 students tested, only 323 obtained a score of “limited” proficiency in the pre-test, and 440 scored in this category in the post test. A much smaller number of students were placed in the category of “fluent”: 39 in the pre-test, and 46 in the post-test (Table 6).

Table 6. Oral Dine Language Assessment results, 2015-16 to 2017-18

Assessment	Non Proficient Pre	Non Proficient Post	Limited Pre	Limited Post	Fluent Pre	Fluent Post
SY 2015-16	2,105	1,173	286	407	18	39
SY 2016-17	2,032	1,729	242	519	22	45
SY 2017-18	1,937	1,136	323	440	39	46

Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [ODLA dataset]. Unpublished tribal data received by request.

According to a Fact Sheet produced by DoDE’s Office of Educational Research and Statistics, these results were interpreted as showing no growth in Navajo language development among Navajo K-12 students.<sup>38</sup> A decision was made to develop new assessments that would more accurately capture

progress in the acquisition of the Navajo language among students in participating schools on the Navajo Nation. The first of these assessments is the Diné Content Standards Assessment tool (ONLC-T), which measures academic outcomes in grades 4, 8 and 12 focused on five content standards: Oral Language, Culture, History, Government and Character. The second assessment is the Diné Language Proficiency Assessment (DLPA), first administered in school year 2019-20, that measures Navajo language proficiency and growth among Navajo students. In addition, the Native American Language and Culture Certification (NALCC) test has been revised. The NALCC was developed for those interested in becoming Navajo Language and Culture teachers. The NALCC evaluates the following areas: Navajo reading; Navajo language structure; Navajo cultural understanding; Professional knowledge; Navajo speaking and listening; and Navajo writing.

The Office of Educational Research and Statistics Fact Sheet also emphasizes the need to collaborate with parents and community in the efforts around language and culture revitalization on the Nation to establish language use and practice in the homes.<sup>39</sup>

Additional data from the Arizona Department of Education (ADE) were available on home language use for children enrolled in ADE schools in the Navajo Nation Region. Upon initial enrollment at schools in ADE districts, families complete the Home Language Survey which contains three questions: 1) What language do people speak in the home most of the time? 2) What language does the student speak most of the time? 3) What language did the student first speak or understand? If the answer to any of these three questions is any language other than English, the child must take the Arizona English Language Learner Assessment (AZELLA). Results from the AZELLA placement test determine whether the child is considered an English Language Learner: Those who do not score as “proficient” in English, that is, those with a score of “Pre-emergent/emergent,” “Basic” or “Intermediate,” qualify for English Learner services.<sup>vi</sup>

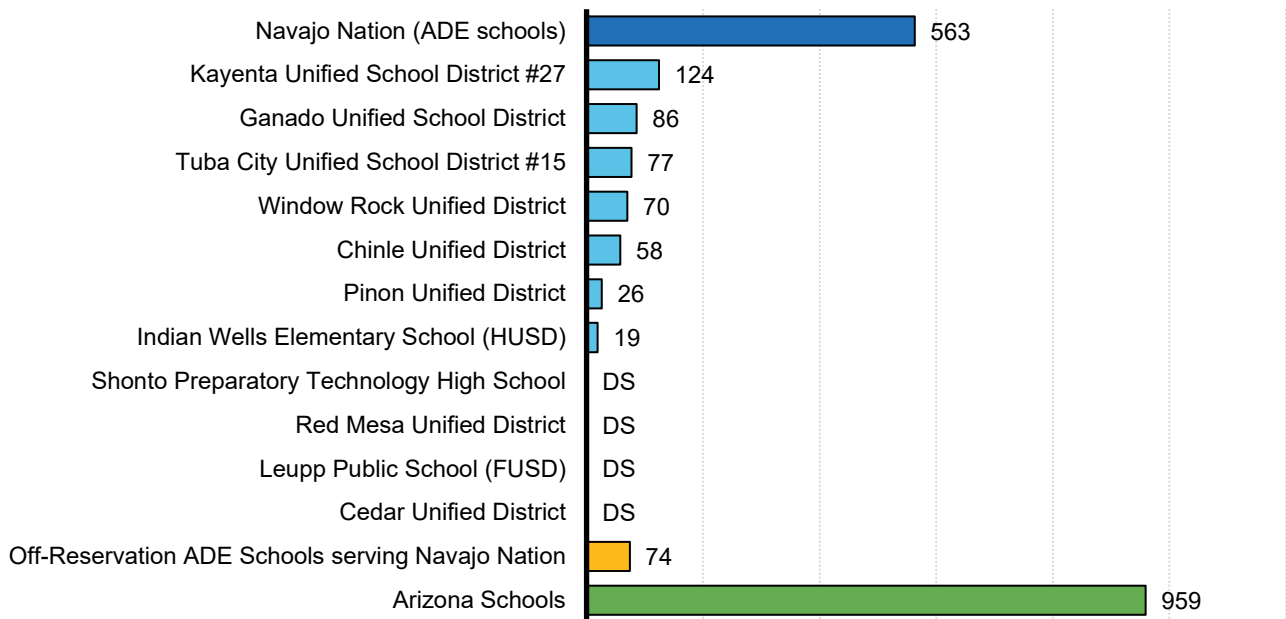
In 2019-20, 563 children enrolled in school districts within the Navajo Nation Region who completed the Home Language Survey reported use of the Navajo language either in the child’s home or actively by the student (whether in the present or the past). As explained in the paragraph above, this does not mean that all 563 children spoke Navajo. Some may have been active Navajo speakers, while for others it may mean that some adults in the child’s home spoke Navajo but the child did not. The total may also capture children who initially spoke Navajo but were no longer doing so at the time the Home Language Survey was completed. We will refer to these children collectively as “reporting use of the Navajo language” (Figure 8).

Looking at the school districts in the region, Kayenta Unified had the largest number of children reporting use of the Navajo language (N=124); at Indian Wells Elementary, on the other hand, only 19 children reported Navajo use (Figure 8).

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<sup>vi</sup> For more information about the Home Language Survey, AZELLA test or ELL services see <https://www.azed.gov/oelas>

Figure 8. Students in ADE schools reporting use of the Navajo language on the Home Language Survey data by district, 2019-20

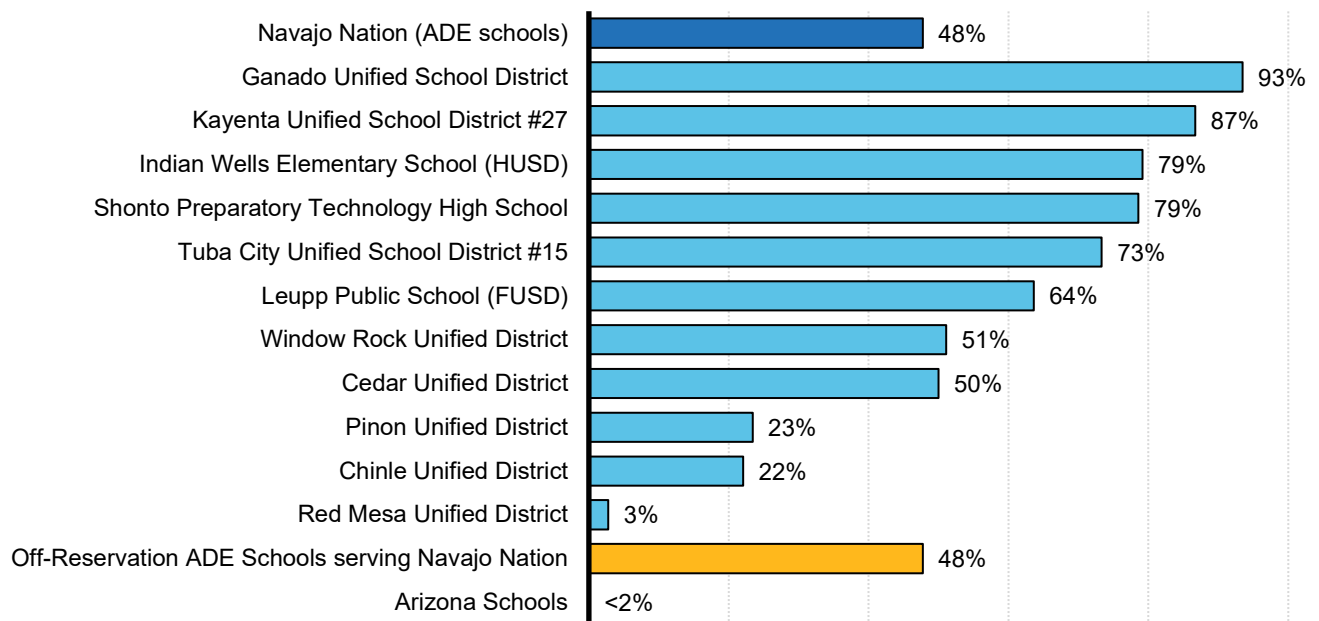


Source: Arizona Department of Education (2021). [Primary Home Language Other Than English results Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The selected off-reservation schools serving Navajo Nation students included in this report are as follows: Sinagua Middle School and Flagstaff High School in Flagstaff Unified District; Page Middle School, Page High School and Sand & Sage Academy in Page Unified District; Holbrook Junior High School and Holbrook High School in Holbrook Unified District; and Sanders Elementary School and Valley High School in Sanders Unified District.

The number of students reporting use of the Navajo language represent different proportions of the total number of students completing a Home Language Survey at the district level (see Figure 9). In the Kayenta Unified School District, the 124 children account for 87% of all Survey completers in school year 2019-20. The 19 children at Indian Wells Elementary represent 79% of all children completing a Home Language Survey. Even a very small number of children reporting Navajo use can represent a large proportion of those who completed the Survey. This is the case at Cedar Unified School District, where the number was so small that it needed to be suppressed in Figure 8, but represented 50% of the Home Language Survey completers. The opposite is also true: the 959 children in all Arizona schools combined whose families completed a Survey in 2019-20 (Figure 8) represent less than 2% of Survey completers in Arizona that year (Figure 9). Because the Home Language Survey must be completed the first time a child is enrolled in a school or Local Education Agency (LEA) it is possible that a large share of the Surveys is for younger children who are first enrolling in Kindergarten or first grade.

Figure 9. Percent of Home Language Survey completers reporting use of the Navajo language (ADE schools), 2019-20



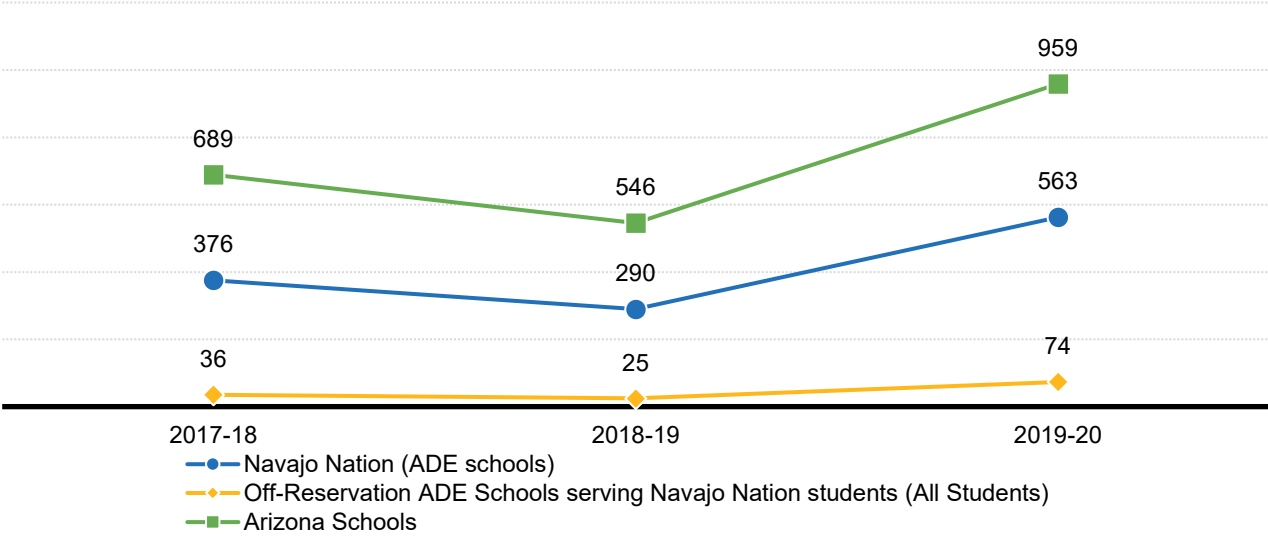
Source: Arizona Department of Education (2021). [Primary Home Language Other Than English results Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: The selected off-reservation schools serving Navajo Nation students included in this report are as follows: Sinagua Middle School and Flagstaff High School in Flagstaff Unified District; Page Middle School, Page High School and Sand & Sage Academy in Page Unified District; Holbrook Junior High School and Holbrook High School in Holbrook Unified District; and Sanders Elementary School and Valley High School in Sanders Unified District.

Figure 10 shows that the number of students who report use of the Navajo language varies widely each year and increased notably from school year 2018-19 to 2019-20.

The ADE Home Language Survey data provides a source of information about the use of the Navajo language among families in the region. Key informants noted, however, that this source may have important limitations. As noted above, the Survey is a part of the English Language Learner determination process to assess children who may need additional support with English acquisition. Key informants noted that this could be interpreted as a deficit-based approach where multilingualism is seen as a potential impairment to school performance. They pointed out that families may fear stigmatization if they indicate use of a language other than English at home. As a result, the Home Language Survey may not fully capture the number of homes where the Navajo language is used on a regular basis.

Figure 10. Number of students in Navajo-speaking homes (ADE schools), 2017-18 to 2019-20



Source: Arizona Department of Education (2021). [Primary Home Language Other Than English results Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team



Table 7. Students in ADE schools reporting use of the Navajo language on the Home Language Survey data by district, 2017-18 to 2019-20

Geography	Number of students reporting use of the Navajo language			Percent of Home Language Survey completers reporting use of the Navajo language		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
<b>Navajo Nation (ADE schools)</b>	<b>376</b>	<b>290</b>	<b>563</b>	<b>30%</b>	<b>22%</b>	<b>48%</b>
Window Rock Unified District	25	19	70	15%	12%	51%
Ganado Unified School District	DS	DS	86	<2%	<2%	93%
Chinle Unified District	35	29	58	11%	10%	22%
Red Mesa Unified District	N/A	DS	DS	N/A	<2%	3%
Leupp Public School (FUSD)	19	17	DS	76%	74%	64%
Tuba City Unified School District #15	96	64	77	77%	60%	73%
Indian Wells Elementary School (HUSD)	DS	DS	19	9%	8%	79%
Pinon Unified District	12	DS	26	11%	3%	23%
Cedar Unified District	DS	DS	DS	8%	12%	50%
Kayenta Unified School District #27	136	116	124	75%	73%	87%
Shonto Preparatory Technology High School	DS	DS	DS	92%	56%	79%
Off-Reservation ADE Schools serving Navajo Nation students (All Students)	36	25	74	36%	18%	48%
Arizona Schools	689	546	959	<2%	<2%	<2%

Source: Arizona Department of Education (2021). [Primary Home Language Other Than English results Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: The selected off-reservation schools serving Navajo Nation students included in this report are as follows: Sinagua Middle School and Flagstaff High School in Flagstaff Unified District; Page Middle School, Page High School and Sand & Sage Academy in Page Unified District; Holbrook Junior High School and Holbrook High School in Holbrook Unified District; and Sanders Elementary School and Valley High School in Sanders Unified District.

In school year 2019-20, there were 3,206 students enrolled in kindergarten to 3<sup>rd</sup> grade in the region. Of those, 265 (8%) were classified as English Language Learners. As explained above, these are children who reported use of a language other than English (including the Navajo language), and who did not score as “proficient” in the Arizona English Language Learner Assessment (AZELLA) (Table 8). The proportion of English Language Learners decreased slightly in the region from 2017-18 to 2019-20 (Table 9).

Table 8. Number of English Language Learners enrolled in kindergarten to third grade, 2017-18 to 2019-20

	Total K-3 Students Enrolled (2017-18)	Total K-3 Students Enrolled (2018-19)	Total K-3 Students Enrolled (2019-20)	ELL K-3 Students (2017-18)	ELL K-3 Students (2018-19)	ELL K-3 Students (2019-20)
<b>Navajo Nation (ADE schools)</b>	<b>3,579</b>	<b>3,428</b>	<b>3,206</b>	<b>355</b>	<b>261</b>	<b>265</b>
Arizona Schools	325,841	326,891	329,300	37,144	35,025	37,313

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: English Language Learners are students who do not score 'proficient' in the English language on the Arizona English Language Learner Assessment (AZELLA) and thus eligible for additional supportive services for English language acquisition.

Table 9. Percent of English Language Learners enrolled in kindergarten to third grade, 2017-18 to 2019-20

Geography	Percent of K-3 Students who were English Language Learners, 2017-18	Percent of K-3 Students who were English Language Learners, 2018-19	Percent of K-3 Students who were English Language Learners, 2018-19
<b>Navajo Nation (ADE schools)</b>	<b>10%</b>	<b>8%</b>	<b>8%</b>
Arizona Schools	11%	11%	11%

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: English Language Learners are students who do not score 'proficient' in the English language on the Arizona English Language Learner Assessment (AZELLA) and thus eligible for additional supportive services for English language acquisition.

## Family and Household Composition

According to the ACS, nearly two-thirds (63%) of children ages birth to 5 in the Navajo Nation Region live with a single parent, a similar proportion to that in all Arizona reservations (62%). About one-third of young children live with two married parents (or a parent and a stepparent) compared to 28% across Arizona reservations (Figure 11).

Additional information about family and household composition were available from the Navajo Nation Head Start and Early Head Start Program Information Report. According to the Report, in 2018-19, nearly six in 10 children enrolled (56%) lived in families with two parents present, while 37% lived with single-parents (Figure 12). This family composition profile is different from that in the region as reported by the ACS which may be due to different ways of asking and interpreting family composition questions. Some parents in the region may not be legally married but are cohabitating and raising children together.

An important limitation of the ACS data is the fact that it does not allow for the identification of both parents being present in the household if they are unmarried. The ACS only captures the relationship of

the child to the householder, not to the other parent. Therefore, a full count of the number of children living with both parents is not available from ACS data.<sup>40</sup> Furthermore, in communities where cohabitation is common, the ACS may overestimate the number of children living with single parents.

The Head Start application form, on the other hand, only asks whether the family is a “one-parent family” or a “two-parent family,” making it easier for these parents who are cohabitating to indicate that theirs is a “two-parent family,” regardless of the legal status of their relationship.

ACS data about the *households* in the region provide an additional source of information regarding living arrangements in the region. According to the most recent ACS estimates (2015-2019) there were 6,884 households in the Navajo Nation Region where the householder had their own children under the age of 18 residing in the home.<sup>vii</sup> Of these, 2,313 were single-female-headed households (34%), 411 were single-male-headed households (6%), 886 were cohabitating (unmarried) couple households (13%), and 3,274 were married-couple households (48%). In sum, 47% of these were single-parent households, and 61% were households with both partners present (regardless of marital status).<sup>41</sup>

Key informants also pointed out that the Head Start form may more easily allow caregivers in multigenerational families to indicate that there is more than one adult responsible for the children in the households. A “two-parent household,” for instance, might be comprised of a parent and a grandparent. Key informants also expressed that, generally speaking, the way in which family composition and living arrangements are understood by the U.S. Census Bureau may not necessarily reflect the reality of Navajo families, where children spend considerable amounts of time in the homes of various family members such as aunts, uncles and grandparents. This means that even if a child lives in the home of single-parent householder by ACS definitions, they may have access to a much larger adult caregiver presence than just their parent or legal guardian. As key informants indicated, families in tribal communities like the Navajo Nation have complex living arrangements, often based on values of kinship. This can be a strength for families in the region.

Even if the number of young children living with only one parent is lower than ACS data in Figure 11 suggest, single-parent families in the region may need additional support. With the move to remote learning during the pandemic, parents and caregivers took on the challenging role of assisting with children’s online learning. The burden was particularly taxing for single-parent households, with more than three-quarters (78%) of single parents surveyed nationally managing children’s online learning. Single-parent households were more likely to experience unemployment, food insecurity, difficulty paying for housing and utilities and heightened behavioral difficulties in children during the pandemic.<sup>42,43,44</sup> Single-parent households were also more likely to rely upon grandparents to take on primary caregiving (37%) and support of children’s remote learning (20%) compared to the overall

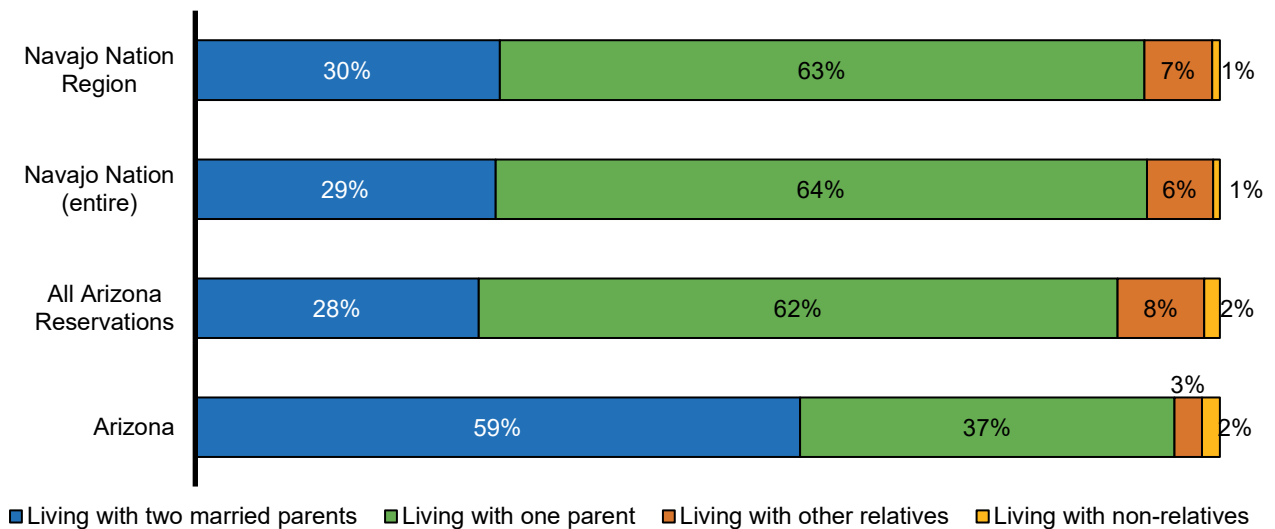
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<sup>vii</sup> There are other households in the region with children residing in them where the householder is not the parent such as children in kinship care, foster children, or cases where the householder is not the parent of the children, e.g., a grandparent is the householder. These are not included in the 363 count. Data for households with children birth to 5 were not available from the ACS.

population (26% and 11%, respectively).<sup>45</sup> These additional hardships may impact young children living with a single parent in the Navajo Nation Region.

The ACS estimates that 7% of young children in the region are living with relatives other than their parents (such as grandparents, uncles, and aunts), and the remaining 1% are living with non-relatives including foster parents; these proportions are similar to those across all Arizona reservations (8% and 2%, respectively) (Figure 11). Children living in kinship care, that is, living with a close friend or relative who is not a parent, can arrive in those situations for a variety of reasons, including a parent’s absence for work or military service, chronic illness, drug abuse, or incarceration, or due to abuse, neglect or homelessness. Though the proportion of children living in kinship-care arrangements in the region is small, these families 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 ageing caregiver for a young child. Children in kinship-care may also face special needs as a result of trauma, and could benefit from additional support and assistance to help them adjust and to ensure they have a stable and nurturing home environment.<sup>46</sup>

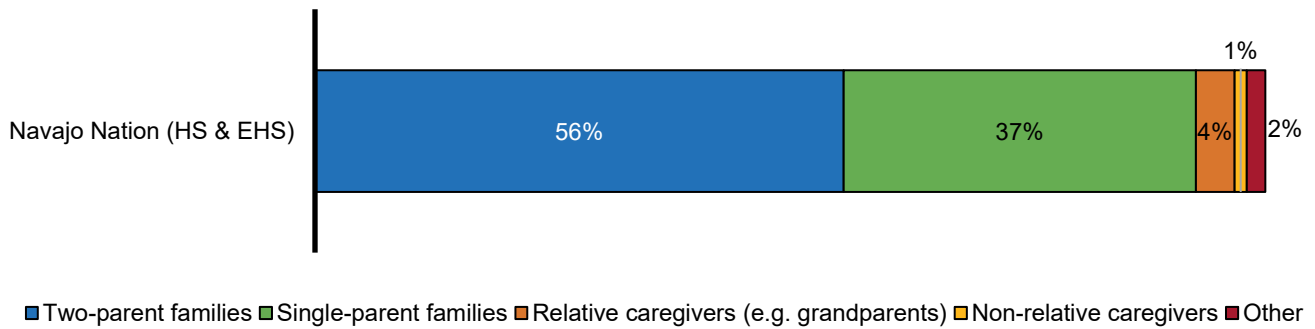
Figure 11. Living arrangements for children ages birth to 5, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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 step-parents. 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 12. Living arrangements for children enrolled in the Navajo Nation Head Start & Early Head Start, 2018-19

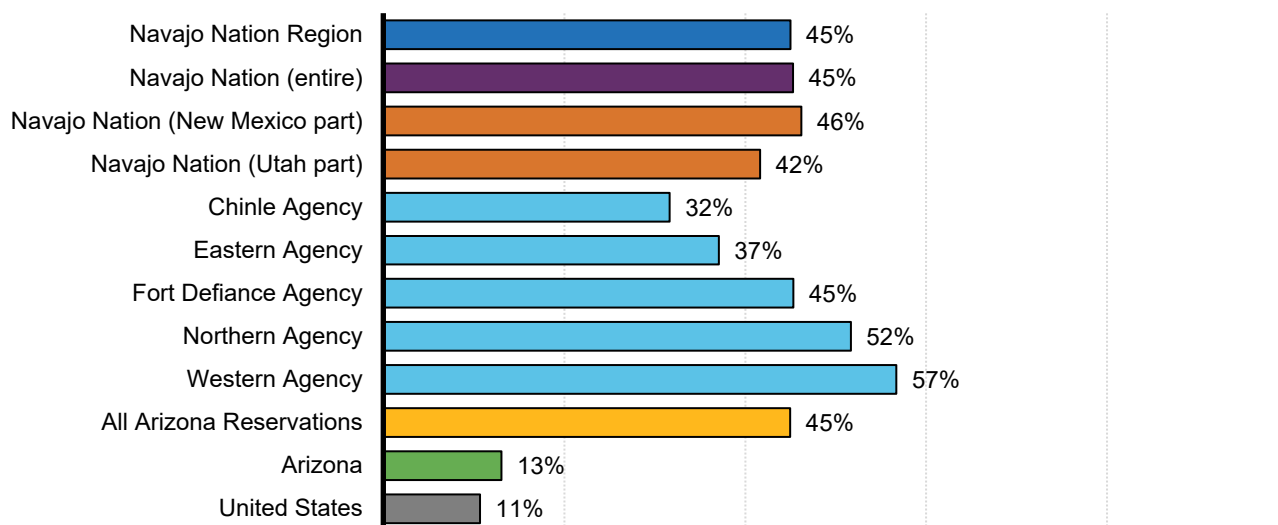


Source: Office of Head Start (2020). 2019 Program Information Report. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/data/pir>

The ACS estimates that nearly half (45%) of young children in the Navajo Nation Region live in their grandparent's household, the same proportion as in all Arizona reservations (Figure 13). Note that the grandparent may or may not be responsible for raising the child, and that the child's parent(s) may or may not also be living in the household.

Understanding the circumstances of grandparents living with their grandchildren is critical to providing services in a way that will meet the unique needs of grandparent-led families. Although multigenerational households can enhance family bonds and provide additional financial and caregiving resources, children's risk of living in poverty is higher for those living with grandparents and grandparents often encounter multiple barriers when accessing public assistance as caregivers and face unique psychological and physical stressors.<sup>47,48,49,50</sup> Grandparents who care for their grandchildren may require targeted outreach and information about resources, support services, benefits and policies available to aid in their caregiving role.<sup>51</sup>

Figure 13. Proportion of children ages birth to 5 living in a grandparent's household, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B10001 & B27001

Note: This table includes all children (under six 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.

According to ACS data, grandparents are considered responsible for their 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. Table 10 shows selected characteristics of grandparents in the Navajo Nation Region who are responsible for raising one or more grandchildren ages birth to 17 who live with them. These grandparents are similar in most ways to those in all Arizona reservations: almost two-thirds are female (65% in both geographies); nearly half are 60 or older (47% vs 45%); nearly two in five live in poverty (36% vs 38%); and about 1 in 4 do not have the child's parent(s) living in the household (27% vs 29%). Grandparents in the region, however, are different from those across Arizona reservations in their language use: a higher proportion of grandparents in the Navajo Nation Region are not proficient English speakers (29%), compared to 19% across all reservations (Table 10).

There are important differences in the characteristics of grandparents raising their grandchildren at the agency level, especially regarding English proficiency and presence of parents in the household. The proportion of grandparents who do not speak English very well ranges from 16% in the Western Agency, to 54% in the Chinle Agency. Grandparents with limited English proficiency who are their grandchildren's primary care provider may experience barriers to accessing health care and social services for their grandchildren, as well as barriers to engaging in important interactions at schools.

Similarly, the Chinle Agency has the highest percentage of grandparents who do not have the child's parents in the household (54%), compared to 18% in the Western Agency (Table 10). The combination of certain grandparent characteristics may result in the need for additional services for those residing in some regions. For instance, grandparents in the Chinle Agency may have a higher need for support

because they are less likely to have the presence of the child’s parents in the home, and because they are more likely to need services provided in the Navajo language.

Table 10. Selected characteristics of grandparents who are responsible for one or more grandchildren under 18 in their households, 2015-2019 ACS

Geography	Estimated number of grandparents who live with and are responsible for grandchildren under 18 years old	Percent of these grandparents who:				
		Are female	Are 60 years old or older	Have an income below the poverty level	Do not speak English very well	Do not have the child's parents in the household
<b>Navajo Nation Region</b>	<b>2,657</b>	<b>65%</b>	<b>47%</b>	<b>36%</b>	<b>29%</b>	<b>27%</b>
Navajo Nation (New Mexico part)	1,851	65%	49%	42%	17%	25%
Navajo Nation (Utah part)	161	57%	30%	25%	30%	32%
Navajo Nation (entire)	4,669	65%	47%	38%	24%	26%
Chinle Agency	582	68%	48%	36%	54%	41%
Eastern Agency	964	66%	51%	47%	20%	28%
Fort Defiance Agency	1,017	68%	48%	43%	24%	31%
Northern Agency	856	61%	42%	35%	21%	20%
Western Agency	1,250	63%	47%	30%	16%	18%
All Arizona Reservations	5,630	65%	45%	38%	19%	29%
Arizona	64,841	62%	42%	22%	21%	31%
United States	2,465,864	63%	44%	19%	14%	36%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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.

Additional data tables related to *Population Characteristics*, including tables with data at the agency level, can be found in Appendix 1 of this report.



## **ECONOMIC CIRCUMSTANCES**



# ECONOMIC CIRCUMSTANCES

## Why it Matters

Poor economic conditions are a threat to child well-being across a range of indicators including academic achievement, physical health, and mental health.<sup>52</sup> Poverty can affect the way children grow and develop, even including changes to their brains.<sup>53,54</sup> As such, children in impoverished homes are at a greater risk of problems that include being born at a low birth weight, lower school achievement and poor health.<sup>55,56,57,58,59,60,61</sup> They are also more likely to remain poor later in life, passing along these challenges to future generations.<sup>62,63</sup> On the other hand, children raised in families with higher incomes tend to do better in a variety of ways across their lives. This includes being less likely to have health problems like depression and diabetes and more likely to finish high school and earn higher wages.<sup>64,65,66,67</sup>

Economic circumstances in tribal communities can be much more complex than in other parts of the state. For many historical and legal reasons, economic development in tribal areas has followed a different trajectory than in other areas. Economic disparities between non-Native and Native communities have compounded over decades, affecting the poverty, employment, housing instability and food security in tribal areas.<sup>68</sup> At the same time, it is common for tribal governments to be involved in community and economic development, investing in forestry, fisheries, gaming, and many other economic arenas to strengthen the social and economic conditions of their people.<sup>69</sup>

Economic resources are important for meeting basic needs, like providing nutrition. Food security, defined by the U.S. Department of Agriculture (USDA) as “access at all times to enough food for an active, healthy life for all household members”<sup>70</sup> is linked with many aspects of child well-being, and yet households with young children experience food insecurity at nearly twice the rate (15.3%) of households with no children (8.8%).<sup>71</sup> Safety-net programs aim to minimize the impacts of poverty on child and family well-being.<sup>72,73,74</sup> These programs include:

- The Supplemental Nutrition Assistance Program (SNAP; also referred to as “nutrition assistance” and “food stamps”),<sup>75</sup>
- The Special Supplemental Nutrition Program for Women, Infants and Children (WIC),<sup>76</sup>
- The National School Lunch Program<sup>77</sup> and Summer Food Service Program,<sup>78</sup>
- Temporary Assistance for Needy Families (TANF),<sup>79</sup>
- KidsCare (the state children’s health insurance program),<sup>80</sup>
- Child care assistance from the Arizona Department of Economic Security,<sup>viii</sup>

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<sup>viii</sup> For more information see: <https://des.az.gov/services/child-and-family/child-care>

- Tribal food distribution programs,
- Tribal child care assistance programs, such as the Tribal Child Care and Development Fund, and
- Tribal housing programs.

Other factors related to economic stability include employment and housing.<sup>81</sup> Unemployment (and underemployment<sup>ix</sup>) can limit access to resources like health insurance – typically provided by employers – that support children’s health and well-being. Unemployment can also contribute to family stress, conflict, homelessness and child abuse.<sup>82,83</sup> Similarly, housing instability can harm the physical, social-emotional and cognitive development of young children.<sup>84</sup> High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness.<sup>85,86</sup> This high relative cost leaves inadequate funds for other necessities, such as food and utilities.<sup>87</sup>

## What the Data Tell Us

### Income and Poverty

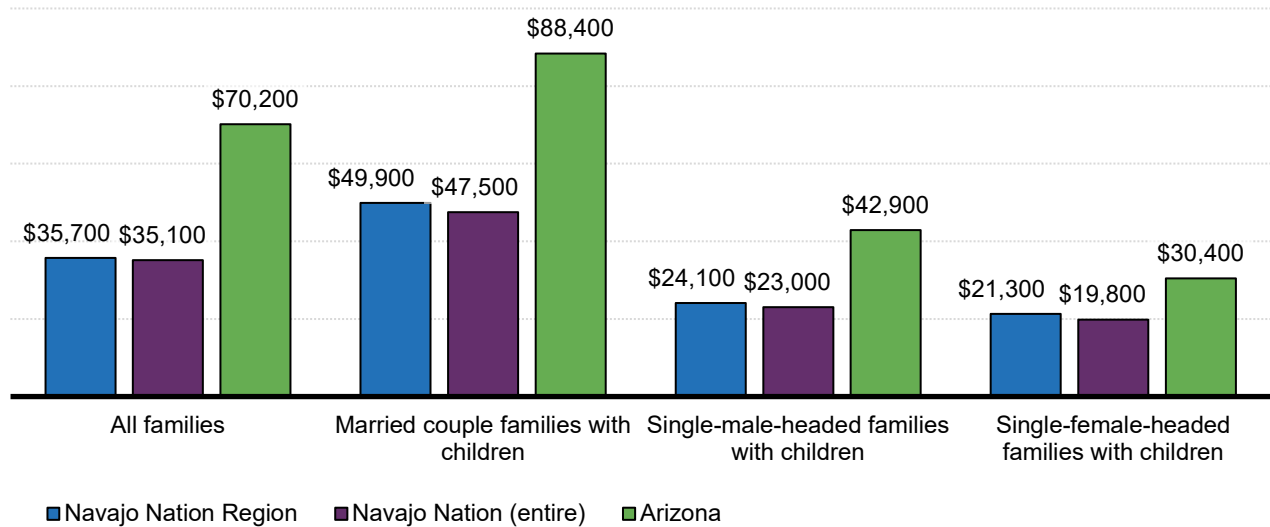
The American Community Survey (ACS) estimates that the median family income for the Navajo Nation Region is \$35,700, which means that half of the region’s families have incomes lower than that amount, and the other half have incomes above it. This includes all families of at least two people, whether or not they have children. For families who have at least one child (up to 17 years old), the median income is \$49,900, higher than that of all families, likely because many such families are dual-income earners (Figure 14).

Financial hardship is, however, substantially larger for single-parent-headed families in the region, as their income is about half that of married-couple families: \$24,100 for single-male-headed families and \$21,300 for single-female-headed households (Figure 14). As mentioned above in the *Family and Household Composition* section, 47% of the households with children birth to 17 in the Navajo Nation Region are led by a single parent. This means those young children also live in families with low incomes that are likely insufficient to meet their basic needs and that require additional support from safety-net programs in the region.

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<sup>ix</sup> 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

Figure 14. Median family income, 2015-2019 ACS

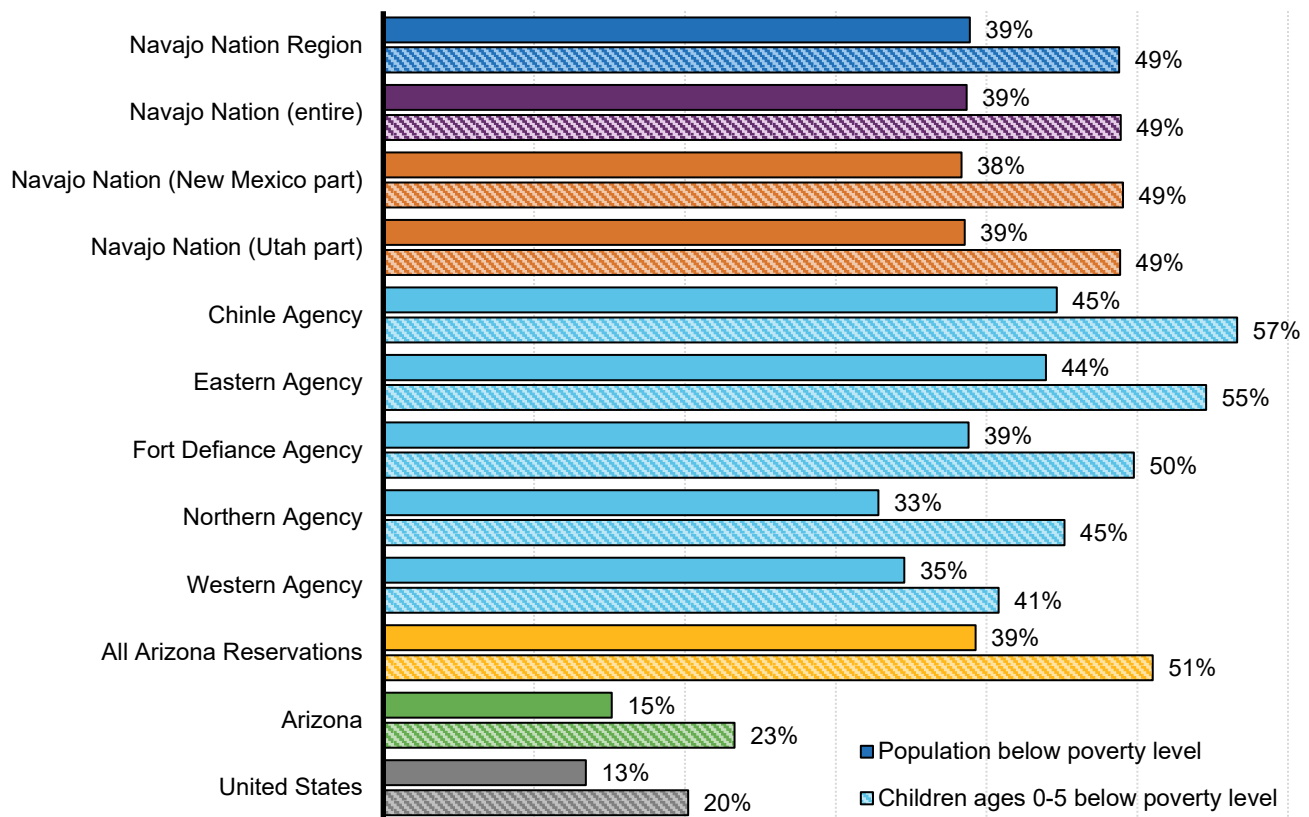


Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B19126

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 ages birth to 17.

Consistent with the lower median family incomes in the Navajo Nation Region, rates of poverty (averaged over the years 2015-2019) for the overall population (39%) and for young children (49%) are more than double those seen statewide (15% and 23%, respectively). Regional rates are similar to the overall population rate (39%) and young child poverty rate (51%) seen in reservations across Arizona (Figure 15). Poverty rates vary by agency: the Chinle Agency has the highest rates for both the overall population (45%) and children birth to 5 (57%). The Northern Agency has the lowest poverty rate for the overall population (33%), and the Western Agency has the lowest poverty rate for young children (41%). Poverty is a well-known risk factor for many adverse outcomes for both children and their families, including chronic health problems, mental health disorders, substance abuse, poor academic achievement and child abuse and neglect.<sup>88</sup> Poverty can also amplify and exacerbate Adverse Childhood Experiences (ACEs) and have long-term effects on health into adulthood.<sup>89</sup> Given these effects, strategies and programs to support families with young children experiencing poverty are particularly important.

Figure 15. Rates of poverty by subregion, 2015-2019 ACS

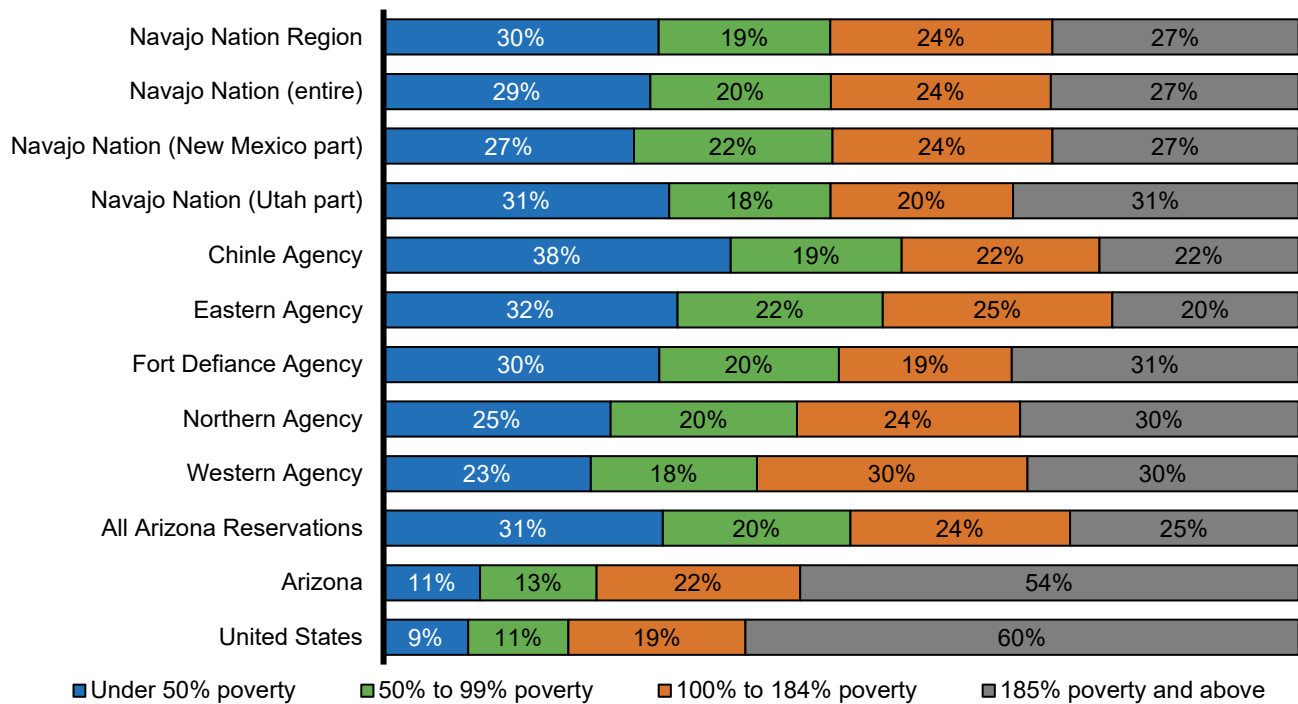


Source: U.S. Census Bureau. (2020). American Community Survey five-year estimates 2015-2019, Table B17001

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 2019, the poverty threshold for a family of two adults and two children was \$25,926; for a single parent with one child, it was \$17,622.

In the Navajo Nation Region, an estimated three out of every four young children (73%) live in households with incomes under 185% of the poverty level, a commonly used threshold for safety net benefits such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and free or reduced-price school meals. This 73% is similar to the percentage seen across all reservations in Arizona (75%) but exceeds the rate in the state (46%) (Figure 16).

Figure 16. Children ages birth to 5 living at selected poverty thresholds, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B17024

Note: The four percentages in each row should sum to 100%, but may not because of rounding. In 2019, the poverty threshold for a family of two adults and two children was \$25,926; for a single parent with one child, it was \$17,622. The 185% thresholds are \$47,963 and \$32,600, respectively.

The poverty and income data presented above represent a five-year window of ACS data collection prior to 2020. The COVID-19 pandemic had a sudden and dramatic impact on income for many families nationwide, with about half of adults surveyed by the Census Bureau’s Household Pulse Survey in Arizona reporting that someone in their household had lost employment income throughout 2020.<sup>90</sup>

**Navajo Nation Department for Self Reliance (Tribal TANF program)**

Public assistance programs are one way of counteracting the effects of poverty and providing supports to children and families in need. The Temporary Assistance for Needy Families (TANF) Cash Assistance program provides temporary cash benefits and support services to children and families. Eligibility is based on citizenship or qualified resident status, Arizona residency, and limits on resources and monthly income. In recognition of tribal sovereignty, federally-recognized tribes have the option to administer their own TANF programs. Since tribes set their own priorities for their communities and many design their own social services, some Tribal TANF program requirements may differ from those in state programs (e.g., time limits on receipt of TANF cash assistance). Tribal TANF programs also have more flexibility in determining program requirements to meet the needs of their own communities. With a focus on self-sufficiency, Tribal TANF programs can include community and social programs that are unique to their spiritual and cultural traditions.<sup>91</sup>

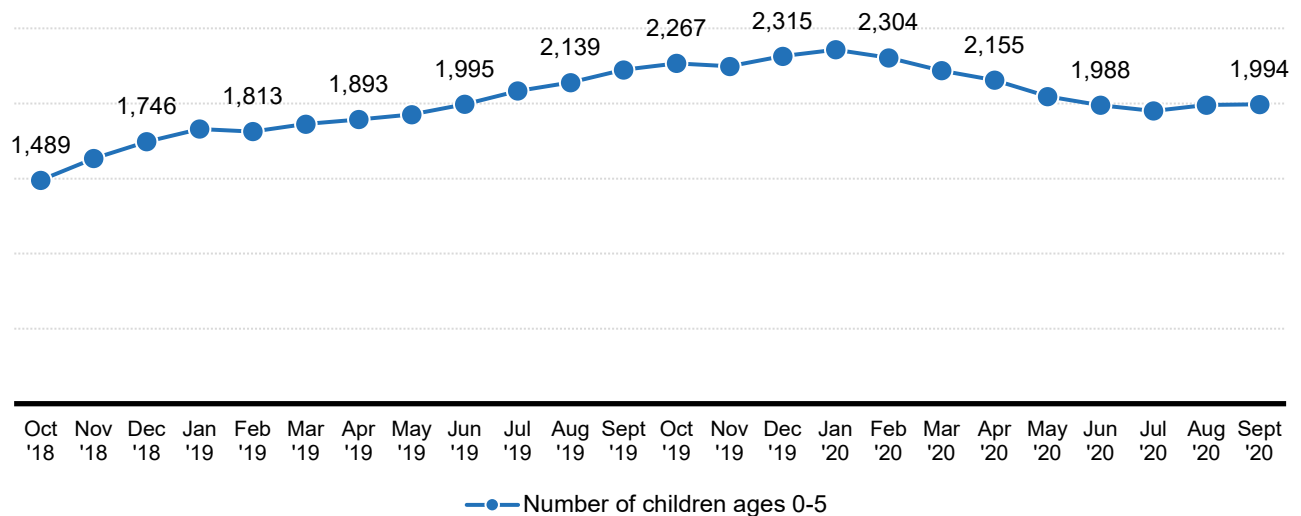
The Navajo Nation is one of the six Arizona tribes that operate a Tribal TANF program. The Navajo Nation TANF program is known as the Navajo Nation Department for Self Reliance (NNSDR), established within the Navajo Division of Social Services, and its creation and establishment was influenced by traditional Navajo values and teachings.

Data provided by the Navajo Nation Division of Social Services show that the number of children ages birth to 5 served by the NNSDR in Federal Fiscal Years (FFY) 2019 and 2020 steadily increased from 1,489 in October 2018, to 2,358 in January of 2020. Starting in February 2020, the number of children served began to decline, reaching a low of 1,950 young children participating in the NNSDR in July 2020. This reduction in participation is due to the impact of the COVID-19 pandemic. Key informants noted that during the shelter-in-place order in the Navajo Nation, the NNSDR did not require participating adults to seek a job or training but recommended that they stay home with their children. The shelter-in-place order made people reluctant to venture out into the public or seek out in-person services. In addition, tribal departments and programs, including the NNSDR were closed to the public and only communicated with clients via phone, regular mail, and email for those with internet access. NNSDR staff were available on a limited basis, and several became ill with COVID-19, further limiting staff availability. During this time, NNSDR prioritized processing payments to families.

By the late summer of 2020 the number of NNSDR participants began to slowly increase again (Figure 17). Note that all of the data provided by the Navajo Nation Division of Social Services presented in the figures and tables below reflect children served by the NNSDR in the entire Navajo Nation, not just the First Things First Navajo Nation Region.

The overall inclining trend in the number of young children participating in NNSDR in the Navajo Nation differs from a statewide decrease in participation in the state-operated TANF program in State Fiscal Year 2019. And while Tribal TANF numbers in the Navajo Nation fell during the first months of the pandemic, statewide there was an increase in participation in the program. Between February and July 2020, the number of families using TANF rose 35% in Arizona. During the state of emergency order, Arizona suspended the TANF work requirement<sup>92</sup> and lifetime eligibility limit of 12 months,<sup>93</sup> which had been the shortest in the nation,<sup>94</sup> thereby allowing more families to tap into these emergency funds.

Figure 17. Children ages birth to 5 served by the Navajo Nation Department for Self Reliance (Tribal TANF) by month, FFY 2019 to FFY 2020



Source: Navajo Nation Division of Social Services, Department for Self Reliance (2021) [TANF Dataset]. Unpublished data received by request.

Note: Data reflect children served by NNDSR in the entire Navajo Nation, not just the First Things First Navajo Nation Region.

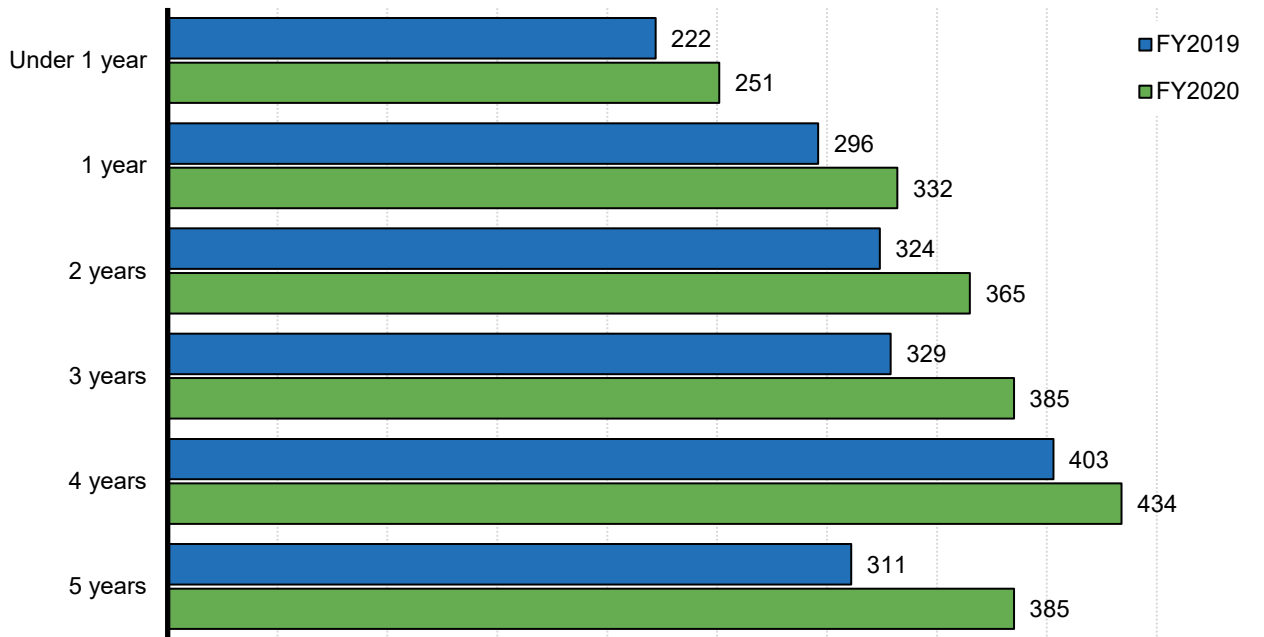
In FFY 2019 an average of 1,886 young children were served by the NNDSR, a number that increased to 2,153 in FFY 2020. In both of years, these numbers represented about one-third of the total number of children (ages 0-17) served by the program: 5,851 in FFY 2019, and 6,601 in FFY 2020 (Table 11). Looking at the data for young children participating in the NNDSR program by age, in both FFY2019 and 2020 the average monthly number of children enrolled increased with age up until age 4 and then decreased for children who were 5 years old (Figure 18). In FFY 2020, an average of 251 children under the age of 1 were served by the program each month compared to almost twice as many 4-year-old children (N=434) served each month. That same fiscal year, an average of 385 5-year-old children were served monthly (Figure 18).

Table 11. Children served by the Navajo Nation Department for Self Reliance (Tribal TANF) by age, FFY 2019 & FFY 2020

	Average monthly number of children (FY2019)	Percent of children (FY2019)	Average monthly number of children (FY2020)	Percent of children (FY2019)
Ages 0-5	1,886	32%	2,153	33%
Ages 6-10	1,811	31%	2,043	31%
Ages 11-15	1,663	28%	1,840	28%
Ages 16-18	490	8%	565	9%
Total (0-17)	5,851	100%	6,601	100%

Source: Navajo Nation Division of Social Services, Department for Self Reliance (2021) [TANF Dataset]. Unpublished data received by request.

Figure 18. Average monthly number of children ages birth to 5 served by the Navajo Nation Department for Self Reliance (Tribal TANF) by age, FY 2020



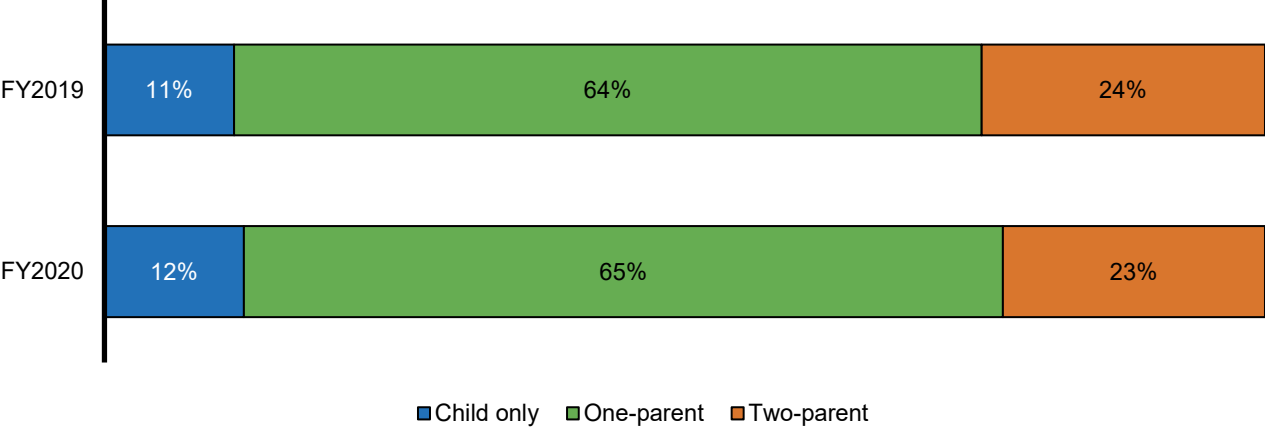
Source: Navajo Nation Division of Social Services, Department for Self Reliance (2021) [TANF Dataset]. Unpublished data received by request.

Data from the Navajo Nation Division of Social Services show that in FFY 2020 about two-thirds of the young children served by NNDSR (65%) were in one-parent families, 24% were in two-parent families, and 11% were child-only participants (Figure 19).



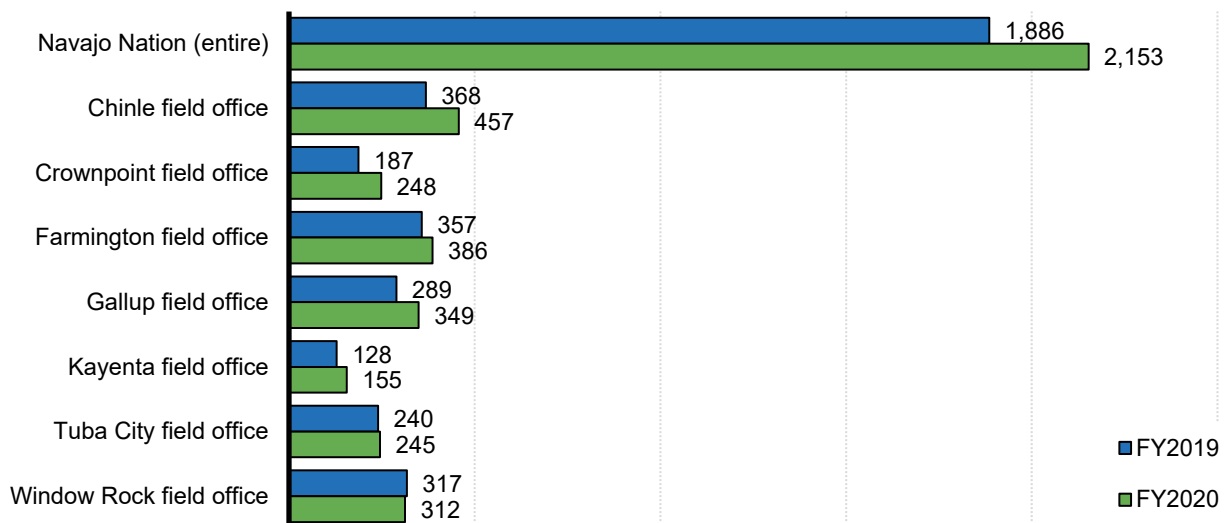
The Navajo Nation Department for Self Reliance has seven field offices across the Navajo Nation: Chinle, Crownpoint, Farmington, Gallup, Kayenta, Tuba City and Window Rock. In FFY 2020 the field offices that served the largest number of children ages birth to 5 were: Chinle (N=457), Farmington (N=386) and Gallup (N=349) (Figure 20). As indicated above, the Chinle Agency also has the largest share of the total population and of young children living in poverty (Figure 15).

Figure 19. Children ages birth to 5 served by the Navajo Nation Department for Self Reliance (Tribal TANF) by type of case, FY2019 to FY2020



Source: Navajo Nation Division of Social Services, Department for Self Reliance (2021) [TANF Dataset]. Unpublished data received by request.

Figure 20. Average monthly number of children ages birth to 5 served by the Navajo Nation Department for Self Reliance (Tribal TANF) by NNDSR field office, FY 2019 to 2020



Source: Navajo Nation Division of Social Services, Department for Self Reliance (2021) [TANF Dataset]. Unpublished data received by request.

Additional tables with data from the NNDSR program for children ages birth to 17 are included in *Appendix 1*.

To help alleviate the financial need brought on by the COVID-19 pandemic, the federal government also issued three Economic Impact Payments to eligible individuals in 2020 and 2021. These funds were available to U.S. citizens or permanent residents whose adjusted gross incomes were no more than \$75,000 for single adults, \$112,500 for heads of household, and \$150,000 for married couples filing jointly.<sup>95</sup> Eligible families received: \$1,200 per adult and \$500 per child in April 2020; \$600 per family member in December 2020/January 2021; and \$1,400 per person in March 2021.<sup>96</sup>

### Food Insecurity

Many families struggle with consistent access to “enough food for an active, healthy life,” a problem known as food insecurity.<sup>97</sup> This limited or uncertain availability of food is negatively associated with many markers of health and well-being for children, including heightened risks for developmental delays<sup>98</sup> and having obesity.<sup>99</sup> To help reduce food insecurity, there are a variety of federally-funded programs including the Supplemental Nutrition Assistance Program (SNAP),<sup>100</sup> the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC),<sup>101</sup> the National School Lunch Program (NSLP),<sup>102</sup> the School Breakfast Program,<sup>103</sup> the Summer Food Service Program (SFSP)<sup>104</sup> and the Child and Adult Care Food Program (CACFP).<sup>105</sup>

An additional food resource in the Navajo Nation Region is the Navajo Food Distribution program, which is managed through the Navajo Department of Health and is part of the federal Food Distribution

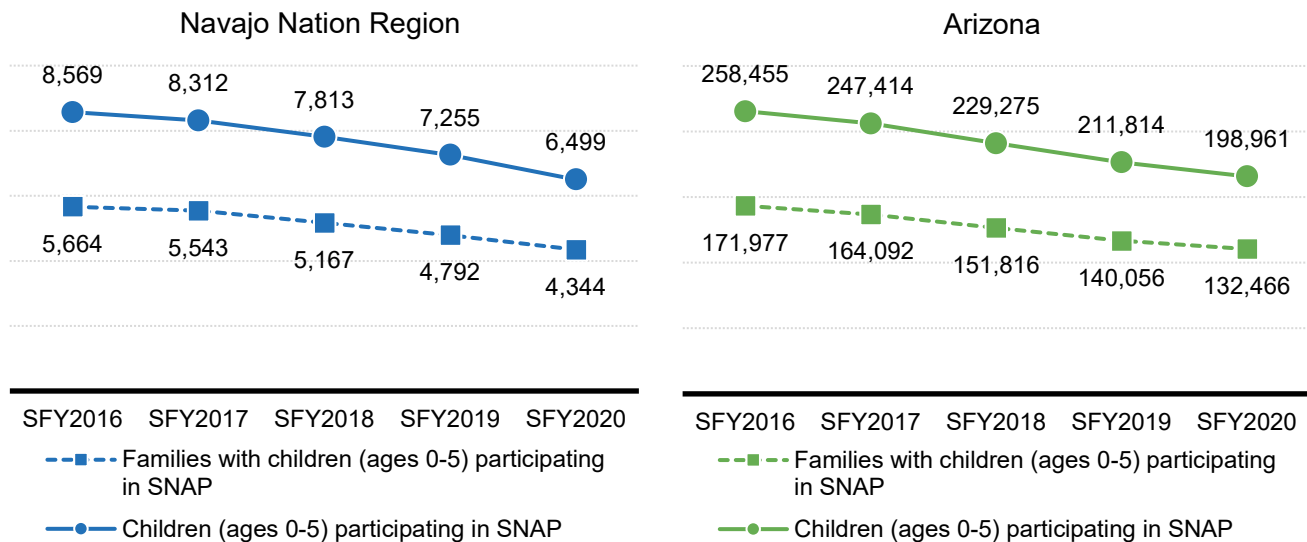
Program on Indian Reservations (FDPIR). In 2013, over 4,600 households took part in the Navajo Food Distribution Program, making it the largest FDPIR program in the US.<sup>106</sup>

A nationally representative survey found that for caregivers in low-income families, food insecurity during the pandemic, exacerbated by the loss of free meals (e.g., school lunch), was the lone consistent predictor of anxiety, depression and stress.<sup>107</sup> Arizona families with young children have been particularly vulnerable to being persistently food insecure and becoming food insecure during the pandemic. Furthermore, food insecurity tends to be worse for people of color. Nationally, Hispanic individuals are almost twice as likely (15.8%) as non-Hispanic White individuals (8.1%) to be food insecure, and Native Americans are three times as likely (23.5%) to be food insecure.<sup>108</sup>

### Supplemental Nutrition Assistance Program (SNAP)

Administered by the Arizona Department of Economic Security (DES) and also referred to as “Nutrition Assistance” and “food stamps,” SNAP is designed to combat food insecurity. The program has been shown to help reduce hunger and improve access to healthier food.<sup>109</sup> In the years prior to the pandemic, there was an overall decline in the number of families with young children who participate in SNAP across both the Navajo Nation Region and Arizona as a whole (Figure 21). The number of families with young children ages birth to 5 receiving SNAP fell from a high of 5,664 in SFY 2016 to 4,344 in SFY 2020, and the total number of young children receiving SNAP declined from 8,569 in SFY 2016 to 6,499 in SFY 2020.

Figure 21. Number of children ages birth to 5 and families with children birth to 5 participating in SNAP, state fiscal years 2016 to 2020



Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

SNAP benefits support working families whose incomes simply do not provide for all their needs. For low-income working families, the additional funds available to access food from SNAP can help make a meaningful difference. For example, for a three-person family with one person who earns a minimum wage, SNAP benefits can boost take-home income by 10-20%.<sup>110</sup> However, even among those accessing SNAP benefits, nearly half of households in poverty still struggle with food security.<sup>111</sup>

During the pandemic, changes were made to SNAP program administration to better meet the needs of families in a time of crisis. Beginning in December 2020, participants received a 15% increase in benefits. Among other administrative changes, interviews were waived, certification periods were extended and online shopping was approved, making it easier for families to access benefits. WIC also adjusted administrative guidelines, and participants were allotted extra monthly funds to use on fruits and vegetables. Beginning October 2021, the USDA also instituted a roughly 27% increase in SNAP benefits, the largest permanent increase in the program's history.

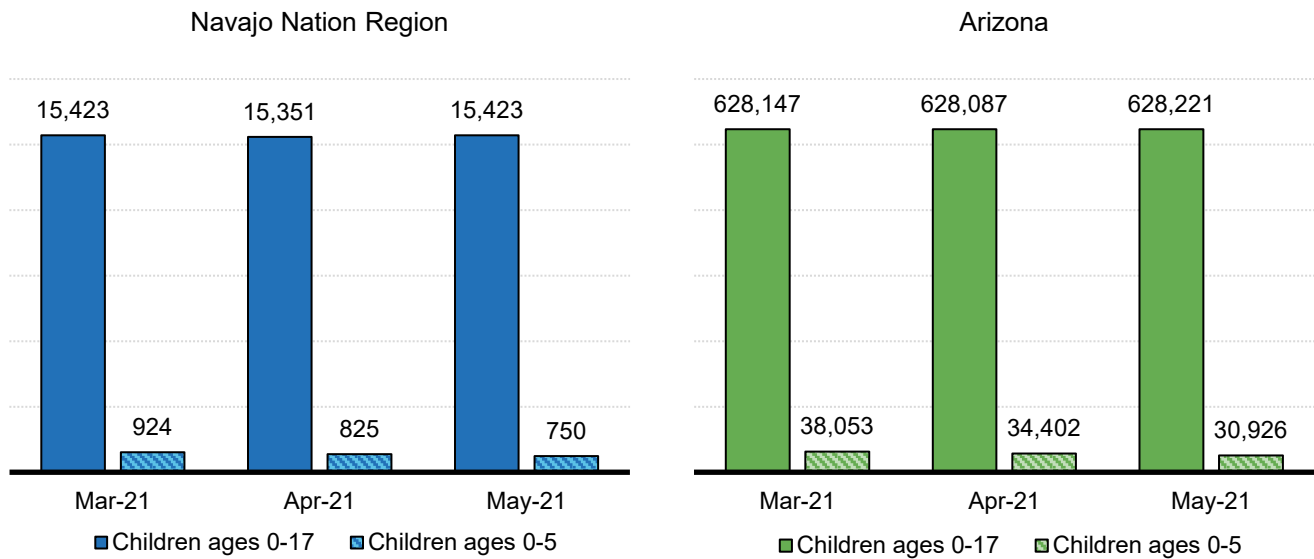
Despite these efforts to adapt SNAP benefits to the pandemic, in a survey of SNAP users in Arizona, nearly half (46%) of respondents found their benefits insufficient to meet their family's needs, due to barriers such as issues paying for online groceries and not being able to use a full month's benefit due to COVID-19 related shopping difficulties, such as stores running out of food items. Individuals with fewer financial resources are less able to stock up on necessities needed for a quarantine, and formula stocking shortages were a particular concern for families with young children.<sup>112,113</sup>

### ***Pandemic Electronic Benefit Transfer Program (P-EBT)***

The Pandemic Electronic Benefit Transfer Program (P-EBT), a collaboration between the Arizona Department of Education, the Arizona Department of Economic Security and the USDA Food and Nutrition Service, was established to offset the loss of meals normally received for free at schools or in child care settings. Eligible families included those participating in SNAP with a child birth to 5 and families with a child of any age who received free or reduced-price school lunch. Over 520,200 children were eligible for the program in Arizona, which ended on September 24, 2021.

The majority of the children who received Pandemic-EBT in the Navajo Nation Region were above the age of 5, even though children birth to 5 who were receiving SNAP were eligible to receive P-EBT. For example, in March 2021, only 924 of the 15,423 children ages birth to 17 receiving P-EBT were under 6 years of age; similar patterns were seen statewide (Figure 22). In contrast, in SFY 2020, over 4,000 children under the age of 6 were participating in SNAP in the region (Figure 21), suggesting that only about a fifth of eligible young children were enrolled in Pandemic EBT. In addition, while receipt of P-EBT remained constant across all children aged 0-17, receipt for children aged birth to 5 decreased between March and May 2021 in the region (Figure 22).

Figure 22. Children ages birth to 17 and birth to 5 receiving Pandemic EBT, March to May 2021



Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

### ***Special Supplemental Nutrition Program for Women, Infants and Children (WIC)***

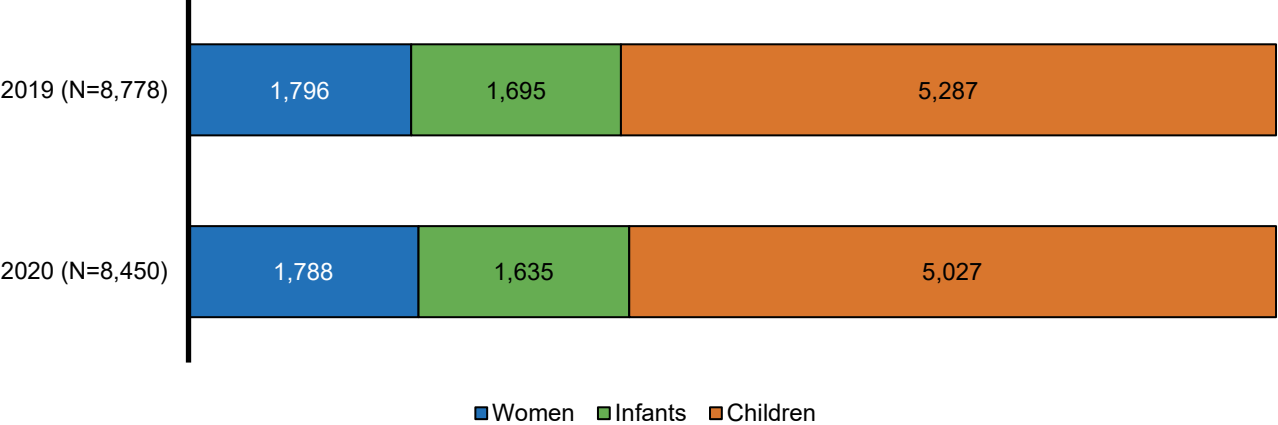
In many Arizona tribes the WIC program was initially funded through the state of Arizona. Over time, however, several tribes advocated for direct control over their WIC programs. The Navajo Nation WIC program is one of several WIC programs that serves pregnant, postpartum and breastfeeding women, as well as infants and young children (ages birth to 4) who are low-income (i.e., family incomes at or below 185% of the federal poverty level). The program offers funds for nutritious food, breastfeeding and nutrition education and referrals to health and social services.<sup>x</sup> Participation in WIC has been shown to be associated with healthier births, lower infant mortality, improved nutrition, decreased food insecurity, improved access to health care and improved cognitive development and academic achievement for children.<sup>114</sup>

The Navajo Nation WIC program receives funding directly from the United States Department of Agriculture and is hosted within the Navajo Department of Health. Services are provided at 12 Service Unit clinics: Chinle, Crownpoint, Farmington, Fort Defiance, Gallup, Ganado, Kayenta, Pinon, Shiprock, Tsaile, Tuba City, and Winslow. Some of these clinics are located within health care facilities including: Winslow, Kayenta, Crownpoint, Ganado, and Shiprock. The rest are stand-alone clinics. In addition to these 12 main sites, the Navajo WIC program operates a number of satellite clinics in order to reach the population in more remote areas.

<sup>x</sup> For more information on the ITCA WIC Program, visit <https://itcaonline.com/programs/wic-program/>

In 2020, the most recent year for which data were available, 8,450 individuals were enrolled in the Navajo Nation WIC program, including 1,788 women, 1,635 infants and 5,027 children ages 1 to 4 (Figure 23).

Figure 23. Enrollment in the Navajo Nation WIC Program, 2019 & 2020

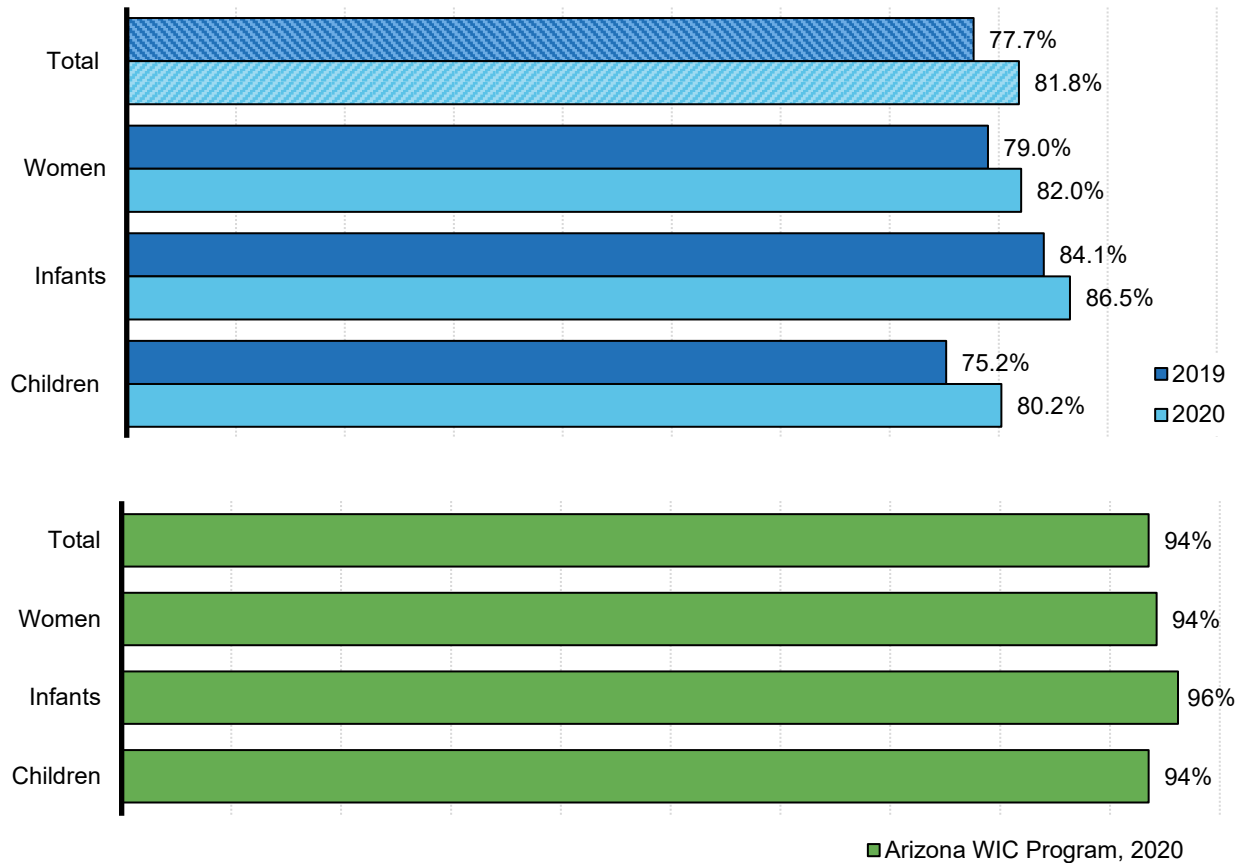


Source: Navajo Nation WIC Program (2021). [WIC program dataset]. Unpublished tribal data received by request.

The percent of women, infants and children enrolled in WIC who actively received benefits during the calendar year is called the participation rate. Low participation rates may reflect challenges that WIC-enrolled families face when accessing their benefits (e.g. nearby grocery stores not participating in WIC). In the Navajo Nation WIC program, the total participation rate in 2020 was 82%. Among all eligible groups, participation was highest among infants (87%), followed by women (82%), and children ages 1 to 4 (80%) (Figure 24). Participation rates for all groups increased between 2019 and 2020, though the change was highest among children ages 1 to 4 (75% vs 80%), a positive trend considering that this group makes up the majority of Navajo Nation WIC enrollees. Key informants indicated that during the pandemic, the Navajo Nation WIC program offered drive-through and phone-based appointments, which might have facilitated participation. They also pointed out that, for working parents, being able to work remotely and having the possibility to more easily make their WIC appointments using the phone or drive-through options might have also helped improve participation. According to key informants, in pre-pandemic times some parents had a difficult time making their appointments during regular business hours if they had to work. In addition, with child care and school closures, families had their children at home for longer hours and likely needed more food, prompting them to maximize their WIC benefits. Despite this increase, participation rates in the Navajo Nation WIC program in 2020 were lower than those in the WIC program managed by the state of Arizona for all categories, where 94% of enrollees actively participated in the program and received their benefits that year.

Note that the Navajo Nation WIC program serves the entire Navajo Nation and not just families on the First Things First Navajo Nation Region. The data in the tables and figures below reflect all program participants, including those residing on the portions of the Navajo Nation outside of Arizona.

Figure 24. Navajo Nation WIC participation rates, 2019 to 2020, compared to Arizona WIC participation rates in 2020



Source: Navajo Nation WIC Program (2021). [WIC program dataset]. Unpublished tribal data received by request. Arizona Department of Health Services (2021). [WIC program dataset]. Unpublished data received by request.

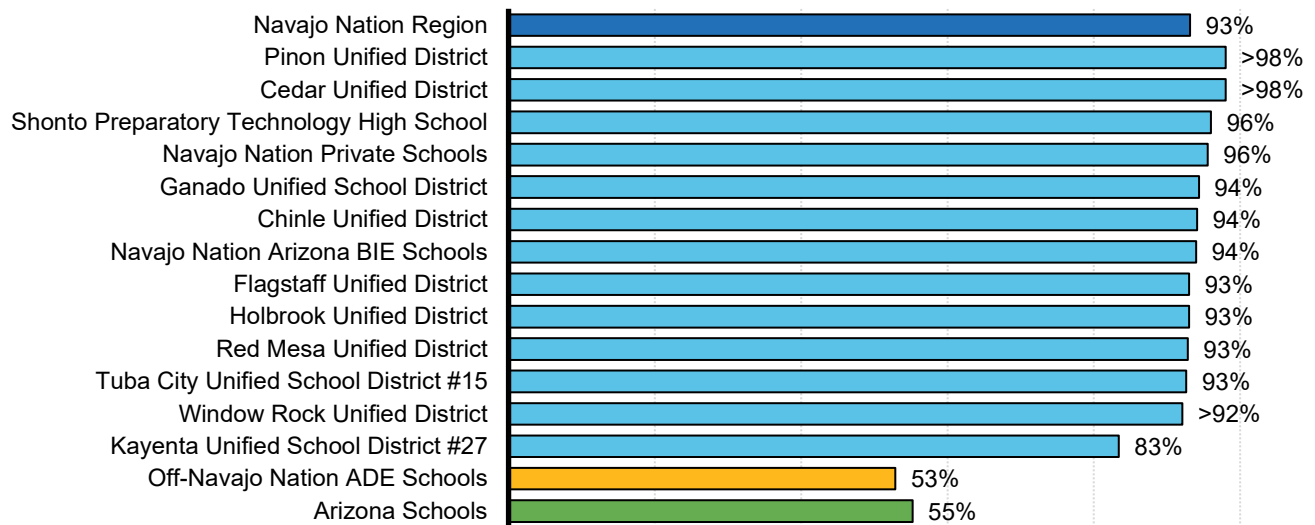
Two additional food resources in the Navajo Nation Region are the Emergency Food Assistance Program (TEFAP) and the Commodity Senior Food Program (also known as Commodity Supplemental Food Program). TEFAP is a federally funded program to help supplement the diets of low-income individuals by providing them with emergency food and nutrition assistance at no cost and TEFAP foods are distributed as Emergency Food Packages and in meals served at Congregate Feeding Sites (Soup Kitchens). There are 16 TEFAP sites on the Navajo Nation Region.

The Commodity Senior Food Program (CSFP) also supplements the diets of low-income residents who are 60 years or older through monthly packages of nutritious food. Participation is limited and new applicants are usually put on a waiting list. There are two CSFP sites, and a total of 25 emergency food sites in the region. <sup>115</sup>

## School Meal Programs

Schools play an important role in the nutrition assistance system, especially for children who are food insecure. Administered by the Arizona Department of Education (ADE), the National School Lunch Program (NSLP) provides free and reduced-price meals at school for students whose family incomes are at or less than 130% of the federal poverty level (FPL) for free lunch, and 185% of the FPL for reduced-price lunch. According to data on school lunch applications provided by ADE, in school year 2019-20, 93% of students attending schools in the Navajo Nation Region were eligible for free or reduced-price lunch, a proportion that is substantially higher than that in all Arizona schools combined (57%) (Figure 25). Figure 26 shows that these rates have been consistent over time: from school year 2017-18 to school year 2019-20 at least 93% of students in the region have qualified for this benefit.<sup>xi</sup>

Figure 25. Percent of students eligible for free or reduced-price lunch, 2019-20



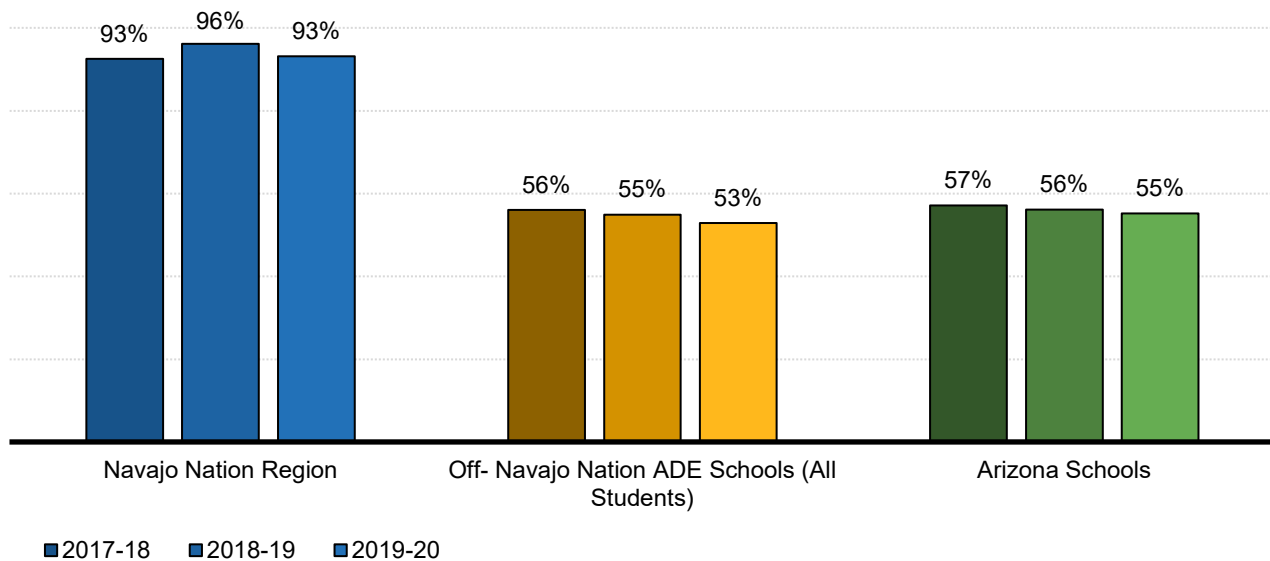
Source: Arizona Department of Education (2021). [Health & Nutrition dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Note: The selected off-reservation schools serving Navajo Nation students included in this report are as follows: Sinagua Middle School and Flagstaff High School in Flagstaff Unified District; Page Middle School, Page High School and Sand & Sage Academy in Page Unified District; Holbrook Junior High School and Holbrook High School in Holbrook Unified District; and Sanders Elementary School and Valley High School in Sanders Unified District.

<sup>xi</sup> The Navajo Nation Region participates in the USDA Community Eligibility Provision (CEP). CEP allows school districts to serve breakfast and lunch at no cost to all enrolled students without collecting household applications. For sites/districts participating in a CEP, the ESEA (Title I) Income Eligibility Forms may be used to report free and reduced data.



Figure 26. Percent of students eligible for free or reduced-price lunch, 2019-20



Source: Arizona Department of Education (2021). [Health & Nutrition dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Note: The selected off-reservation schools serving Navajo Nation students included in this report are as follows: Sinagua Middle School and Flagstaff High School in Flagstaff Unified District; Page Middle School, Page High School and Sand & Sage Academy in Page Unified District; Holbrook Junior High School and Holbrook High School in Holbrook Unified District; and Sanders Elementary School and Valley High School in Sanders Unified District.

In addition to the NSLP, ADE supports two other programs addressing children’s food security. Funded by the United States Department of Agriculture (USDA), the Child and Adult Care Food Program (CACFP)<sup>116</sup> gives reimbursements to participating child care centers, preschools, emergency centers and after school programs for nutritious meals and snacks served to eligible children. Providers must complete a renewal each year. Eligible providers include for-profit child care centers serving at least 25% free or reduced-price participants or be a non-profit.<sup>117</sup> Also funded by the USDA, the Summer Food Service Program (SFSP)<sup>118</sup> works to keep all children through age 18 fed when school is out of session by providing free meals (breakfast, lunch, supper) and snacks at community sites. The SFSP program 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.<sup>119</sup>

Table 12 to Table 14 show varying trends across school nutrition programs with decreases overall in NSLP and CACFP lunches served between 2018-19 and 2019-20, and a notable increase in lunches served through the SFSP in 2019-20. Decreases in the NSLP and CACFP were likely due to closures of child care centers and schools in the spring of 2020 due to the COVID-19 pandemic. In contrast, the USDA approved year-round operation of SFSP during the pandemic with no free or reduced-price lunch eligibility criteria applied, allowing more children to receive food during quarantines. These patterns in the Navajo Nation Region mirror those seen statewide.

Table 12. Lunches served through the National School Lunch Program (NSLP), 2018 to 2020

Geography	Number of schools			Number of lunches served		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
<b>Navajo Nation Region</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>3,018,211</b>	<b>2,956,378</b>	<b>2,201,445</b>
Arizona Schools	18,190	18,202	14,767	101,727,112	102,012,129	76,454,370

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

Table 13. Meals served through the Summer Food Service Program (SFSP), 2018 to 2020

Geography	Number of sites			Number of lunches served		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
<b>Navajo Nation Region</b>	<b>57</b>	<b>58</b>	<b>158</b>	<b>91,359</b>	<b>88,422</b>	<b>763,518</b>
Arizona Schools	2,199	1,845	9,136	1,870,111	1,868,539	21,786,393

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

Table 14. Meals served through the Child and Adult Care Feeding Program (CACFP), 2018 to 2020

Geography	Number of sites			Number of lunches served		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
<b>Navajo Nation Region</b>	<b>58</b>	<b>46</b>	<b>38</b>	<b>75,681</b>	<b>56,209</b>	<b>40,190</b>
Arizona Schools	7,693	7,336	6,305	7,225,302	7,242,730	5,556,341

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

## Employment

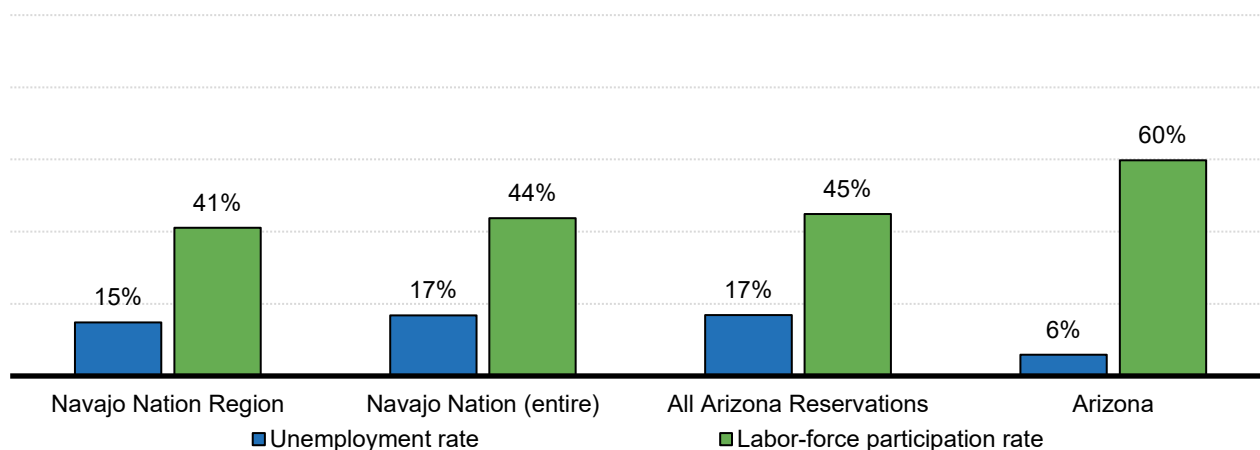
Unemployment and underemployment can affect a family’s ability to meet the expenses of daily living, as well as their access to resources needed to support their children’s well-being and healthy development. A parent’s job loss can affect children’s school performance, leading to poorer attendance, lower test scores, and higher risk of grade repetition, suspension or expulsion.<sup>120</sup> Unemployment can also put families at greater risk for stress, family conflict, and homelessness.<sup>121</sup>

The unemployment rate is the proportion of the total number of people in the civilian labor force who are unemployed and looking for work. Note that unemployment rates do not include people who have dropped out of the labor force entirely, including those who wanted to work but could not find a suitable

job and so have stopped looking for employment.<sup>122</sup> An additional metric of employment is the labor-force participation rate. This rate is the fraction of the population who are in the labor force, whether employed or unemployed. In administrative terms, there is a difference between someone who is considered unemployed and someone who has dropped out of the labor force entirely. The latter group includes retirees and stay-at-home parents, but also those who wanted but could not find suitable work and so have stopped looking for employment.<sup>123</sup>

The American Community Survey estimates that the average unemployment rate for the Navajo Nation Region over the five years from 2015 to 2019 was 15%, a slightly lower rate than that across all Arizona reservations (17%). The labor force participation rate in the region (41%) is also lower than the rate in all Arizona reservations (45%) (Figure 27). This means that less than half of working-age teens and adults are working or actively looking for work, while the rest are not (which includes students, retirees, stay-at-home parents and others). There is some variability in the unemployment rate in the agencies that fall within the Navajo Nation Region, with rates ranging from 14% in the Western Agency to 18% in the Northern Agency (Figure 28). It is important to note that due to many historical and legal reasons as well as differences in practical economic structures, employment rates in Native communities can vary greatly from state rates.<sup>124</sup>

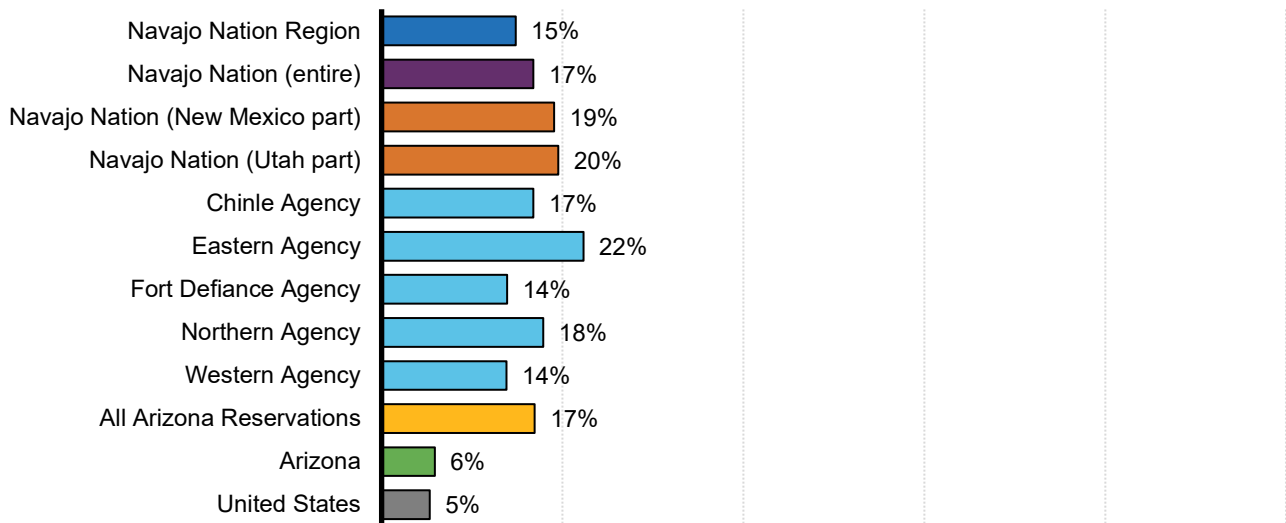
Figure 27. Unemployment and labor-force participation for the adult population (ages 16 and older), 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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 three percentages in each row (employed, unemployed, and not in the labor force) should sum to 100%, but may not because of rounding.

Figure 28. Unemployment rates by subregion for the adult population (ages 16 and older), 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B23025

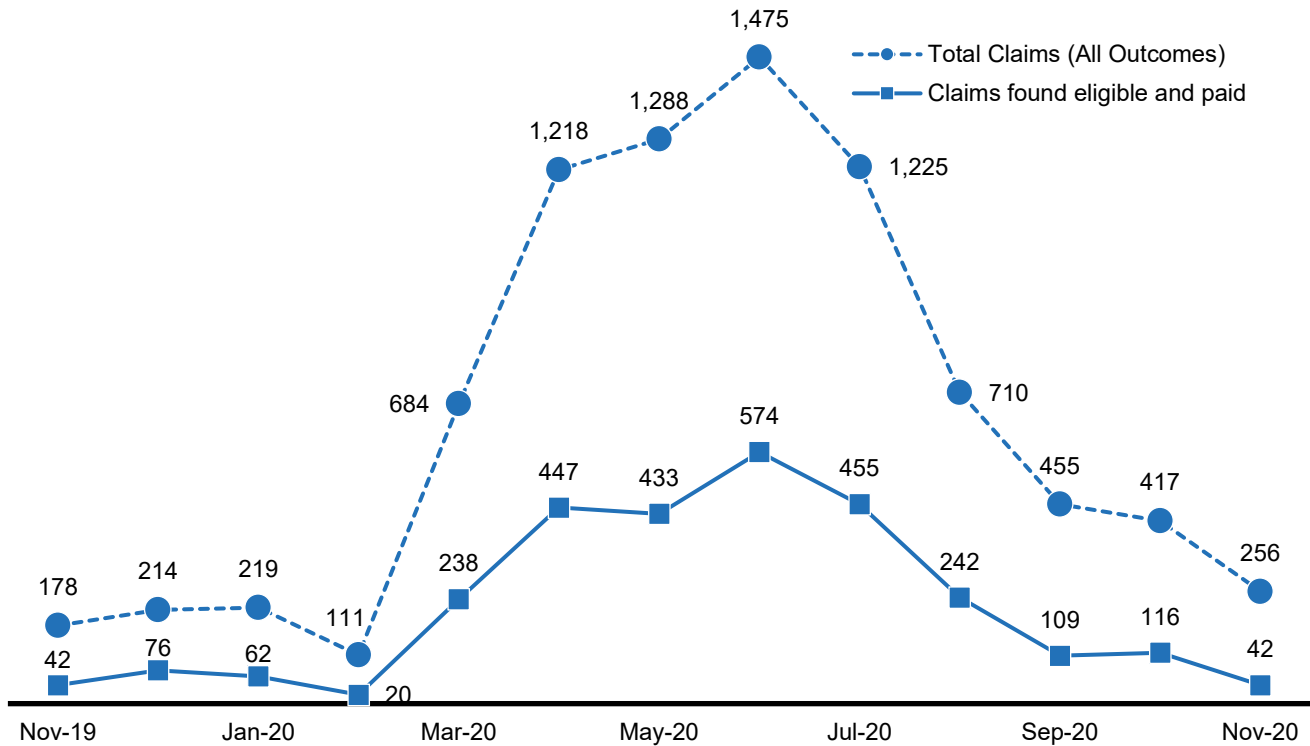
Note: The labor force is all persons who are working (employed) or looking for work (unemployed). The "unemployment rate" is the fraction of the civilian labor force which are unemployed.

The COVID-19 pandemic shocked the labor market. Statewide, unemployment insurance claims peaked at 262,523 the week of May 16, 2020. This is over twice the number of claims at the peak of the Great Recession in 2009.<sup>125</sup> In March 2020, the Pandemic Unemployment Assistance program temporarily expanded unemployment insurance eligibility to categories of workers who were not previously eligible for unemployment, including self-employed workers, freelancers, independent contractors and part-time workers. The Pandemic Unemployment Assistance program extended benefits for those who had already used the 26 weeks of benefits usually allowed in Arizona.<sup>126</sup> In addition to expanded eligibility, federal provisions granted unemployed workers nationwide supplemental funds during the pandemic - \$600 additional per week through July 31, 2020, and \$300 additional per week through September 5, 2021.<sup>127</sup>

The demand for these programs in the Navajo Nation Region is highlighted in Figure 29. The number of unemployment claims jumped substantially, from 100 to 200 in most months prior to March 2020, to a high of 1,475 in June 2020. Claims remained elevated above pre-pandemic levels through November 2020. Key informants indicated that the Navajo Nation Region has a large population of individuals who earn their income through non-traditional means including artisans, itinerant food vendors, consultants and freelancers. As indicated above, the Pandemic Unemployment Assistance Program expanded the eligibility of the regular unemployment insurance program and allowed these residents to temporarily be eligible for unemployment compensation, a benefit that they would normally not have access to. Notably, even as claims surged during the pandemic, there was a consistent gap between the number of claims filed and the number of claims found eligible and paid. At most, in June 2020, 39% of claims

were found eligible and paid. This suggests there may be economic challenges for families with lost incomes who requested but did not receive unemployment benefits. By November of 2020, however, unemployment claims were already closer to pre-pandemic levels.

Figure 29. Monthly unemployment claims, November 2019 - November 2020 (Navajo Nation Region)



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

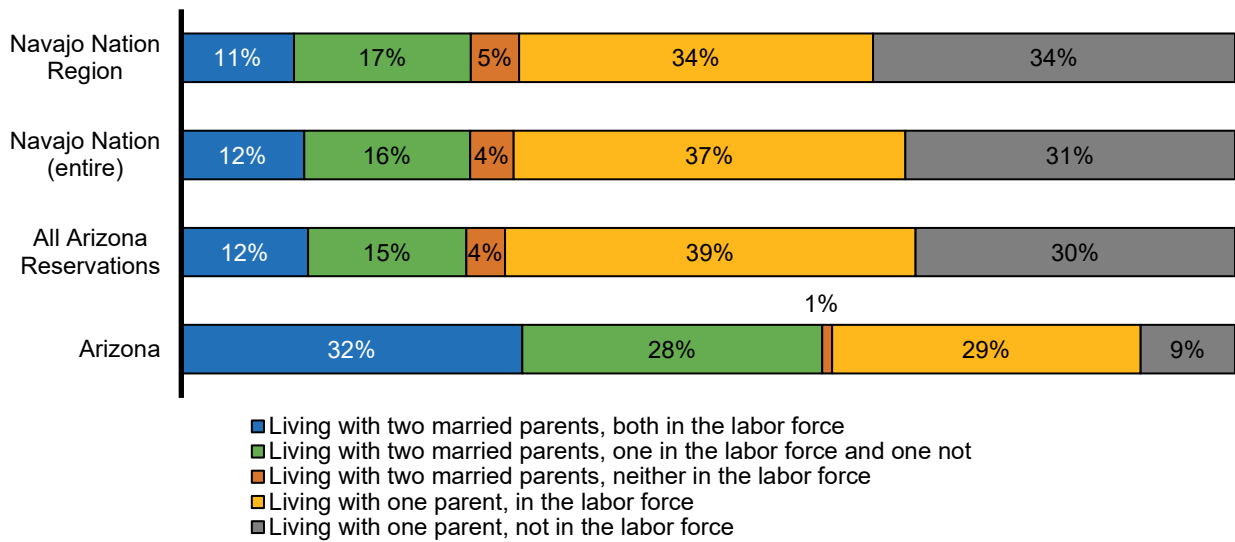
For parents of young children, many employment decisions may be influenced by the availability and affordability of child care. Nearly half (44%) of children birth to 5 in the Navajo Nation Region live in households where all present parents are in the workforce (that is, are employed, or actively seeking paying work), a proportion that is lower than in all Arizona reservations (51%). This includes children in households with a single parent who is in the labor force (34%) and two-parent (married) households where both parents work (11%) (Figure 30). In other words, nearly half of households with young children in the region likely require some form of child care. These working families may have faced particular challenges during the pandemic when local schools and early care and education centers transitioned to remote learning.

Data on the employment status of families in the region were also available from the Navajo Nation Head Start and Early Head Start Program Information Report. In 2018-29, one-quarter (25%) of the 1,625 families participating in these programs reported that all parents or guardians in the family were

employed; this proportion included two-parent families where both parents were employed (9%) and single-parent families where that one parent was employed (16%) (Figure 32).

The share of children living in households with all present parents being in the workforce varies among the agencies within the Navajo Nation Region, from a low of 37% in the Chinle Agency, to a high of 54% in the Western Agency (Figure 31). The Chinle Agency, which has high poverty rates (see Figure 15), also has the lowest proportion of children with both parents in the labor force. This seems to be driven by a higher share of young children living with two married parents and only one being in the labor force, and by a lower proportion of children living with only one parent and that parent being in the labor force (Table 15). This could be because of a lack of employment opportunities in the agency, lack of access to child care which limits parents’ ability to work outside the home, a preference for home care among parents in the agency, or other reasons. The Eastern Agency, though outside of the First Things First Navajo Nation Region, has the highest estimated proportion of children living with both parents in the workforce (60%) (Figure 31).

Figure 30. Children ages birth to 5 living with parents who are or are not in the labor force, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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.

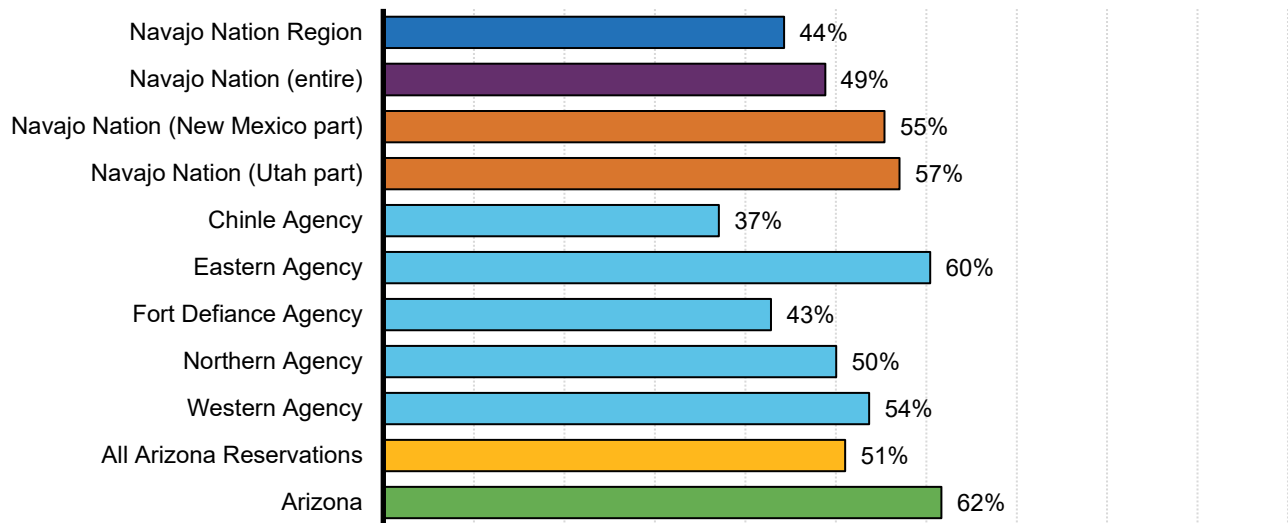
Table 15. Parents of children ages birth to 5 who are or are not in the labor force, 2015-2019 ACS

Geography	Estimated number of children (birth to 5 years old) living with parent(s)	Living with two parents, both in the labor force	Living with two parents, one in the labor force and one not	Living with two parents, neither in the labor force	Living with one parent, in the labor force	Living with one parent, not in the labor force
<b>Navajo Nation Region</b>	<b>8,184</b>	<b>11%</b>	<b>17%</b>	<b>5%</b>	<b>34%</b>	<b>34%</b>
Navajo Nation (New Mexico part)	4,877	12%	14%	4%	43%	26%
Navajo Nation (Utah part)	645	18%	13%	0%	39%	29%
Navajo Nation (entire)	13,706	12%	16%	4%	37%	31%
Chinle Agency	2,401	12%	26%	7%	25%	30%
Eastern Agency	2,482	14%	13%	6%	46%	21%
Fort Defiance Agency	3,240	9%	18%	4%	34%	36%
Northern Agency	2,226	10%	16%	2%	40%	32%
Western Agency	3,357	14%	9%	3%	40%	35%
All Arizona Reservations	16,370	12%	15%	4%	39%	30%
Arizona	494,590	32%	28%	1%	29%	9%
United States	22,727,705	39%	25%	1%	27%	7%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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. Reliable estimates are not available for the remainder of the region row due to sample size limitations.

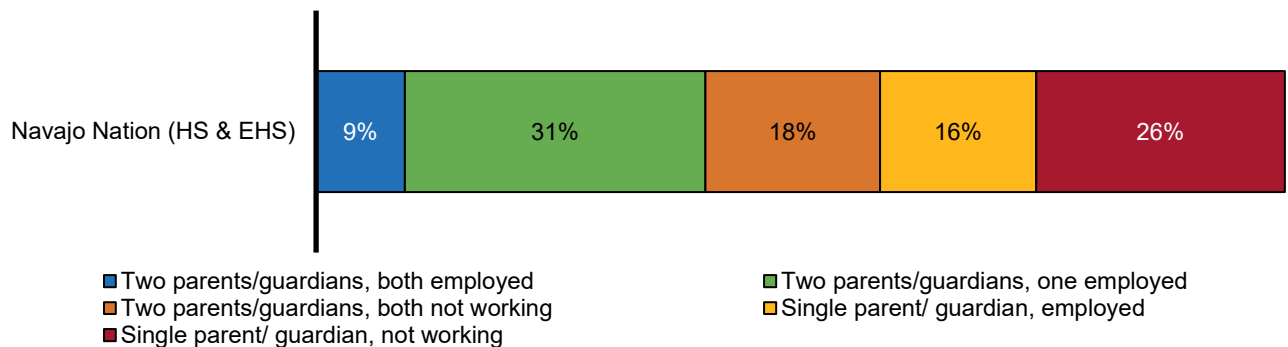
Figure 31. Children ages birth to 5 living with both parents in the labor force, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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.

Figure 32. Employment status of families of children enrolled in Navajo Nation Head Start and Early Head Start, 2018-19



Source: Office of Head Start (2020). 2019 Program Information Report. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/data/pir>

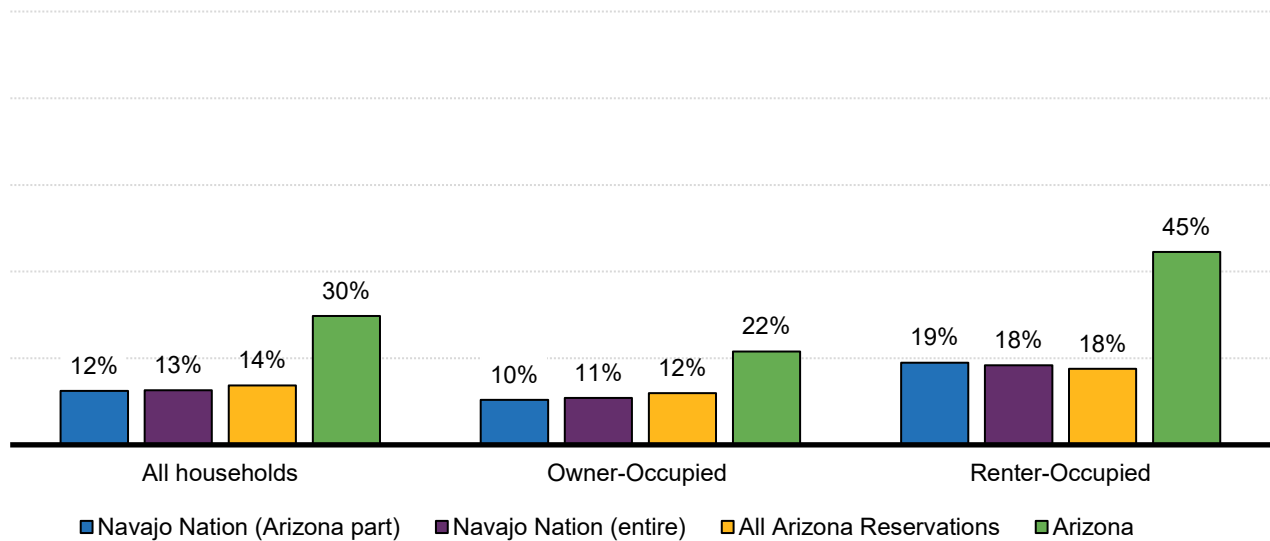
### Housing Affordability and Instability

Examining indicators related to housing quality, costs, and availability can reveal additional factors affecting the health and well-being of young children and their families in a region. Housing challenges such as issues paying rent or mortgage, overcrowded living conditions, unstable housing arrangements, and homelessness can have harmful effects on the physical, social-emotional, and cognitive development of young children.<sup>128</sup> The most recent data available on housing affordability predates the



COVID-19 pandemic. According to ACS five-year estimates (2015-2019), 12% of households in the Navajo Nation Region were housing-cost burdened, i.e., spending more than 30% of their household income on housing. This proportion is slightly lower than that in all Arizona reservations combined (14%). The share of housing-cost burdened homes in the region is higher in renter-occupied households (19%) (Figure 33).

Figure 33. Percent of households with housing costs of 30 percent or more of household income by home ownership status, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B25106

While pre-pandemic housing cost burdens were already high enough to cause concern in some areas of Arizona, the economic disruptions of the COVID-19 pandemic, including losses of household employment income reported by approximately half of adults in the state, led to housing instability for some families as they struggled to make housing payments. The McKinney-Vento Act provides funding and supports 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.<sup>129</sup> According to McKinney-Vento Act definitions, 72 students in Navajo Nation Region schools overseen by the Arizona Department of Education were experiencing homelessness in 2019-20, an increase from the previous two school years (51 and 41, respectively) (Table 16).

Table 16. Students experiencing homelessness (McKinney-Vento definition) enrolled in public and charter schools, 2017-18 to 2019-20

Geography	Number of students experiencing homelessness			Percent of students who were experiencing homeless		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
<b>Navajo Nation (ADE schools)</b>	<b>51</b>	<b>41</b>	<b>72</b>	<b>0%</b>	<b>0%</b>	<b>1%</b>
Off-Reservation ADE Schools serving Navajo Nation students (All Students)	93	62	50	1%	1%	1%
Arizona Schools	15,923	12,931	11,538	1%	1%	1%

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team.

Note: The McKinney-Vento Act provides funding and supports 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.

The “Navajo Nation (ADE Schools)” include the following school districts and schools: Window Rock, Ganado, Chinle, Red Mesa, Leupp Public School, Tuba City, Indian Wells Elementary, Pinon, Cedar Kayenta, and Shonto Preparatory Technology High School. The selected off-reservation schools serving Navajo Nation students included in this table are as follows: Sinagua Middle School and Flagstaff High School in Flagstaff Unified District; Page Middle School, Page High School and Sand & Sage Academy in Page Unified District; Holbrook Junior High School and Holbrook High School in Holbrook Unified District; and Sanders Elementary School and Valley High School in Sanders Unified District.

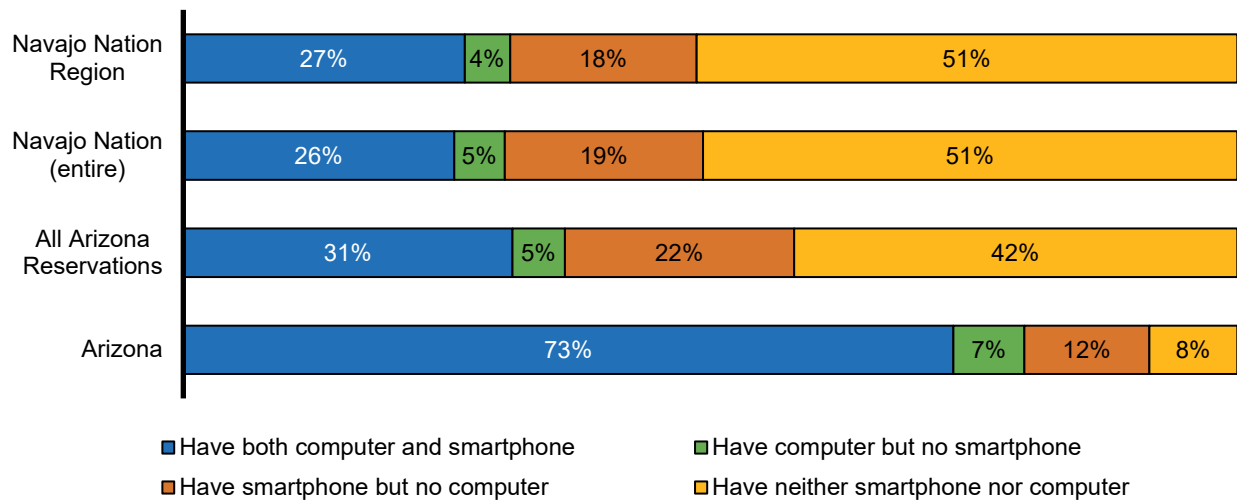
### Information Access Through Computers and Internet

One increasingly critical need for modern homes is a reliable means of internet access. Families often rely on communication and information technologies to access information, connect socially, pursue an education and apply for employment opportunities. During the pandemic, a reliable internet connection was essential for a successful transition to remote work and school for many. Parents are also more likely to turn to online resources, rather than in-person resources, for information about obtaining health care and sensitive parenting topics including bonding, separation anxiety and managing parenting challenges.<sup>130</sup> The term “digital divide” refers to disparities in communication and information technologies,<sup>131</sup> and the lack of sustained access to information and communication technologies in low-income communities is associated with economic and social inequality.<sup>132</sup> Low-income households may experience regular disruptions to this increasingly important service when they cannot pay bills, repair or update equipment or access public locations that may offer connectivity (e.g., computers at local libraries).<sup>133</sup>

According to pre-pandemic data from the ACS, just over one-quarter of households (27%) in the Navajo Nation Region have both a computer and a smartphone in their home, a proportion that is lower than that across Arizona reservations (31%) and substantially lower than in the state (73%) (Figure 34). Nearly one in five households in the region (18%) have a smartphone but no computer; over half of households (51%) lack both. The share of households that do not have access to either a smartphone or computer is a proportion that is higher than in all Arizona reservations (42%), and notably higher than in the state

(8%) (Figure 34). Furthermore, in many rural parts of the state, even those families with internet access and a computer may find connectivity frustratingly slow or inconsistent.<sup>134</sup> Households in rural areas typically experience more limited coverage from mobile networks and slower-speed internet services.<sup>135</sup>

Figure 34. Households with and without computers and smartphones, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28010

Note: In this figure, "computer" includes both desktops and laptops; "smartphone" includes tablets and other portable wireless devices.

ACS estimates also show that computer and smartphone access varies somewhat across agencies. In the Chinle Agency, for instance, 13% of households have a smartphone but no computer compared to 23% of households in the Western Agency. Similarly, the share of households that do not have access to either of these technologies is highest in the Chinle Agency (56%) and lowest in the Northern Agency (47%) (Table 17). Though access to smartphones and computers is generally limited in the region, geographic differences can further inform service providers regarding the potential effectiveness and reach of online communications and social media announcements. Recognizing the limitations of these forms of communication can help ensure that families are able obtain information about services through other means, including telephone or mail.

Table 17. Households with and without computers and smartphones, 2015-2019 ACS

Geography	Estimated number of households	Have both computer and smartphone	Have computer but no smartphone	Have smartphone but no computer	Have neither smartphone nor computer
<b>Navajo Nation Region</b>	<b>27,647</b>	<b>27%</b>	<b>4%</b>	<b>18%</b>	<b>51%</b>
Navajo Nation (New Mexico part)	18,310	25%	6%	21%	49%
Navajo Nation (Utah part)	1,573	16%	3%	17%	63%
Navajo Nation (entire)	47,530	26%	5%	19%	51%
Chinle Agency	7,556	25%	6%	13%	56%
Eastern Agency	9,337	26%	3%	21%	50%
Fort Defiance Agency	12,060	27%	6%	17%	51%
Northern Agency	8,426	26%	8%	19%	47%
Western Agency	10,151	25%	2%	23%	50%
All Arizona Reservations	50,231	31%	5%	22%	42%
Arizona	2,571,268	73%	7%	12%	8%
United States	120,756,048	71%	7%	13%	10%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28010

Note: In this table, "computer" includes both desktops and laptops; "smartphone" includes tablets and other portable wireless devices. The four percentages in each row should sum to 100%, but may not because of rounding.

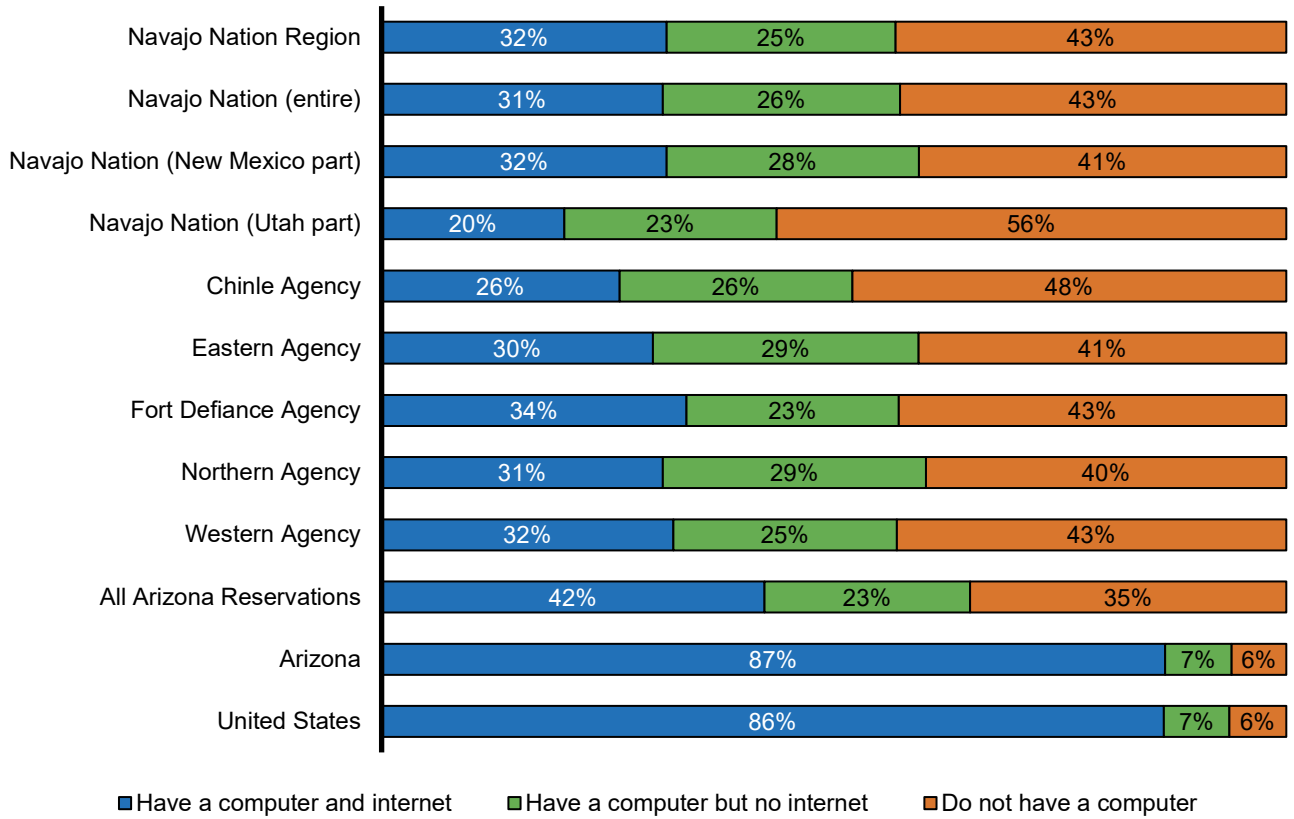
Looking at individuals rather than households, just under one-third of Navajo Nation Region residents (32%) have access to a computer and the internet (Figure 35). About one in four (25%) have a computer but no internet, and 43% have no computer. Consistent with the data on smartphone and computer ownership discussed above, access to computers and the internet is also more limited in the region than in all Arizona reservations, where 42% of residents have access to these technologies. At the agency level, Chinle Agency residents have the most limited access, with only 26% having both a computer and internet connectivity.

Among children birth to 17, rates of computer and internet access at home were slightly higher than for the population as a whole, with 35% of children living in households with both a computer and internet access (Figure 36). This rate, though higher than that for the region's overall population, is still notably lower than that for children in all Arizona reservations combined (46%). Access to a computer and internet connectivity is highest in the Fort Defiance Agency (39%).

As schools transitioned to remote learning during the COVID-19 pandemic, access to a computing device and the internet became increasingly important for children to engage in educational activities and to connect socially with teachers or peers. With nearly two-thirds of children in the Navajo Nation

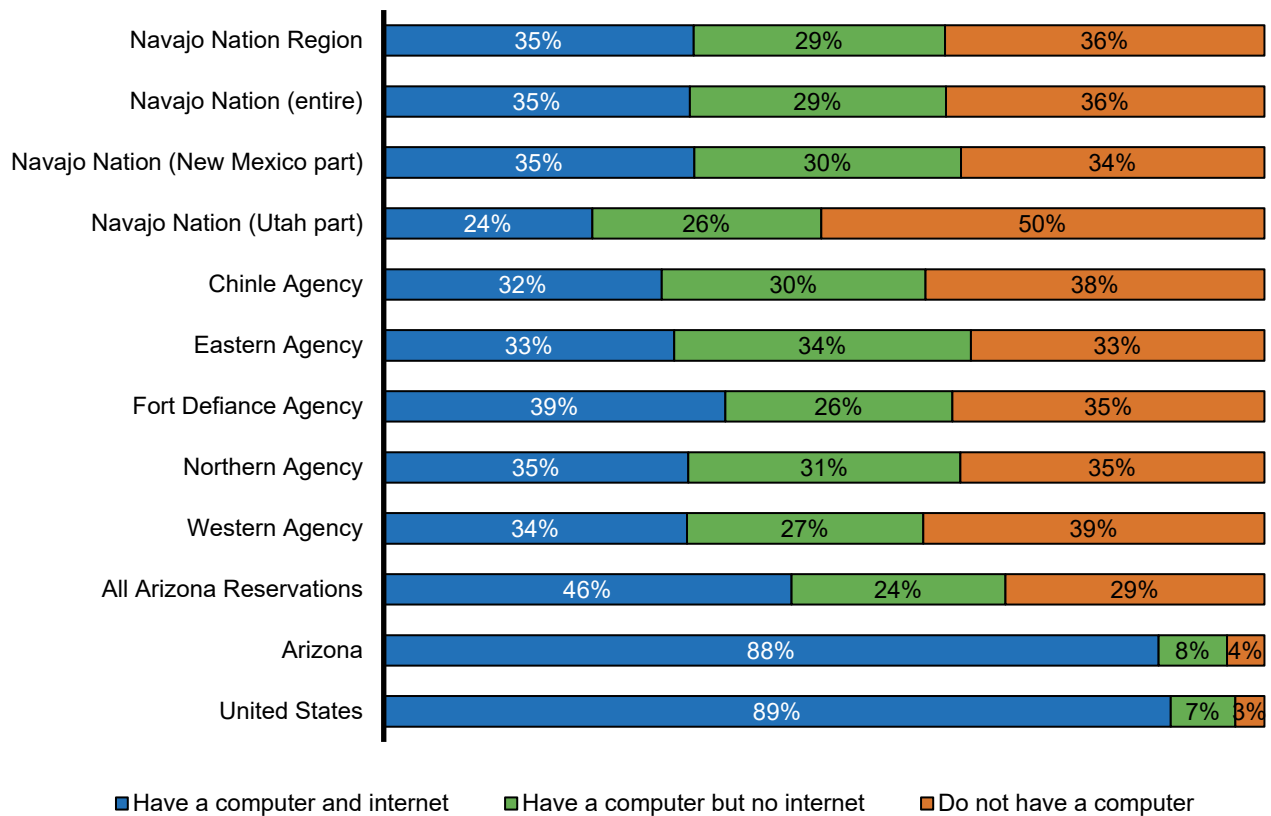
Region lacking either a computer or access to the internet at home before the pandemic, staying connected with school during remote learning was particularly challenging for many families.

Figure 35. Persons of all ages in households with and without computers and internet connectivity, by subregion, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28005

Figure 36. Children ages birth to 17 in households with and without computers and internet connectivity, by subregion, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28005

Table 18 below shows that similar proportions of residents in the Navajo Nation Region who have internet connectivity access the internet through fixed-broadband (63%) and cellular data (62%). There are, however, some differences in the type of internet access at the sub-regional level. Among the agencies that lie within the Navajo Nation Region, 70% of residents in the Chinle Agency access the internet through fixed broadband service, compared to only 56% in the Fort Defiance Agency. This last agency also has a higher proportion of residents with only dial-up internet access (6% compared to all Arizona reservations combined (1.8%). In the Western Agency, equal proportions of residents access the internet through cellular data and fixed-broadband internet (62% and 63%, respectively), similar to access in the region as a whole. In the Northern Agency, on the other hand, cellular data internet access is the lowest of all agencies (55%), but fixed broadband internet is among the highest (69%). The Eastern Agency, though outside of the First Things First Navajo Nation Region, has the opposite pattern: only half of residents (51%) access the internet through fixed broadband and nearly three-quarters (71%) through cellular data.

Nationally, Americans are increasingly reliant on smartphones as their sole source of internet access. Particularly for individuals who are younger, lower-income, and non-white, broadband service at home

is less common and smartphone-only internet use is more common.<sup>136</sup> Households in rural areas typically experience more limited coverage from mobile networks and slower-speed internet services, as well as limited internet provider options which can result in higher monthly costs.<sup>137,138,139</sup>

Table 18. Persons in households by type of internet access (broadband, cellular, and dial-up), 2015-2019 ACS

Geography	Estimated number of persons (all ages) living in households with computer and internet	With fixed-broadband internet	With cellular-data internet	With only dial-up internet
Navajo Nation Region	31,498	63%	62%	4%
Navajo Nation (New Mexico part)	20,611	57%	63%	2%
Navajo Nation (Utah part)	1,298	59%	61%	0%
Navajo Nation (entire)	53,407	60%	62%	3%
Chinle Agency	6,775	70%	66%	1%
Eastern Agency	9,994	51%	71%	1%
Fort Defiance Agency	14,849	56%	58%	6%
Northern Agency	9,480	69%	55%	1%
Western Agency	12,309	62%	63%	3%
All Arizona Reservations	77,951	68%	68%	1.8%
Arizona	5,968,639	87%	82%	0.3%
United States	273,795,622	88%	82%	0.3%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28008

Note: The percentages in each row sum to more than 100% because many households use both fixed-broadband and cellular-data internet.

As schools closed and transitioned to remote learning, access to a computing device and the internet became increasingly important for children to engage in educational activities and to connect socially with teachers or peers. It is important to consider that having access to the internet does not mean that families had a consistently reliable connection. Key informants pointed out that the internet connection in many areas in the region is poor. They also indicated that even in households with better internet connectivity, the bandwidth was not enough to support all the people in the home that needed access to the internet, including multiple children having to connect at the same time. Challenges with connectivity imposed serious limitations on children’s ability to participate in virtual learning.

Schools and communities applied multiple strategies to close the digital divide, from provision of mobile hotspot devices and laptops by schools and libraries. One silver-lining to the pandemic is the allocation of CARES Act and American Rescue Plan dollars for expanding rural broadband access, which may help shrink the digital divide.<sup>140</sup> Even as schools return to in-person learning, investments in closing the digital divide remain essential to ensuring equity in outcomes for all students.

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





## **EDUCATIONAL INDICATORS**

# EDUCATIONAL INDICATORS

## Why it Matters

A community's K-12 education system can support positive outcomes for children and their families, as well as the economic well-being of the entire community. Individuals with higher levels of education are less likely to live in poverty and tend to live longer and healthier lives.<sup>141</sup> Graduating from high school, in particular, is associated with better health and financial stability, lower risk for incarceration and better socio-emotional outcomes compared to dropping out of high school.<sup>142,143</sup> Parents with more education are also more likely to have children with positive outcomes related to school readiness and educational achievement, with children of parents who have at least a high school diploma or GED scoring higher in reading, math and science in their first four years of school.<sup>144,145</sup> The educational achievement of adults within a region speaks to the assets and challenges of a community's workforce, including those that are working with or on behalf of young children and their families.

High-quality early learning experiences lay a foundation for children's learning in kindergarten, early elementary school and beyond.<sup>146</sup> Participation in high-quality early education has been linked to better school performance in elementary and high school.<sup>147</sup> Reading skills in 3<sup>rd</sup> grade, specifically, are an important predictor of later academic learning and success measured in standardized tests. Students who are at or above grade-level reading in 3<sup>rd</sup> grade are more likely to graduate high school and attend college.<sup>148</sup> Given these intergenerational impacts of educational attainment and the cascading effect of early education on later academic achievement and success in adulthood, it is critical to provide substantial support for early education and promote policies and programs that encourage the persistence and success of Arizona's children.

## What the Data Tell Us

### School Attendance and Absenteeism

The primary and secondary educational system in the Navajo Nation Region is comprised of grant schools,<sup>xiii</sup> Bureau of Indian Education (BIE) schools and schools managed by the Arizona Department of Education (ADE).

The Navajo Nation Department of Diné Education (DODE) is the central administrative education agency within the Executive Branch of the Navajo Nation, and is vested with the authority and responsibility to implement and enforce the educational laws of the Navajo Nation. DODE authorizes and renews grants and contracts for 29 Grant schools, 18 of which are in the state of Arizona. DODE works collaboratively with the BIE to address the needs of the 12 BIE Schools on the Arizona portion of the Navajo Nation. DODE also works with State Education Agencies (from the states of Arizona, New

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<sup>xiii</sup> *Schools that are tribally controlled under P.L. 93-638 Indian Self-Determination Contracts or P.L. 100-297 Tribally Controlled Grant Schools Act. 57*

Mexico, and Utah) primarily as an advocate for the Navajo students attending public schools. There are 11 Arizona school districts (with a total of 49 Arizona public schools), two New Mexico school districts (with 27 New Mexico public schools) and one Utah School District (with five Utah public schools) that operate within the boundaries of the Navajo Nation as a whole. In addition to these public schools, children from the Navajo Nation also attend private schools located within the reservation boundaries or in the towns bordering the reservation. There are five private schools located on the Arizona side and five on the New Mexico side.<sup>149</sup>

DODE’s central mission is to “promote and foster lifelong learning of the Navajo People, and to protect the cultural integrity and sovereignty of the Navajo Nation.”<sup>xiii</sup>

According to data provided by the DODE Office of Educational Research and Statistics, in school year 2020-21 there were 31,227 children enrolled in all grades in the various schools that comprise the educational system in the Navajo Nation residing within the Nation’s boundaries. An additional 44,187 Navajo children were enrolled in public and charter schools outside of the Navajo Nation in the states of Arizona, New Mexico and Utah as well as in Residential Halls (Table 19). Figure 37 shows enrollment data in BIE and Grant schools on the Navajo Nation from school year 2018-29 to school year 2020-21. In this period, enrollment in BIE schools decreased from 7,055 to 6,031. Grant school enrollment decreased slightly between 2018-19 and 2019-20 and increased by a similar amount in 2020-21, to a total of 6,071 in that last school year.

Table 19. Navajo Nation students enrolled in schools by state and type, 2020-21

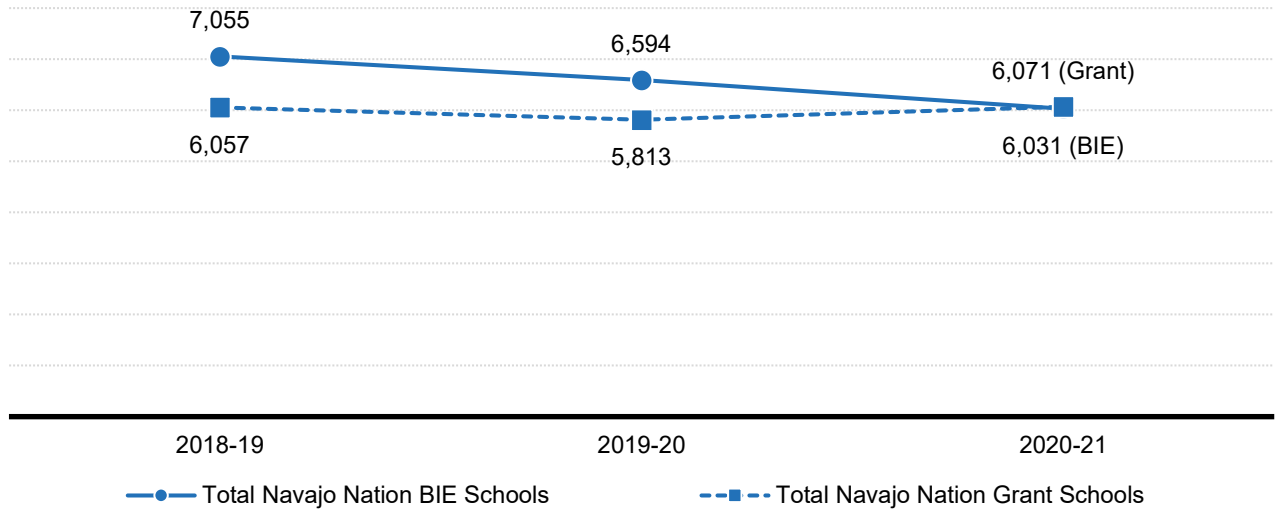
	On Navajo Nation	Off Navajo Nation	Total (On + Off)
Arizona public & charter schools	12,104	14,380	26,484
New Mexico public & charter schools	5,978	27,550	33,528
Utah public schools	1,043	1,886	2,929
BIE Schools	6,148	0	6,148
Grant Schools	5,954	0	5,954
Residential Halls	0	371	371
<b>Total</b>	<b>31,227</b>	<b>44,187</b>	<b>75,414</b>

Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [2020-21 Enrollment dataset]. Unpublished tribal data received by request.

Note: Off-Navajo Nation students include schools in the Flagstaff, Holbrook, Page and Winslow Unified School Districts. For a detailed list of the schools included in each district please see additional tables included in Appendix 1.

<sup>xiii</sup> For more information on the Navajo Nation Department of Diné Education see <https://www.navajonationdode.org/about-dode/>

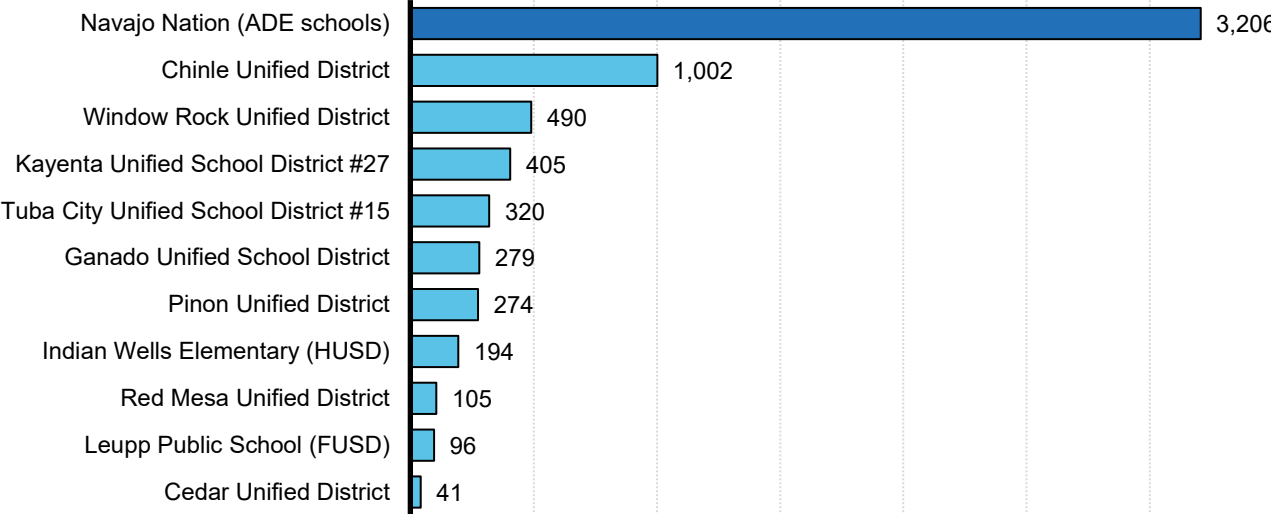
Figure 37. Total BIE and Grant Schools in Navajo Nation, 2018-19 to 2020-21



Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [Enrollment dataset]. Unpublished tribal data received by request.

Looking at data for younger students, there were 3,541 children enrolled in preschool through 3<sup>rd</sup> grade in Navajo Nation public and charter schools under ADE as of October 1, 2019 (Figure 38).

Figure 38. Students enrolled in kindergarten through 3rd grade in Arizona public and charter schools, 2019-20 school year



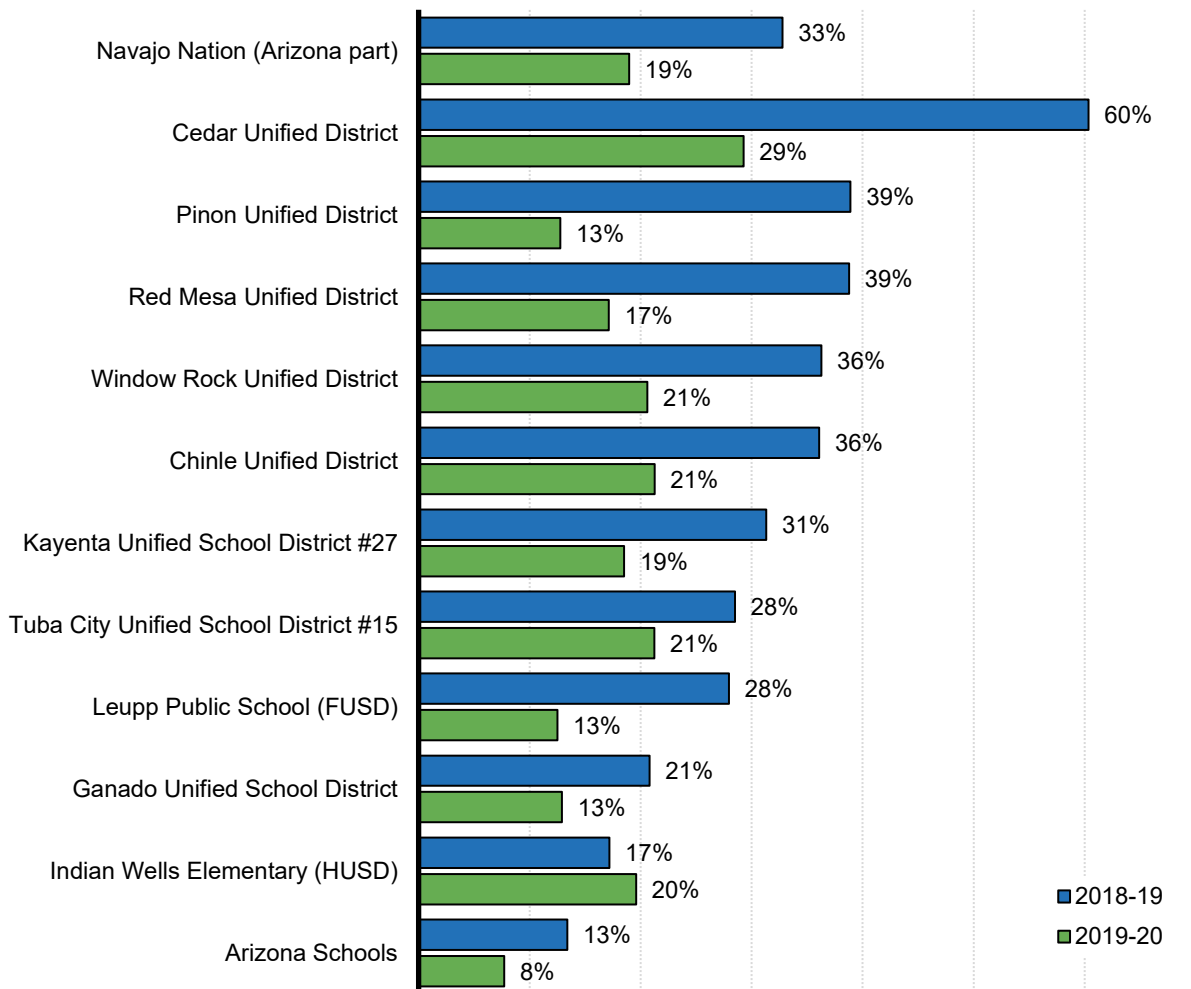
Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [Enrollment dataset]. Unpublished tribal data received by request.

Note: Indian Wells Elementary and Leupp Public School are the only schools from Holbrook Unified School District (HUSD) and Flagstaff Unified School District (FUSD), respectively, located in the region.

School attendance and academic engagement early in life can significantly impact the direction of a child’s schooling. Chronic absenteeism is defined as missing more than 10% of the school days within a school year (including for reasons of chronic illness), and it affects even the youngest children, with more than 10% of U.S. kindergarteners and 1<sup>st</sup> graders considered chronically absent.<sup>150</sup> Poor school attendance can cause children to fall behind academically, leading to lower proficiency in reading and math and increased risk of not being promoted to the next grade.<sup>151</sup> Chronic absenteeism also negatively impacts the development of key social-emotional skills, including self-management, self-efficacy, and social awareness.<sup>152</sup>

Chronic absences in children enrolled in grades K-3 in the Navajo Nation Region in the 2018-19 school year (33%) were substantially higher than those seen across the state (13%). There was also much variability in chronic absenteeism across school districts (Figure 39). In the 2019-20 school year, chronic absences dropped almost everywhere – all districts, the region overall, and the state overall. The drops in chronic absenteeism are likely driven by changes due to the COVID-19 pandemic including changes in how attendance was tracked by schools in the spring of 2020.

Figure 39. Percent of kindergarten through 3rd grade students with chronic absences, 2018-19 and 2019-20



Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

### Achievement on Standardized Testing

A child’s 3<sup>rd</sup> grade reading skills have been identified as a critical indicator of future academic success.<sup>153</sup> Students who are at or above grade level reading in 3<sup>rd</sup> grade are more likely to go on to graduate high school and attend college.<sup>154</sup> The link between poor reading skills and risk of dropping out of high school is even stronger for children living in poverty. More than one quarter (26%) of children who were living in poverty and not reading proficiently in 3<sup>rd</sup> grade did not finish high school. This is more than six times the high school dropout rate of proficient readers.<sup>155</sup>

As of 2019, the statewide assessment tool for English language arts (ELA), including reading and writing, as well as math is Arizona’s Statewide Achievement Assessment for English Language Arts and

Math (AzM2).<sup>xiv,156,157</sup> In March 2020, Arizona cancelled statewide AzM2 testing and other statewide assessments for the 2019-20 school year.<sup>158</sup> Thus, the most recent data available for this report are from the 2018-19 school year, when the AzMERIT assessment was administered.

In the 2018-19 school year, only one in five (21%) 3<sup>rd</sup> grade students in ADE schools on the Navajo Nation Region achieved passing scores on the ELA assessment; this proportion was less than half of that across Arizona as a whole (46%). ELA passing rates varied by district and ranged from 9% at Cedar Unified District, to 35% at Window Rock Unified District. Performance on the AzMERIT math test among students in the region was better than ELA performance, with about one in four (26%) Navajo Nation 3<sup>rd</sup> grade students in ADE schools achieving passing scores in the 2018-19 school year. This proportion, however, is also notably lower than among students across the state, with over half of them (51%) achieving a passing score. Math passing rates also varied by widely district and ranged from 9% at Ganado Unified District, to 40% at Window Rock Unified District (Figure 40).

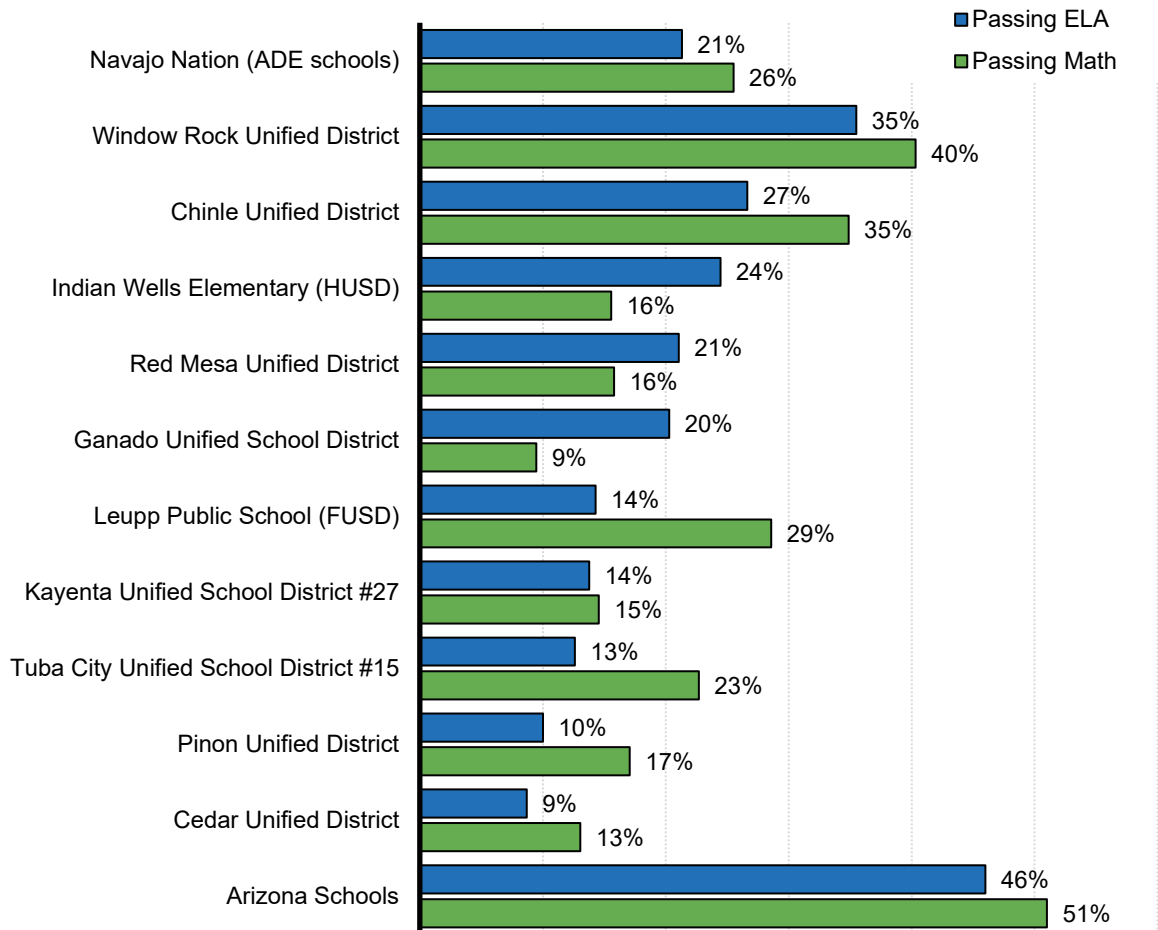
Additional tables with detailed data on AzMERIT results in the region are included in Appendix 1 under the *Educational Indicator* section.

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<sup>xiv</sup> AzMERIT was renamed to AzM2 during the 2019-2020 school year. In 2022, AzM2 will be replaced by AASA (Arizona's Academic Standards Assessment).



Figure 40. AzMERIT assessment results: 3rd grade ELA and Math, 2018-19

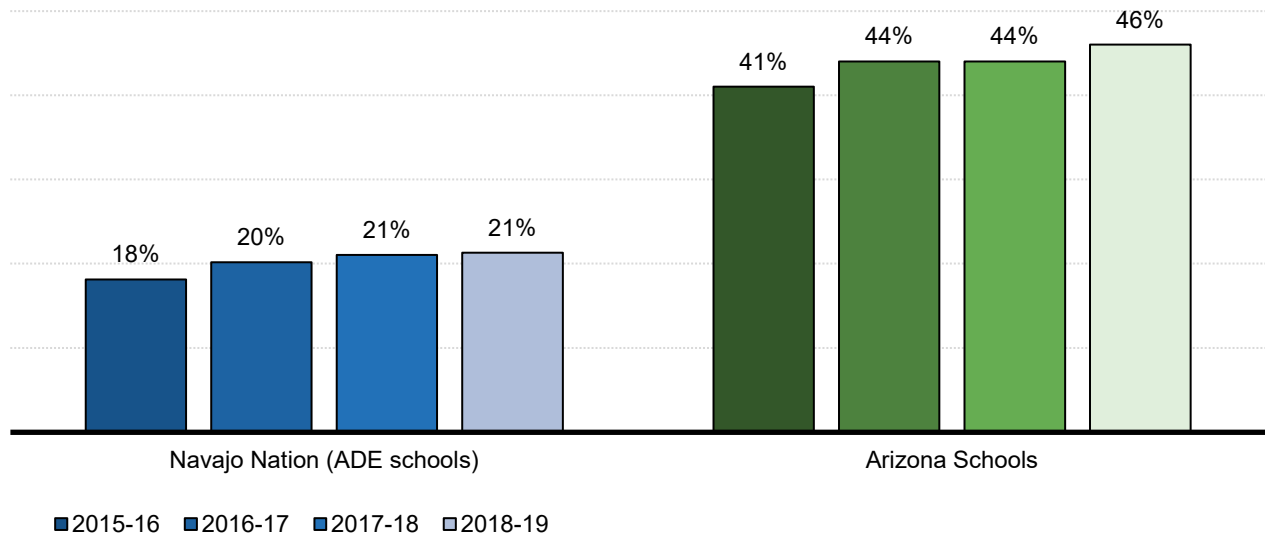


Source: Arizona Department of Education (2021). [AzMERIT dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Looking at assessment results over time, the share of students in the region with passing ELA scores increased slightly from 18% in 2015-16, to 21% in 2017-18 and remained stable in 2018-19. ELA passing scores also increased among all Arizona students in that period, though overall passing rates in the state were at least two times as high in each of those years as rates in the region (Figure 41). The proportion of students obtaining a math passing score increased from 21% in 2015-16, to 33% in 2017-18 and decreased to 26% in 2018-19. A similar pattern was seen in all Arizona schools combined, though the proportion of students with a passing score in the state was at least twice as high in most of those years (Figure 42).

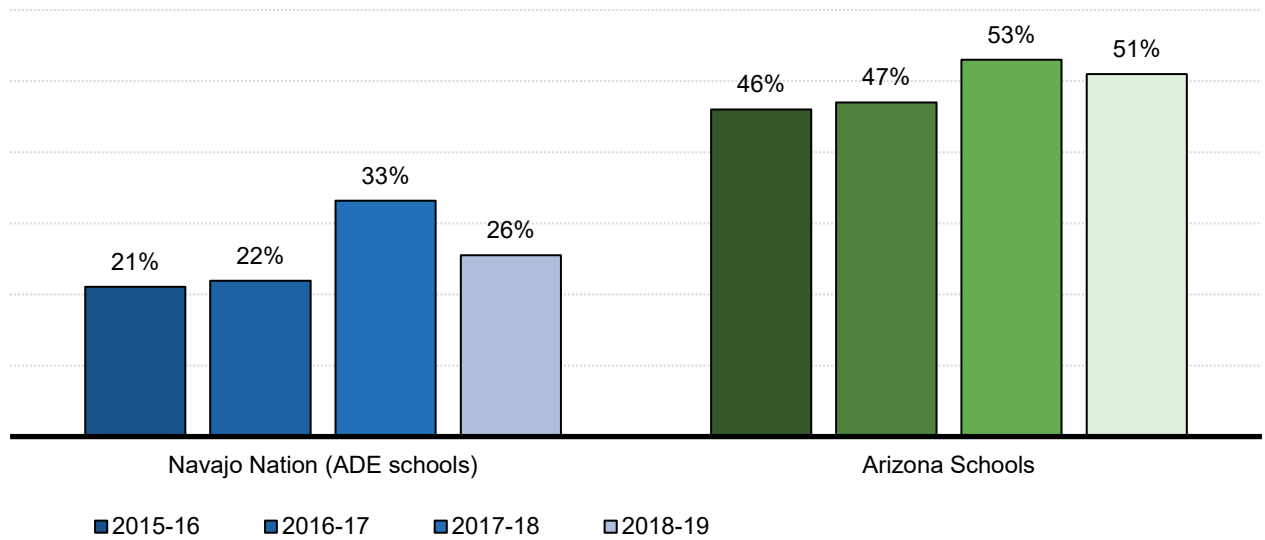


Figure 41. Trends in passing rates for 3rd-grade English Language Arts AzMERIT, 2015-16 to 2018-19



Source: Arizona Department of Education (2021). [AzMERIT dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team.

Figure 42. AzMERIT assessment results: 3rd grade Math, 2015-16 to 2018-19



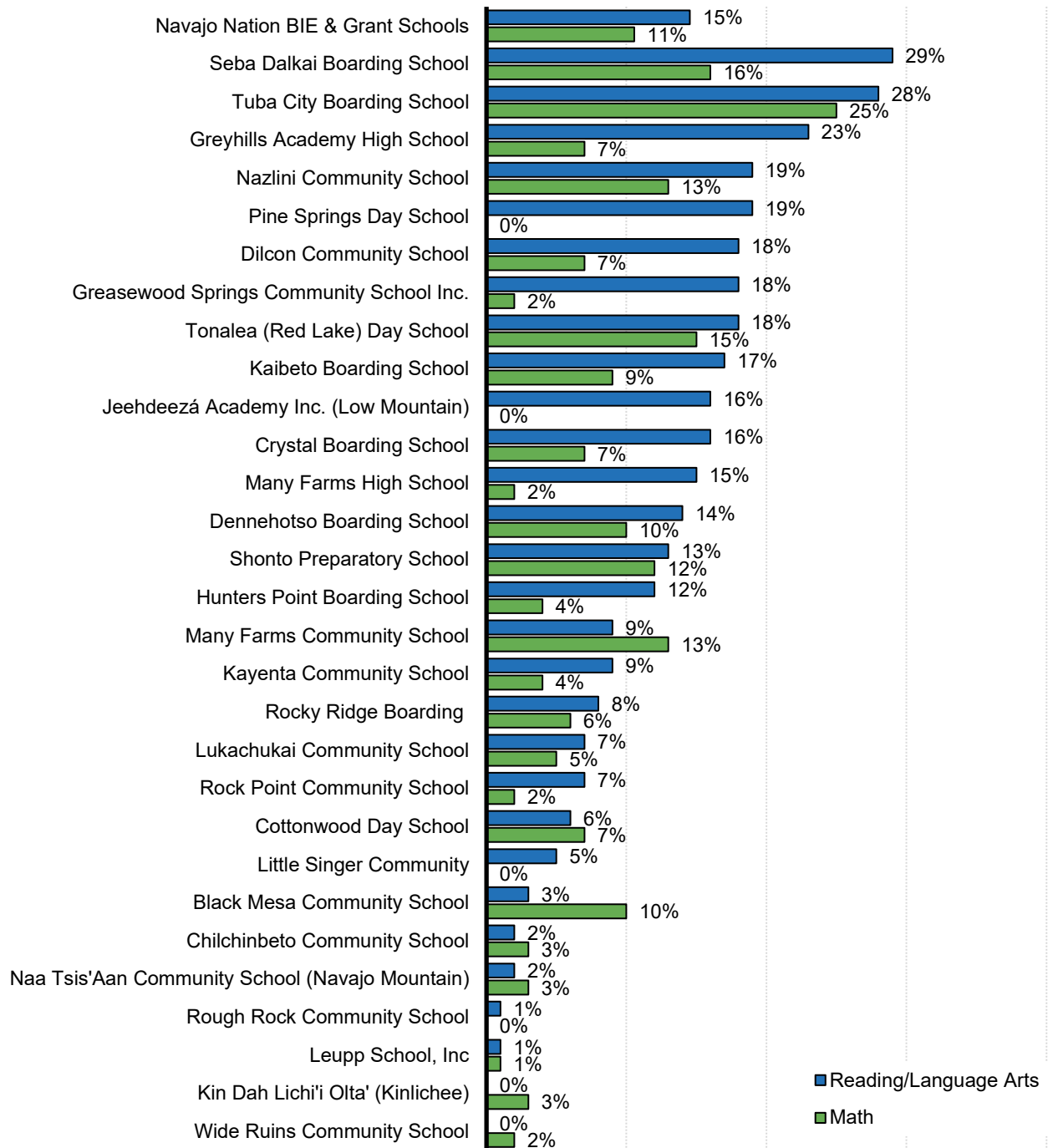
Source: Arizona Department of Education (2021). [AzMERIT dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Assessment results were also available from BIE School Report Cards of 2018-19 for BIE and Grant schools in the region. The combined Reading/Language Arts passing rate for all schools that year was 15%. The proportion of students with a passing score varied widely by school, ranging from 0% at Kin

Dah Lichi'i Olta' (Kinlichee) and Wide Ruins Community School, to 29% at Seba Dalkai Boarding School. Math assessment results were also available BIE School Report Cards of 2018-19 for BIE and Grant schools in the region. Different from ADE schools, however, the combined math passing rate for all schools that year was lower than the Reading/Language Arts: 11%. There was also great variability in the share of students with a passing math scored by school, from 0% at four schools (Jeehdeezá Academy Inc. (Low Mountain), Rough Rock Community School, Little Singer Community and Pine Springs Day School) to 25% at Tuba City Boarding School (Figure 43). Note that the 2018-29 BIE Annual School Report Cards do not indicate what grades are included in the assessment results presented in Figure 43 below.

In March 2020 BIE announced that it had published its Standards, Assessments and Accountability Systems (SAAS) Final Rule under the Every Student Succeeds Act (ESSA). Under the new SAAS rule, BIE will be able to use a single unified assessment in all BIE funded schools.<sup>159</sup> Previously, BIE schools across the country used a variety of standardized assessments. In Arizona, BIE funded schools had used the same assessment administered at public schools under ADE. Starting in school year 2020-21, BIE approved Pearson as the vendor for the new unified assessment for ELA and mathematics in grades 3-8 and 11.<sup>160</sup>

Figure 43. Reading/Language Arts & Math assessment pass rates for Navajo Nation BIE & Grant Schools, 2018-19



Source: Bureau of Indian Education (2021). Annual School Report Cards. Retrieved from <https://www.bie.edu/topic-page/performance-data-statistics>

Note: The Annual School Report Cards do not specify what grades were included in the assessment results included in this table

Assessment data specific for 3<sup>rd</sup> grade students in Grant schools on the Navajo Nation Region were available from the Navajo Nation Department of Dine Education, Office of Educational Research and Statistics. In 2018-19 Grant schools utilized the Partnership for Assessment of Readiness for College and Careers (PARCC) test to evaluate student performance. The share of Arizona Navajo Nation Grant schools school 3<sup>rd</sup> graders who achieved a passing score on the PARCC test in 2018-19 was lower than those reported by BIE on the Annual School Report Cards (see Figure 43 above). This was true for both the ELA portion of the test (8% vs 15%), and for the math portion (9% vs 11%) (Table 20). As indicated above, it is possible that BIE results include students in more than just 3<sup>rd</sup> grade.

Table 20. PARCC assessment results at Arizona Navajo Nation grant schools, 2018-19

	Students tested	Did not yet meet expectations	Partially met	Approached expectations	Met expectations	Exceeded expectations	Passing
3rd Grade English Language Arts (ELA)	283	51%	26%	15%	8%	0%	8%
3rd Grade Math	282	28%	28%	22%	9%	0%	9%

Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [Assessment results]. Unpublished tribal data received by request.

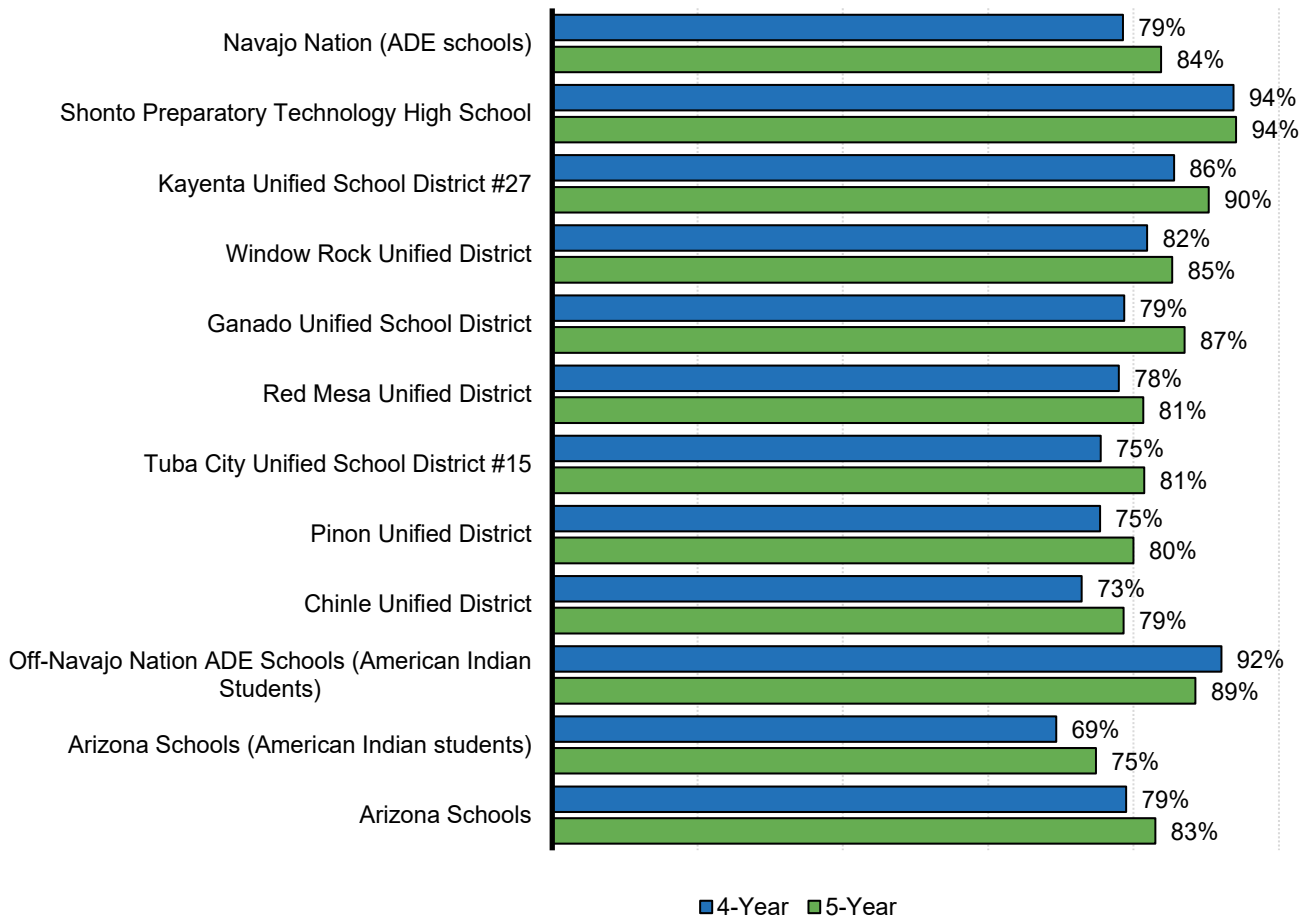
Note: Grant schools represented on this table include: Black Mesa Community School, Chilchinbeto Community School, Dilcon Community School, Greasewood Springs CS, Hunters Point Boarding School, KinDahLichi'IOlta, Leupp Schools, Little Singer Community School, Lukachukai Community School, Many Farms Community School, NaaTsisAan Community School, Nazlini Community School, Rock Point Community School, Rough Rock Community School, Shonto Preparatory and Wide Ruins Community School.

## Graduation Rates and Adult Educational Attainment

Understanding current high school graduation and dropout rates provides insight into the assets and challenges faced by a community and its future workforce. Adults who graduated from high school have better health and financial stability, lower risk for incarceration and better socio-emotional outcomes compared to adults who dropped out of high school.<sup>161,162</sup> Increasingly, a high-school education is necessary for employment in the U.S., with nearly two-thirds of all jobs in 2020 requiring more than a high-school education.<sup>163</sup> Adults with lower educational attainment also tended to experience more economic challenges during the pandemic, with adults with less than a high school diploma experiencing more than twice the unemployment rate of adults with a bachelor's degree or higher.<sup>164</sup>

The 4-year and 5-year graduation rates in the ADE schools on the Navajo Nation Region overall in 2019 (79% and 84%) were similar than across Arizona as whole (79% and 83%) and exceeded those seen for all American Indian students enrolled in Arizona public and charter schools (69% and 75%). Graduation rates varied by district/school, with Chinle Unified having overall lower rates and Shonto Preparatory Technology High School having the highest rates (73% and 94%).

Figure 44. Four- and five-year graduation rates, 2019



Source: Arizona Department of Education (2021). [Graduation dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Note: Off-reservations ADE schools Navajo Nation students' data represent the following schools: Flagstaff High School, Page High School, Winslow High School, Holbrook High School, and Valley High School.

Examining trends in 4- and 5-year graduation rates shows that graduation rates have overall increased between 2017 and 2019 at both Navajo Nation ADE schools and for American Indian Students enrolled in Arizona public and charter schools (Table 21).

Table 21. Trends in graduation rates, 2017 to 2019

	Four-year graduation rates			Five-year graduation rates		
	2017	2018	2019	2017	2018	2019
<b>Navajo Nation (ADE schools)</b>	<b>75%</b>	<b>74%</b>	<b>79%</b>	<b>80%</b>	<b>79%</b>	<b>84%</b>
Window Rock Unified District	69%	71%	82%	78%	77%	85%
Ganado Unified School District	84%	87%	79%	86%	87%	87%
Chinle Unified District	63%	71%	73%	71%	78%	79%
Red Mesa Unified District	76%	69%	78%	76%	73%	81%
Tuba City Unified School District #15	79%	72%	75%	86%	81%	81%
Pinon Unified District	78%	63%	75%	79%	66%	80%
Kayenta Unified School District #27	86%	80%	86%	87%	84%	90%
Shonto Preparatory Technology High School	89%	90%	94%	94%	100%	94%
Off-Reservation ADE Schools serving Navajo Nation students (American Indian Students)	87%	85%	92%	83%	84%	89%
Arizona Schools (American Indian students only)	67%	67%	69%	72%	73%	75%
Arizona schools	78%	78%	79%	82%	82%	83%

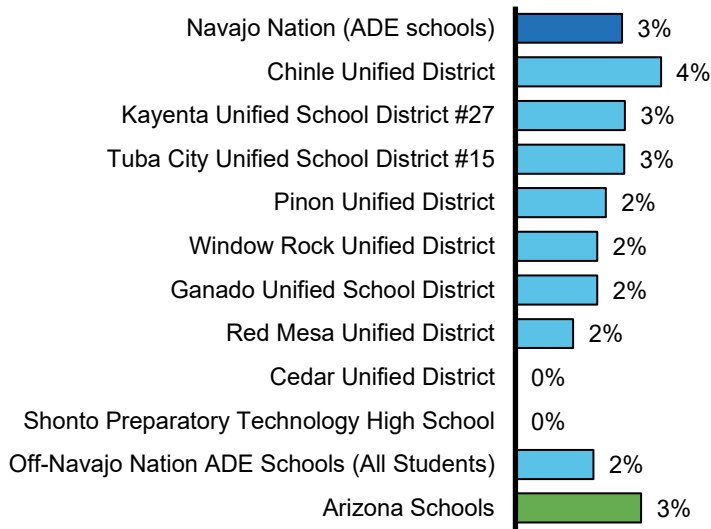
Source: Arizona Department of Education (2021). [Graduation dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CREDE) team

Note: Off-reservations ADE schools Navajo Nation students' data represent the following schools: Flagstaff High School, Page High School, Winslow High School, Holbrook High School, and Valley High School.

In 2018-19, the combined dropout rate for ADE schools in the Navajo Nation Region was 3%, the same as the rate for all Arizona students. Dropout rates in all districts in the region are similar or lower than the state rate, with the exception of the Chinle Unified District, where 4% of students dropped out that school year (Figure 45).

Consistent with the rising graduation rates across the ADE schools in the region, dropout rates for 7<sup>th</sup> to 12<sup>th</sup> grade students have been falling over the past three years, decreasing by half from 6% in 2017-18 to 3% in 2019-20. This positive trend is visible in all ADE school districts in the region (Table 22).

Figure 45. Dropout rates, 2019-20



Source: Arizona Department of Education (2021). [Dropout dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Note: Off-reservations ADE schools Navajo Nation students' data represent the following schools: Sinagua Middle School and Flagstaff High School in Flagstaff Unified District; Page Middle School, Page High School and Sand & Sage Academy in Page Unified District; Holbrook Junior High School and Holbrook High School in Holbrook Unified District; and Valley High School in Sanders Unified District

Table 22. Trends in 7<sup>th</sup>-12<sup>th</sup> grade dropout rates, 2017-18 to 2019-20

	2017-18	2018-19	2019-20
<b>Navajo Nation (ADE schools)</b>	<b>6%</b>	<b>5%</b>	<b>3%</b>
Window Rock Unified District	5%	4%	2%
Ganado Unified School District	4%	3%	2%
Chinle Unified District	7%	7%	4%
Red Mesa Unified District	8%	5%	2%
Tuba City Unified School District #15	4%	7%	3%
Pinon Unified District	7%	6%	2%
Cedar Unified District	0%	0%	0%
Kayenta Unified School District #27	5%	5%	3%
Shonto Preparatory Technology High School	1%	4%	0%
Off-Reservation ADE Schools serving Navajo Nation students (All Students)	3%	3%	2%
Arizona schools	5%	4%	3%

Source: Arizona Department of Education (2021). [Dropout dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CREDE) team

Note: Off-reservations ADE schools Navajo Nation students' data represent the following schools: Sinagua Middle School and Flagstaff High School in Flagstaff Unified District; Page Middle School, Page High School and Sand & Sage Academy in Page Unified District; Holbrook Junior High School and Holbrook High School in Holbrook Unified District; and Valley High School in Sanders Unified District

According to American Community Survey estimates, adult educational attainment in the Navajo Nation Region is similar to that across all Arizona reservations. Nearly one-quarter of adults in the region (24%) have less than a high-school education, more than one-third have a high-school diploma with no further education (36%) and the remaining 41% have more than a high-school education (Figure 46).

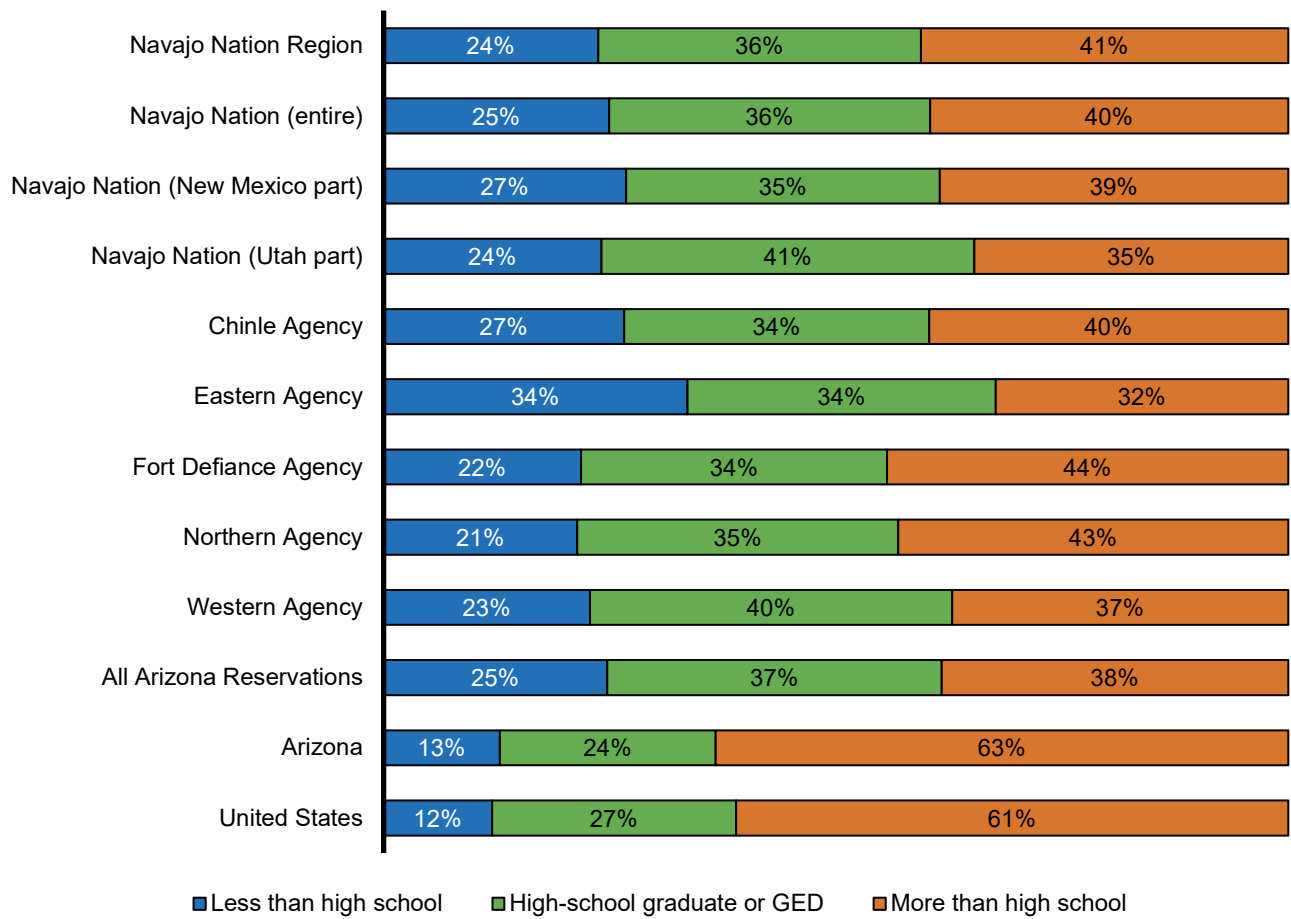
Parental educational attainment has been shown to influence child educational outcomes.<sup>165</sup> Education is also a key mechanism for upward mobility; parents with higher educational levels typically secure higher incomes to support their families.<sup>166</sup> Higher maternal education, in particular, is linked to both cognitive and socio-emotional development as well as general health in young children.<sup>167</sup>

The educational attainment of mothers in the region generally mirrors that of all the population as a whole, though a higher proportion of births in 2019 were to mothers who had more than a high-school education (49%) compared with the overall population (41%); a smaller share of the births were to mothers who had less than high-school education than in the general population (16% vs 24%) (Table 23 and Figure 46). With the high proportion of mothers with less than a high-school education, the region



may benefit from programs that aim to simultaneously serve both young children and their parents. Such *two-generation programs* are designed to provide family-centered supports to low-income parents and their young children by providing access to education and workforce development for parents and high-quality early education for young children.<sup>168,169</sup> Providing resources and programming to support parental and youth education can help grow the human capital of both.<sup>170,171</sup>

Figure 46. Level of education for the adult population (ages 25 and older)



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B15002

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

Table 23. Level of education for the mothers of babies born in 2018 and 2019

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 Nation (Arizona part)	2018	1,071	16%	37%	47%
	2019	1,201	15%	35%	49%
All Arizona Reservations	2018	1,990	N/A	N/A	N/A
	2019	2,180	N/A	N/A	N/A
Arizona	2018	80,539	17%	26%	57%
	2019	79,183	16%	27%	57%

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

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

Additional tables related to *Error! Reference source not found.* can be found in Appendix 1 at the end of this report.



# EARLY LEARNING

# EARLY LEARNING

## Why it Matters

Early childhood is an exciting time of rapid physical, cognitive and social-emotional development. The experiences young children have during these early years are critical for healthy brain development and set the stage for lifelong learning and well-being.<sup>172,173</sup> Just as rich, stimulating environments can promote development, early negative experiences can have lasting effects. For example, gaps in language development between children from disadvantaged backgrounds and their more advantaged peers can be seen by two and a half years of age;<sup>174</sup> those disparities that persist until kindergarten tend to predict later academic problems.<sup>175</sup>

Quality early care and education can positively influence children's overall development.<sup>176,177</sup> This is particularly true for children in poverty.<sup>178</sup> Access to quality child care and classroom environments can provide enriching experiences children might not have access to at home. Children who attend high-quality preschool programs repeat grades less frequently, obtain higher scores on standardized tests, experience fewer behavior problems and are more likely to graduate from high school.<sup>179</sup> Furthermore, early childhood programs help identify children with special needs and can provide targeted interventions that may reduce their risk of developmental delays and prevent preschool expulsion.<sup>180, 181</sup> Children with special health care needs may particularly benefit from high quality teacher-child interactions in classrooms,<sup>182,183</sup> as they are more likely to experience more adverse childhood experiences than typically developing children,<sup>184</sup> and are at an increased risk for maltreatment and neglect.<sup>185,186</sup>

A statewide early care and education system that is accessible, affordable and high-quality is essential for the social and economic health of Arizona. Not only does access to affordable, quality child care make a positive difference for children's health and development, it also allows parents to keep steady jobs and support their families.<sup>187</sup> Investment in programs for young children leads to increased education and employment, reduced crime and better overall health.<sup>188,189</sup> The investment in early childhood is also potentially one of the most productive investments a community can make, with experts estimating that society gets back about \$8.60 for every \$1 spent on early learning programs.<sup>190</sup>

## What the Data Tell Us

### Early Care and Education Programs

Child care and early education opportunities to families in the Navajo Nation Region include: center and home-based child care services under the Navajo Nation Child Care Development Fund (CCDF); Navajo Head Start and Early Head Start; the Bureau of Indian Education (BIE) Family and Child Education (FACE) program; school-based preschool programs; and informal care through family and friends.

### ***Navajo Nation Child Care Development Fund***

The Navajo Nation Child Care Development Fund (CCDF) is housed under the Navajo Nation Division of Social Services and provides child care services for parents and families who are working toward self-sufficiency through tribal child care centers or private providers. To be eligible, children must be under the age of 13, an enrolled member of the Navajo Nation or be eligible for enrollment, and residing within the same household as eligible parents or legal guardians.

Young children can receive child care services through a licensed child care center, a licensed home-based provider, or an unlicensed home-based provider, often a relative of the child who can be reimbursed for providing child care services at their home or at the child's home. Eligible school-age children can receive before- and after-school child care services through CCDF. To qualify for child care assistance, an eligible parent or legal guardian must reside on or near the Navajo Nation and belong to any of the following categories: holding employment (includes self-employment), pursuing completion of a GED, secondary, or post-secondary certificate or degree, attending a job-training program, participating in a TANF or Workforce Development program, or receiving a referral from a Child Protective Services (CPS) agency.

CCDF is comprised of five regions: the Chinle, Fort Defiance, and Tuba City Regions primarily serve communities on the Arizona portion of the Navajo Nation. The Crownpoint and Shiprock Regions primarily serve New Mexico communities.

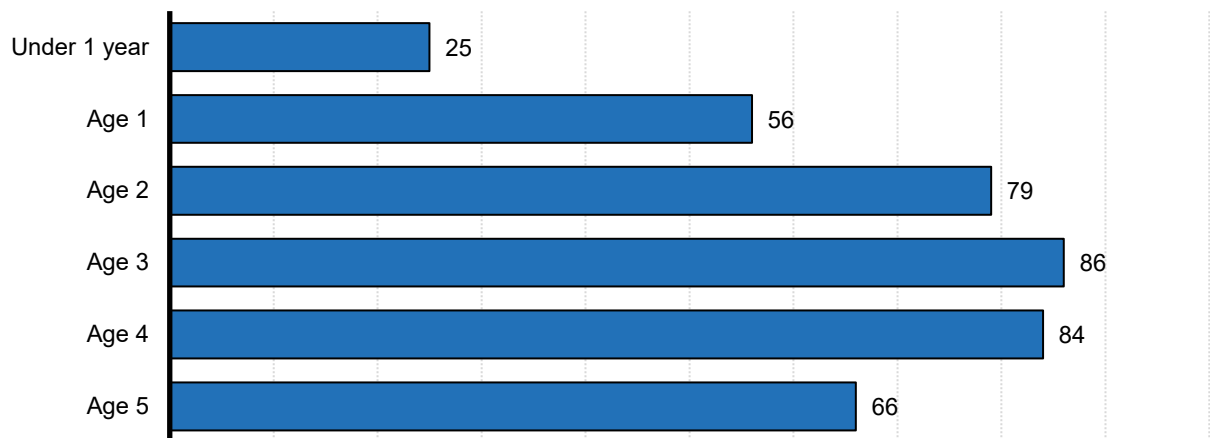
In Federal Fiscal Year (FFY) 2020, 605 children ages birth to 13 received child care services through CCDF in the entire Navajo Nation. About two-thirds (396, or 65%) were children ages birth to 5 (Table 24). Data broken down by year of age show that most of the young children receiving services were 3-year olds (N=86) and 4-year olds (N=84). Only 25 infants were served by CCDF that year (Figure 47).

Table 24. Children receiving child care services through CCDF by age, Navajo Nation, FY 2020

	Number	Percent of total children receiving CCDF services
Children (ages 0-5)	396	65%
Under 1 year	25	4%
Age 1	56	9%
Age 2	79	13%
Age 3	86	14%
Age 4	84	14%
Age 5	66	11%
Ages 6 to 13	201	33%
Age 13 and older	<10	1%
Total children (ages 0-13)	605	N/A

Source: Navajo Nation Department of Child Care and Development (2021). 2020 Navajo Nation CCDF Annual Report Form 700. Report received by request.

Figure 47. Children receiving child care services through CCDF by age, FY 2020

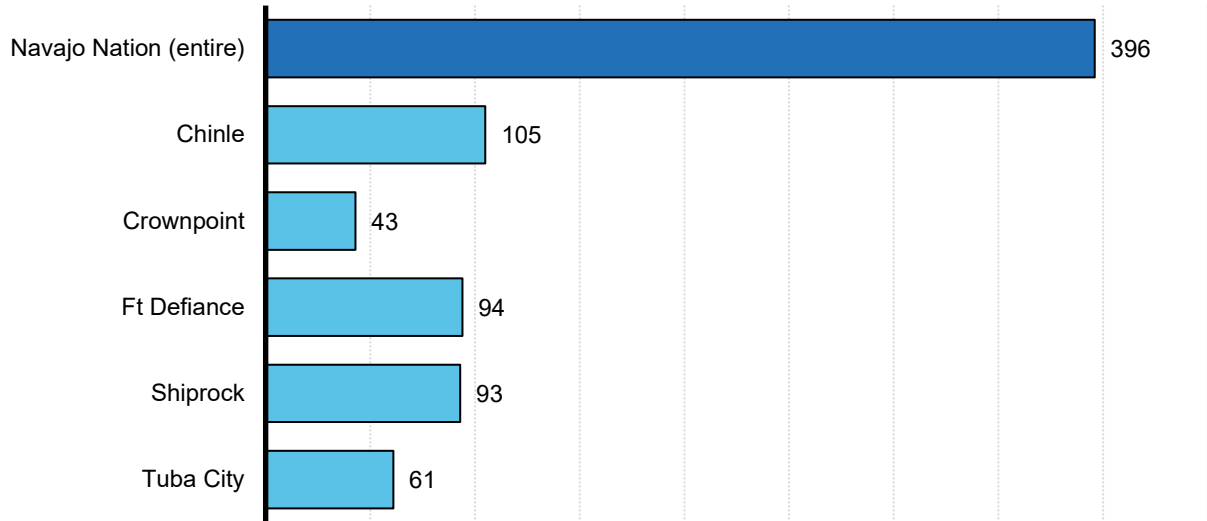


Source: Navajo Nation Department of Child Care and Development (2021). 2020 Navajo Nation CCDF Annual Report Form 700. Report received by request.

Looking at the number of young children receiving child care services at each CCDF region shows that the Chinle Region served 105 children, 61 children received services in the Tuba City Region, and 95 children were served in the Fort Defiance Region. Together, these three regions, which provide services

primarily to Arizona communities, served a total of 260 children ages birth to 5, representing two-thirds (66%) of all young children getting services that year (Figure 48).

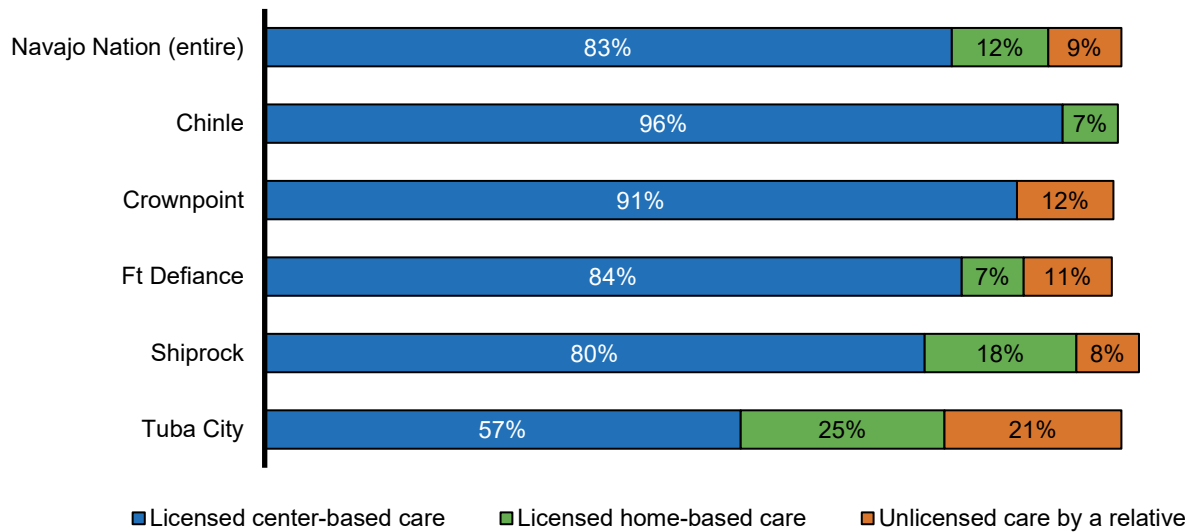
Figure 48. Children ages 0-5 receiving child care services through CCDF by agency, FY 2020



*Source: Navajo Nation Department of Child Care and Development (2021). 2020 Navajo Nation CCDF Annual Report Form 700. Report received by request.*

The type of child care services that children receive also varies by CCDF region. In the Chinle Region, the majority of young children (96%) participated in center-based care and 7% were cared for by a licensed home-based provider. In the Tuba City Region, on the other hand, only 57% of children received services at a child care center, with 25% being cared by a licensed home-based provider and another 21% by a relative (Figure 49).

Figure 49. Children ages 0-5 receiving services through CCDF by child care setting, FY 2020



Source: Navajo Nation Department of Child Care and Development (2021). 2020 Navajo Nation CCDF Annual Report Form 700. Report received by request.

### Navajo Head Start and Early Head Start

Navajo Head Start administers two programs: Head Start and Early Head Start (EHS). Navajo Head Start provides services to young children across five Head Start districts: (1) Shiprock, (2) Crownpoint, (3) Window Rock, (4) Chinle and (5) Kayenta/Tuba City. Arizona communities are primarily served by the Window Rock, Chinle and Kayenta/Tuba City Districts. EHS services cater to infants and toddlers between the ages of birth to 36 months as well as to pregnant women. Three EHS sites are in operation on the Navajo Nation. The two Arizona-based sites are in the Window Rock and Chinle Districts. Both programs offer services through center- and home-based program options. Children must meet age-specific and income eligibility requirements to be enrolled in either program. According to the Navajo Head Start 2020-21 Annual Report, Head Start services are available to 1,313 children ages 3 to 5 and Early Head Start services are available to 37 children from birth to age 3 and pregnant women living in the service area of the Navajo Nation (Table 25). Ten slots are also available for pregnant women in the Home Base Program. Children in the home-based program receive weekly home visits lasting 1.5 hours. Children in the center-based program receive at least four hours daily of instructional time.<sup>191</sup>

Of the Navajo Head Start districts primarily serving Arizona communities, Window Rock has the largest funded enrollment (N=363), followed by Chinle (N=293) and Kayenta/Tuba City (N=237). Twelve of the 37 Early Head Start slots are in the Window Rock District and on the Diné College Campus in Tsaile, Arizona. The remaining eight Early Head start slots are part of the Chinle District (Table 25).

In 2020-21, the Head Start cumulative enrollment (i.e. the total number of children that participated in the program during that year) was 1,203, lower than the funded enrollment of 1,313 slots. This lower participation is likely due to the impact of the COVID-19 pandemic.



Table 25. Funded enrollment in Navajo Head and Early Head Start by district, 2020-21

	Head Start	Early Head Start
<b>Navajo Nation (entire)</b>	<b>1,313</b>	<b>37</b>
District 1: Shiprock	170	17
District 2: Crownpoint	250	0
District 3: Window Rock	363	12
District 4: Chinle	293	8
District 5: Kayenta/Tuba City	237	0

Source: Navajo Head Start (2021). [Funded Enrollment dataset]. Unpublished data received by request.

Table 26. Navajo Nation Head Start and Early Head Start Enrollment, 2020-21

	Funded Enrollment	Cumulative Enrollment
Navajo Nation Head Start	1,313	1,203
Navajo Nation Early Head Start	37	63

Source: Office of Head Start (2020). 2019 Program Information Report. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/data/pir>

Key informants indicated that the funded enrollment has decreased slightly over the past few years in part due to some centers closing down. As of March 2020, 81 centers were operational, but some were not open. Key informants shared that Navajo Head Start was undergoing a population assessment to determine where services are most needed. The program had been providing services to areas with a steady birth rate, but was reassessing population trends to ensure services are offered where they are most needed. As a result, key informants noted, in the future operations may shut down in some regions and start in others. The population assessment also included a possible expansion of the Early Head Start program.

As discussed in the *Population Characteristics* section above, the living arrangement data for children enrolled in Head Start and Early Head Start programs differ from ACS estimates for all families in the region. ACS data show a higher proportion of children living with single parents compared to children in the Navajo Head Start and Early Head Start. According to key informants, another possible explanation for this difference is the fact that it may be more difficult for single parents to enroll their children in the program. Single parents who do not have the support of other adults in the home may struggle with the logistical demands of the enrollment process (e.g. they must have transportation

available and have all the required paperwork such as immunization records at hand, as well as the means to make photocopies of all the documents).

The inability to provide the official documentation required for enrollment in the program is a particular challenge faced by grandparents and other kinship caregivers. Key informants noted that some grandparents might have custody of their grandchild, but they do not have all the necessary documentation such as birth certificates or hospital records. Caregivers who are involved in legal custody battles may also not be able to obtain the required documents from one another.

### ***Families and Child Education (FACE)***

FACE is an early childhood and parental involvement program for American Indian families in schools sponsored by BIE. The goals of the FACE program include supporting parents as their child's first teacher; increasing family literacy; bolstering the connections between families, schools, and communities; supporting early identification and intervention for children with special needs; fostering lifelong learning and promoting the preservation of the unique cultural and linguistic diversity of the communities served by the program. FACE services and activities are currently taking place in 48 BIE schools nationwide, including 15 in the state of Arizona. A focal point of FACE is the integration of Native language and culture in three settings: home, school, and community.

FACE has both center-based and home-based components. The home-based component includes educational visits and screenings by parent educators using the Parents as Teachers (PAT) model and is aimed at families with children from birth to 3, although families can join the program beginning during pregnancy.

The FACE center-based preschool component includes an early childhood education program for children ages 3 to 4, adult education for the children's parents, and Parent and Child Time (PACT). Typically, the FACE center-based setting has two classrooms: one is designated for preschool children ages 3 to 5 years, and the other is the adult education classroom. The preschool classroom promotes a literacy-rich learning environment. In the adult education classroom parents receive instruction focused on educational goal-setting in their roles as caregivers, workers, and community members, and making achievements in the areas of parenting, education, employment, and self-improvement.

In order to participate in the FACE program, children must be American Indian and be eligible for admission to a BIE-funded school upon reaching school age.

Table 27 below shows the number of children and adults participating in both the center-based and home-based components of the FACE program in the Navajo Nation Region. In Program Year 2019 there were eight FACE programs in the region, which combined served 790 unduplicated child and adult participants in both the center-based and home-based components. Center-based services were provided to 117 children and 123 adults. A total of 303 children and 289 adults participated in home-based services.

Table 27. FACE Programs by Agency, PY 2019

	Adults receiving Center-based services	Children receiving Center-based services	Adults receiving Home-based services	Children receiving Home-based services	Unduplicated adult participants receiving any services	Unduplicated child participants receiving any services	Total unduplicated participants
<b>Chinle Agency</b>							
Many Farms	13	13	43	50	52	61	113
Rough Rock Community School	15	8	18	19	33	27	60
<b>Fort Defiance Agency</b>							
Greasewood Springs Community School	17	20	29	30	40	47	87
Kin Dah Lichi'l Olta	18	17	17	17	30	33	63
Leupp	15	15	48	54	61	69	130
<b>Northern Agency</b>							
T'iis Nazbas Community School	9	9	46	50	53	56	109
<b>Western Agency</b>							
Kayenta Community School	15	16	23	27	32	42	74
Little Singer Community School	21	19	65	56	82	72	154
<b>Total</b>	<b>123</b>	<b>117</b>	<b>289</b>	<b>303</b>	<b>383</b>	<b>407</b>	<b>790</b>

Source: Research & Training Associates, Inc. (2020). BIE Family and child education program, 2019 report. U.S. Department of the Interior Bureau of Indian Affairs, Bureau of Indian Education.

**School-Based Preschool**

There are 15 school-based preschool programs in the Navajo Nation Region. Of these, one program is based in a private school. The remaining 14 preschool programs are public school-based. In school year 2019-20 these preschool programs collectively had a total enrollment of 700 children (Table 28).

Table 28. School-based preschool programs by agency, 2019-20

	Type of School	Capacity	Quality First Site
<b>Chinle Agency</b>			
Canyon De Chelly Elementary School	Public	20	Yes
Chinle Elementary School Preschool	Public	100	Yes
Many Farms Elementary School	Public	20	Yes
Pinon Elementary School	Public	45	Yes
Tsaile Public School	Public	20	Yes
<b>Northern Agency</b>			
Red Mesa USD Preschool	Public	57	Yes
<b>Fort Defiance Agency</b>			
Ganado Pre-K Academy	Public	51	No
Indian Wells Preschool	Public	29	Yes
St Michael Indian School Preschool	Private	16	Yes
Tsehootsoi Integrated Preschool Program	Public	59	Yes
<b>Western Agency</b>			
Dine Family Learning Center (Leupp Public School)	Public	20	Yes
Kayenta USD C.O.P.E.	Public	8	Yes
Kayenta USD ABC Preschool	Public	188	Yes
Tuba City Primary School	Public	22*	No
Tuba City High School Child Development Center	Public	45	Yes
<b>Total</b>	15 programs	700	13 QF programs

Source: Arizona Department of Economic Security (2021). [Child Care Administration dataset]. Unpublished data. Arizona Department of Health Services (2021). [Childcare Licensing dataset]. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2021). Childcare Immunization Coverage, 2019-2020 School Year. Unpublished data received by request & aggregated by the Community, Research, & Development Team. First Things First (2021). [Quality First Provider list]. Retrieved from Quality First Data Center in January 2021

Note: Preschool capacity was not available for Tuba City Primary School; this number reflects children enrolled as reported to ADHS in the child care immunization dataset.

## Quality First

Quality First is Arizona’s Quality Rating and Improvement System for early child care and preschool providers. Beyond the basic goal of being a safe place for children, there are a number of different ways for a child care program to enrich a child’s experience. Quality settings include teachers and staff who know how to work with young children and offer hands-on activities, create learning environments that nurture the development of every child, and foster positive, consistent relationships and interactions that give children the individual attention they need.<sup>192</sup> The Quality First star rating system rates programs along a 1-5 continuum based on how they are implementing early childhood best practices. Providers are considered quality educational environments by DES if they receive a Quality First 3-star rating or higher or are accredited by a national organization, such as the Association for Early Learning Leaders or the National Association for the Education of Young Children.<sup>193</sup> Providers that meet these quality standards can receive higher reimbursement for serving children receiving child care subsidies from DES.<sup>194</sup>

As of 2020, there were 23 child care providers in the Navajo Nation Region participating in Quality First with a total combined enrollment of 687 children. Of the 23 participating providers, 17 met quality standards (3-star rating or higher) and provided services to 484 children (Table 29 and Table 30)

Table 29. Providers participating in Quality First, 2020

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 Nation Region	23	17	74%
Arizona	1,045	824	79%

Source: First Things First (2021). Quality First Summary Data. Unpublished data.

Table 30. Children enrolled in Quality First Providers, 2020

Geography	Children enrolled at a Quality First provider site	Children enrolled at a Quality First provider site with a 3-5 star rating	% of Children in a Quality-Level Setting (3-5 Stars)
Navajo Nation Region	687	484	71%
Arizona	60,927	45,822	75%

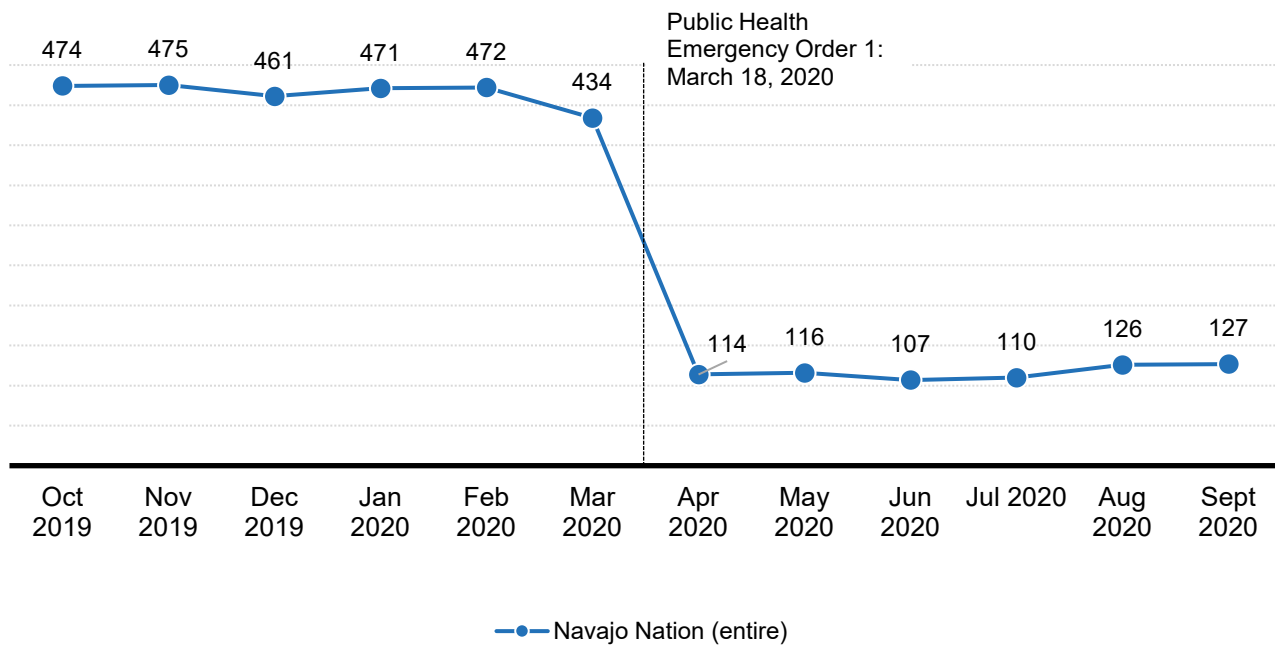
Source: First Things First (2021). Quality First Summary Data. Unpublished data.

### COVID-19 Pandemic Impact on Early Childhood Learning and Care Services

The COVID-19 pandemic made child care even less accessible for many families. Many child care centers and homes closed in the early days of the pandemic due to concerns about the safety of children, staff and families.<sup>195,196</sup> The pandemic's effect on out-of-home child care arrangements heightened stress for families and widened pre-existing inequities in work, income and well-being. In the summer of 2020 about half of families with young children (47%) in a nationally-representative survey reported that they lost their pre-pandemic child care arrangements, and the majority of parents and caregivers surveyed (70%) were worried about returning to prior arrangements.<sup>197</sup>

Data from the Navajo Nation CCDF program were available for the monthly number of children receiving services in FFY2020. These data, which represent children aged birth to 13, illustrate the impact of the COVID-19 pandemic on child care availability in the region. Between March and April of 2020, there was a dramatic drop in the number of children served by the program, from 434 to only 114. The number of children receiving child care services continued at that very reduced level through the end of the federal fiscal year (Figure 50). Availability of services varied by CCDF region: in the Chinle Region, only 16 children received services in April of 2020, less than 10% of the number served in March (N=116). Similarly, only 14 (or 11%) of the children in the Fort Defiance Region received services in April, compared to 132 in March. In the Tuba City Region, on the other hand, 29 children were getting services in April, and that number represented 55% of the children served in March (N=53) (Table 31).

Figure 50. Children ages 0-13 receiving child care services through CCDF by month in Navajo



Source: Navajo Nation Department of Child Care and Development (2021). 2020 Navajo Nation CCDF Annual Report Form 700. Report received by request.

Table 31. Children ages 0-13 receiving child care services through CCDF by month, FY 2020N

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sept 2020
Navajo Nation (entire)	474	475	461	471	472	434	114	116	107	110	126	127
Chinle	113	115	104	110	122	111	16	13	13	13	16	16
Crownpoint	58	53	46	52	55	39	12	11	11	14	14	14
Ft Defiance	138	137	138	139	135	132	14	17	17	17	21	21
Shiprock	110	116	115	109	101	99	43	45	37	40	47	50
Tuba City	55	54	58	61	59	53	29	30	29	26	28	26

Source: Navajo Nation Department of Child Care and Development (2021). 2020 Navajo Nation CCDF Annual Report Form 700. Report received by request.

In response to the COVID-19 pandemic, the Navajo Nation issued a shelter-in-place order on March 20, 2020. As a result, Navajo Head Start, like all other early learning centers, moved to remote learning. Key informants indicated that some children were able to participate in virtual learning, while others had homework packets for children to work on at home if online learning was not a possibility for the family. As in-person learning was again allowed to take place, Head Start moved to a hybrid mode of operation, giving parents the choice of how their children should participate in the program. Key informants noted that a lot of families felt reluctant to send their children back to in-person learning. They also pointed out that there were challenges around communicating re-opening plans to families, which might have contributed to low interest in in-person services. By March 2022 three options for Head Start programming were available to families: fully remote, hybrid and in -person. At that point, 953 children were actively participating in the program representing just over 70% of the program’s funded enrollment. Of those, the majority were still participating remotely (N=548), 295 were attending in-person, and 110 were in the hybrid mode.

As of March 2022, only the adult-education component was back in person at the Kin Dah Lichi'l Olta FACE program. No in-person learning was taking place for the children because vaccination was not yet available for young children.<sup>xv</sup> Key informants indicated that at that point, many families did not want their children participating in face-to-face programming and be potentially exposed to COVID-19. Key

<sup>xv</sup> COVID-19 vaccines for children between the ages of 6 months and 5 years became available in June 2022. For more information see <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-moderna-and-pfizer-biontech-covid-19-vaccines-children>

informants noted that this operational status was specific to the Kin Dah Lichi'l Olta but that it was likely to be the same as in other FACE programs in the region.

During the month of December 2020, more than one-third (37%) of the regulated early care providers that were listed in the Arizona Child Care Resource & Referral (CCR&R) guide were closed. These providers accounted for 35% of the known care capacity in the state. At that time, there were 13 regulated early care and education providers on the CCR&R guide in the Navajo Nation Region, and 12 of them were closed, representing a loss of 742 slots or 95% of the previous capacity (Table 32).

Table 32. Number and capacity of regulated early care and educational providers by operational status in December 2020

	Total Number of Programs (CCRR)	Total Capacity in Programs (CCRR)	Number of Closed Programs	Capacity of Closed Programs	Number of Open Programs	Capacity of Open Programs	Percent of Programs that were closed in Dec 2020	Percent of Capacity in closed providers, Dec 2020
Navajo Nation (Arizona part)	13	782	12	742	1	40	92%	95%
Chinle Agency	4	205	3	165	1	40	75%	80%
Eastern Agency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fort Defiance Agency	4	259	4	259	N/A	N/A	100%	100%
Northern Agency	1	57	1	57	N/A	N/A	100%	100%
Western Agency	4	261	4	261	N/A	N/A	100%	100%
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arizona	2,521	202,010	930	71,576	1,591	130,434	37%	35%

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

Note: Centers represented on this table include Red Mesa Unified School District Preschool; Tsehootsoi Integrated Preschool Program; Flagstaff Unified School District Dine Family Learning Center/Facts; Indian Wells Preschool; Navajo Nation CCFD Karigan Center; Tsailie Public School Preschool; Navajo Nation CCDF Kii Doo Baa Child Care Center; Chinle Elementary School Pre School Preschool; Tuba City High School Child Development; Ganado Pre-K Academy; Pinon Elementary School; C.O.P.E.; and A B C Preschool.

## Young Children with Special Needs

Timely and appropriate developmental screenings can help to identify children who may have special needs. By identifying these children early, intervention can help young children with, or at risk for, developmental delays to improve language, cognitive and socio-emotional development.<sup>198,199</sup> It also reduces educational costs by decreasing the need for special education.<sup>200</sup> In Arizona, services available to families with children with special needs include those provided through the Arizona Early Intervention Program (AZEIP),<sup>201</sup> the Division of Developmental Disabilities (DDD),<sup>202</sup> and the Arizona



Department of Education Early Childhood Special Education Program.<sup>203</sup> AzEIP<sup>xvi</sup> is an interagency system of services and supports for families of young children (birth to 2) with disabilities or developmental delays in Arizona.

The Navajo Nation Growing in Beauty program is the AzEIP provider for the Navajo Nation Region. Growing in Beauty conducts screenings and developmental evaluations, including vision and hearing, to help children access early intervention services. Growing in Beauty’s mission is to “assure that all Dine children with a developmental delay or disability, between the ages of birth to f, grow into beautiful individuals,” and simultaneously honors the Navajo culture and language throughout its mission. The program helps families understand key principles of early intervention.

The number of young children referred to AzEIP in the Navajo Nation Region dropped from 258 in 2019 to 177 in 2020, likely a result of constraints of the COVID-19 pandemic. The number of children referred and found eligible had decreased even prior to the pandemic, from 62 in Federal Fiscal Year (FFY) 2018 to 49 in FFY 2019, and it further declined in FFY 2020 to only 25. The proportion of children who were referred and found eligible for services also decreased in that time period, from 25% in FFY 2018 to only 14% in FFY 2020 (Table 33).

Table 33. Children referred to and found eligible for AzEIP, federal fiscal years 2018 to 2020

Geography	Number of children (ages 0-2) referred to AzEIP			Number of children (ages 0-2) eligible for AzEIP			Percent of referrals found eligible		
	FFY 2018	FFY 2019	FFY 2020	FFY 2018	FFY 2019	FFY 2020	FFY 2018	FFY 2019	FFY 2020
<b>Navajo Nation Region</b>	<b>245</b>	<b>258</b>	<b>177</b>	<b>62</b>	<b>49</b>	<b>25</b>	<b>25%</b>	<b>19%</b>	<b>14%</b>
Chinle Agency	117	136	78	28	17	11	24%	13%	14%
Fort Defiance Agency	50	57	30	[1-14]	[1-9]	[1-9]	DS	DS	DS
Northern Agency	11	12	14	[1-14]	[1-9]	[1-9]	DS	DS	DS
Western Agency	67	53	55	19	[1-9]	[1-9]	28%	DS	DS
Arizona	13,803	14,692	13,615	5,372	5,225	4,675	39%	36%	34%

Source: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program dataset]. Unpublished data.

AzEIP may refer families to DDD<sup>xvii</sup> if the child has or is at risk for developing a qualifying disability, including cerebral palsy, epilepsy, autism spectrum disorder or an intellectual or cognitive disability.<sup>xviii</sup> DDD can provide services to individuals with qualifying disabilities through adulthood. Qualifying

<sup>xvi</sup> For more information on AzEIP, visit <https://www.azdes.gov/azeip/>

<sup>xvii</sup> For more information on DDD, visit <https://des.az.gov/services/disabilities/developmental-disabilities>

<sup>xviii</sup> For more information on the Division of Developmental Disabilities (DDD) eligibility see <https://des.az.gov/services/disabilities/developmental-disabilities/determine-eligibility>

children may receive services from both AzEIP and DDD. There were 14 children ages birth to 5 receiving services from DDD in the Navajo Nation Region in State Fiscal Year (SFY) 2018, and fewer than 10 children received services from DDD in SFY 2019 and SFY 2020 (Table 34).

Table 34. Children (ages 0-5) receiving services from DDD, state fiscal years 2017 to 2020

Geography	SFY 2017	SFY 2018	SFY 2019	SFY 2020	Percent change from 2017 to 2020
<b>Navajo Nation Region</b>	<b>15</b>	<b>14</b>	<b>[1-9]</b>	<b>[1-9]</b>	<b>DS</b>
Chinle Agency	[1-9]	[1-9]	[1-9]	[1-9]	DS
Fort Defiance Agency	[1-9]	[1-9]	[1-9]	[1-9]	DS
Northern Agency	0	0	0	0	N/A
Western Agency	[1-9]	[1-9]	[1-9]	[1-9]	-63%
Arizona	5,520	6,123	4,005	4,078	-26%

Source: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program dataset]. Unpublished data.

In SFY 2020, 44 children ages birth to 2 received services from AzEIP or DDD, a decrease of 23% from the 57 young children served in SFY 2019 (Table 35). A 2008 study using nationally representative data estimates that approximately 13% of children ages 0-2 in the U.S. have developmental delays that could benefit from early intervention services, but only about 3% of children actually receive services, which is consistent with current early intervention service data.<sup>204</sup> Only 0.8% of children birth to 2 years were receiving services from AzEIP or DDD in 2020 in the Navajo Nation Region (Table 35). These data suggest that there are likely many children across the region who would benefit from early intervention services but are not receiving them. This is likely in part because Arizona has some of the strictest eligibility requirements for early intervention services compared to most other states in the U.S.<sup>205</sup>

Table 35. Total children (ages 0-2) receiving services from AzEIP and/or DDD, state fiscal years 2019 and 2020

Geography	SFY 2019	SFY 2020	Percent change from 2019 to 2020	2010 US Census population of children (ages 0-2)	Percent of children (ages 0-2) receiving AzEIP or DDD services, SFY 2020
<b>Navajo Nation (Arizona part)</b>	<b>57</b>	<b>44</b>	<b>-23%</b>	<b>5,347</b>	<b>0.8%</b>
Chinle Agency	23	18	-22%	1,545	1.2%
Fort Defiance Agency	[1-9]	12	DS	2,136	0.6%
Northern Agency	[1-9]	0	DS	1,561	0.0%
Western Agency	18	14	-22%	2,082	0.7%
Arizona	6,376	5,721	-10%	270,519	2.1%

Source: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program dataset]. Unpublished data.

Newly-enrolled children in the Navajo Nation Head Start and Early Head Start Program receive developmental, sensory, and behavioral screenings within 45 days of enrollment. In school year 2018-19, 56% of children in the program were screened, and 6% were determined to require additional follow-up assessment or evaluation (Table 36). Sixty-two children enrolled that year had an Individualized Education Program (IEP). Of those, over half (55%) were diagnosed with having a developmental delay as their primary disability, and about one-third (35%) were diagnosed with speech or language impairments (Table 37).

Table 36. Screenings for children enrolled in Navajo Nation Head Start and Early Head Start, FY2019

	Children (ages 0-5) newly enrolled in Head Start or Early Head Start	Received developmental, sensory, and behavioral screening within 45 days	Required follow-up assessment or evaluation
Navajo Nation Head Start & Early Head Start	1,212	56%	6%

Source: Office of Head Start (2020). 2019 Program Information Report. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/data/pir>

Table 37. Children with disabilities enrolled in the Navajo Nation Head Start and Early Head Start, FY2019

	Children (ages 0-5) enrolled in Head Start or Early Head Start	Children with an IEP or IFSP	Children with developmental delay	Children with speech or language impairment	Children with another disability
Navajo Nation Head Start & Early Head Start	1,726	62	55%	35%	6%

Source: Office of Head Start (2020). 2019 Program Information Report. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/data/pir>

As a child with special needs approaches age 3, they transition from receiving services through AzEIP to receiving services from their local education authority (LEA). About 100 young children (ages 3 to 5) with special needs have received services from LEAs in the Navajo Nation Region each year from 2017-18 to 2019-20.

Pandemic-related school closures also especially impacted children with special needs. In-person services for children through LEAs were disrupted and required transitions to remote modalities.<sup>206</sup> School-based services for children with special needs were also significantly impacted, with remote learning creating barriers to fulfilling students’ IEPs resulting, for some, in a loss of academic, social and physical skills that will require targeted support to address.<sup>207</sup> As schools return to in-person learning, children with special needs may need additional supports to build skills and recover unfinished learning over the past year and a half.

Table 38. Preschoolers with a disability receiving services from Local Education Agencies, 2017-18 to 2019-2020

Geography	Preschoolers enrolled in special education, 2017-18	Preschoolers enrolled in special education, 2018-19	Preschoolers enrolled in special education, 2019-20
<b>Navajo Nation (ADE schools)</b>	99	102	98
Window Rock Unified District	DS	DS	DS
Ganado Unified School District	DS	DS	DS
Chinle Unified District	15	20	DS
Red Mesa Unified District	DS	DS	DS
Leupp Public School (FUSD)	DS	DS	DS
Tuba City Unified School District #15	24	DS	18
Indian Wells Elementary (HUSD)	DS	DS	DS
Pinon Unified District	DS	DS	DS
Cedar Unified District	DS	DS	DS
Kayenta Unified School District #27	DS	DS	DS
Arizona Schools	10,123	10,314	10,521

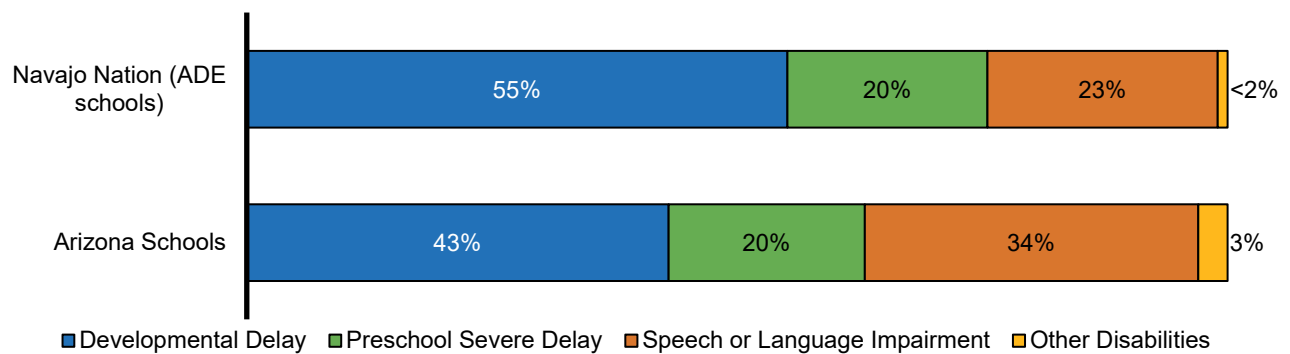
Source: Arizona Department of Education (2021). [Special Needs dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CREDE) team

Nationwide, the number of children receiving special education services has been increasing over the past few years.<sup>208,209,210</sup> Providing early intervention services for young children has been shown to reduce the need for special education services later in childhood,<sup>211</sup> so assuring that children have access

to timely and adequate screening and intervention services from birth to 5 can be key to helping children be ready for kindergarten.

In 2019-20, over half (55%) of the children who were in special education programs in public preschools in the Navajo Nation Region had a developmental delay; another 20% had a preschool severe delay; <sup>xix</sup> and 23% had a speech or language impairment (Figure 51). This pattern is somewhat different than across the state as a whole, where a lower proportion of children in special education programs in public preschools had a developmental delay (43%) and a larger share had a speech or language impairment (34%). Across school districts where data is available, some variability exists in the types of disability among preschoolers in special education programs (Figure 51).

Figure 51. Preschoolers enrolled in special education in ADE schools by type of disability, 2019-20



Source: Arizona Department of Education (2021). [Special Needs dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

In 2019-20, there were 339 children enrolled in special education services in public or charter schools in kindergarten through 3<sup>rd</sup> grade in ADE schools on the Navajo Nation Region. Given that this is more than six times the number of children birth to 2 in the region being served by early intervention services (44 served by AzeIP and DDD in 2020), it may be that children with delays are being identified and diagnosed when they are older, missing the earlier years when intervention can be more effective and less costly.

<sup>xix</sup> The preschool severe delay category is defined by Arizona as a very low score on assessments of in one or more of these areas: cognitive development, physical development, communication development, social or emotional development, or adaptive development from <https://www.azed.gov/specialeducation/disability-categories/>

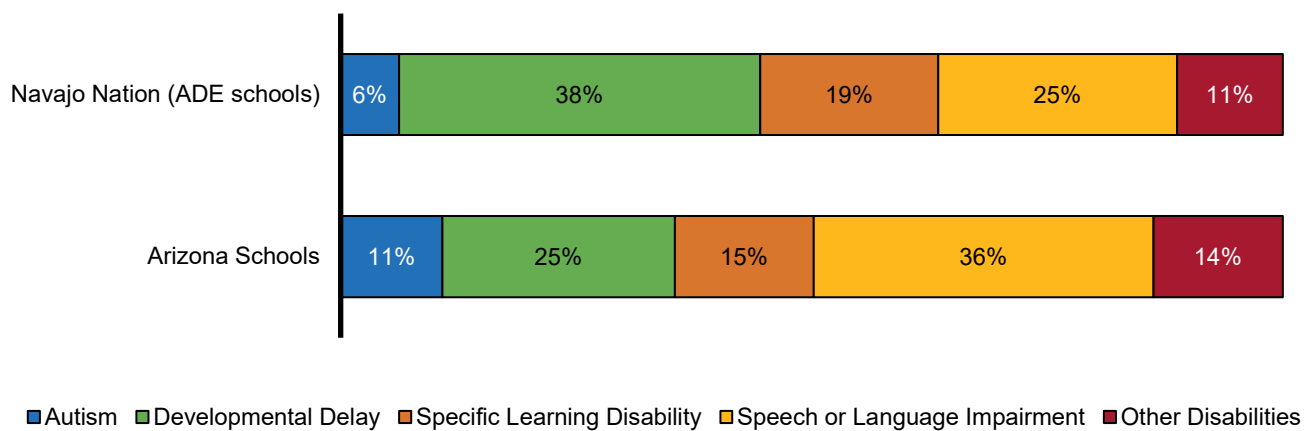
Table 39. Kindergarten to 3<sup>rd</sup> grade students enrolled in special education by type of disability, 2019-20

	Number of K-3 students enrolled	Autism	Developmental Delay	Specific Learning Disability	Speech or Language Impairment	Other Disabilities
<b>Navajo Nation (ADE schools)</b>	339	<b>6%</b>	<b>38%</b>	<b>19%</b>	<b>25%</b>	<b>11%</b>
Window Rock Unified District	[41-51]	6%	24%	31%	29%	10%
Ganado Unified School District	[27-37]	3%	69%	6%	6%	16%
Chinle Unified District	[69-99]	11%	39%	24%	24%	3%
Red Mesa Unified District	[12-22]	<2%	36%	7%	50%	7%
Leupp Public School (FUSD)	[12-22]	<2%	21%	5%	58%	16%
Tuba City Unified School District #15	55	5%	24%	9%	42%	20%
Indian Wells Elementary (HUSD)	[19-29]	8%	40%	40%	8%	4%
Pinon Unified District	[19-41]	<2%	52%	9%	26%	13%
Cedar Unified District	DS	<2%	25%	50%	<2%	25%
Kayenta Unified School District #27	[33-43]	8%	53%	18%	5%	16%
Arizona Schools	39,071	11%	25%	15%	36%	14%

Source: Arizona Department of Education (2021). [Special Needs dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Of those kindergarten through third grade students enrolled in special education in public and charter schools in the region, most have a primary disability of a developmental delay (38%) or speech or language impairment (25%) and 19% were diagnosed with a specific learning disability (15%) (Figure 52). Less often these children have a primary diagnosis of another disability (11%), or autism (6%). These proportions are different for children across the state as a whole: similar to the pattern among preschool-age children, in the state there is a smaller share of children with a developmental delay (25%) and a higher proportion of children diagnosed with a speed or language impairment (36%) (Figure 52).

Figure 52. Kindergarten to 3<sup>rd</sup> grade students enrolled in special education in ADE schools by type of disability, 2019-20



Source: Arizona Department of Education (2021). [Special Needs dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

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 parents 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.<sup>212,213</sup> Experiences during the prenatal and early childhood period can result in lifelong impacts on immune functioning, brain development, and risk for chronic diseases.<sup>214,215</sup> Early health also has lasting impacts on long-term economic well-being and the well-being of their future children, with poor childhood health potentially perpetuating the harmful cycle of intergenerational poverty.<sup>216,217</sup> Therefore, adequate access to health insurance, preventive care and treatment services are not only vital to support a child's current health, but for their long-term development and future success.<sup>218,219,220</sup>

One useful set of metrics for evaluating child health in Arizona are the Healthy People objectives. These science-based objectives define priorities for improving the nation's health and are updated every 10 years. Understanding where Arizona children and mothers fall in relation to these national benchmarks (Healthy People 2020)<sup>xx,221</sup> can help highlight areas of strength in relation to young children's health and those in need of improvement in the state. The Arizona Department of Health Services (ADHS) monitors state level progress towards a number of Healthy People maternal, infant and child health objectives for which data are available at the county level, including increasing the proportion of pregnant women who receive prenatal care in the first trimester, reducing low birth weight, reducing preterm births and increasing abstinence from cigarette smoking among pregnant women.<sup>222</sup>

## What the Data Tell Us

### Access to Care

The ability to obtain health care is critical for supporting the health of pregnant mothers and young children. Health care during pregnancy, i.e., prenatal care, can reduce maternal and infant mortality and complications during pregnancy.<sup>223,224</sup> In the early years of a child's life, well-baby and well-child visits allow clinicians to assess and monitor the child's development and offer developmentally appropriate information and guidance to parents.<sup>225</sup> Families without health insurance are more likely to skip these visits and are less likely to receive preventive care for their children or care for health conditions and chronic diseases.<sup>226,227</sup> Access to health insurance is also an important indicator of children's access to health services. Children who lack health insurance are more likely to be hospitalized and to miss school.<sup>228, 229</sup>

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<sup>xx</sup> Data included in this report are presented alongside Healthy People 2020 benchmarks because data are available through 2019. However, new Healthy People 2030 benchmarks have now been released and are noted where appropriate. For more information about Healthy People 2030 visit <https://health.gov/healthypeople>

Families in the Navajo Nation Region can access health care services through facilities operated by the Indian Health Service (IHS) and tribally-operated hospitals and clinics. The Navajo Area Indian Health Service provides health care services to American Indians who reside in the “four corners” area of the U.S. southwest which includes portions of the states of Arizona, New Mexico and Utah. Most service users are members of the Navajo Nation but the IHS Navajo Area also serves the Southern Band of San Juan Paiutes, Zuni and Hopi populations.

Services in the Navajo Area are provided through inpatient, outpatient contract, and community health programs based out of six hospitals, seven health centers, and 15 health stations. Health care facilities in the area include:

- Chinle Comprehensive Health Care Facility
- Crownpoint Health Care Facility
- Dziłth-Na-O-Dith-Hle Health Center
- Four Corners Regional Health Center
- Gallup Indian Medical Center
- Inscription House Health Center
- Kayenta Health Center
- Pinon Health Center
- Shiprock-Northern Navajo Medical Center
- Tohatchi Health Care Center
- Tsaile Health Center<sup>230</sup>

As a result of the Indian Self-Determination and Education Assistance Act (PL-93-638), federally recognized tribes have the option to receive the funds that IHS would have used to provide health care services to tribal members. The tribes can then utilize these funds to directly provide services to tribal members. Under the leadership of tribal health corporations, the Navajo Nation manages three tribally-operated health care facilities in Arizona under P.L. 93-638 (“638”) contracts:

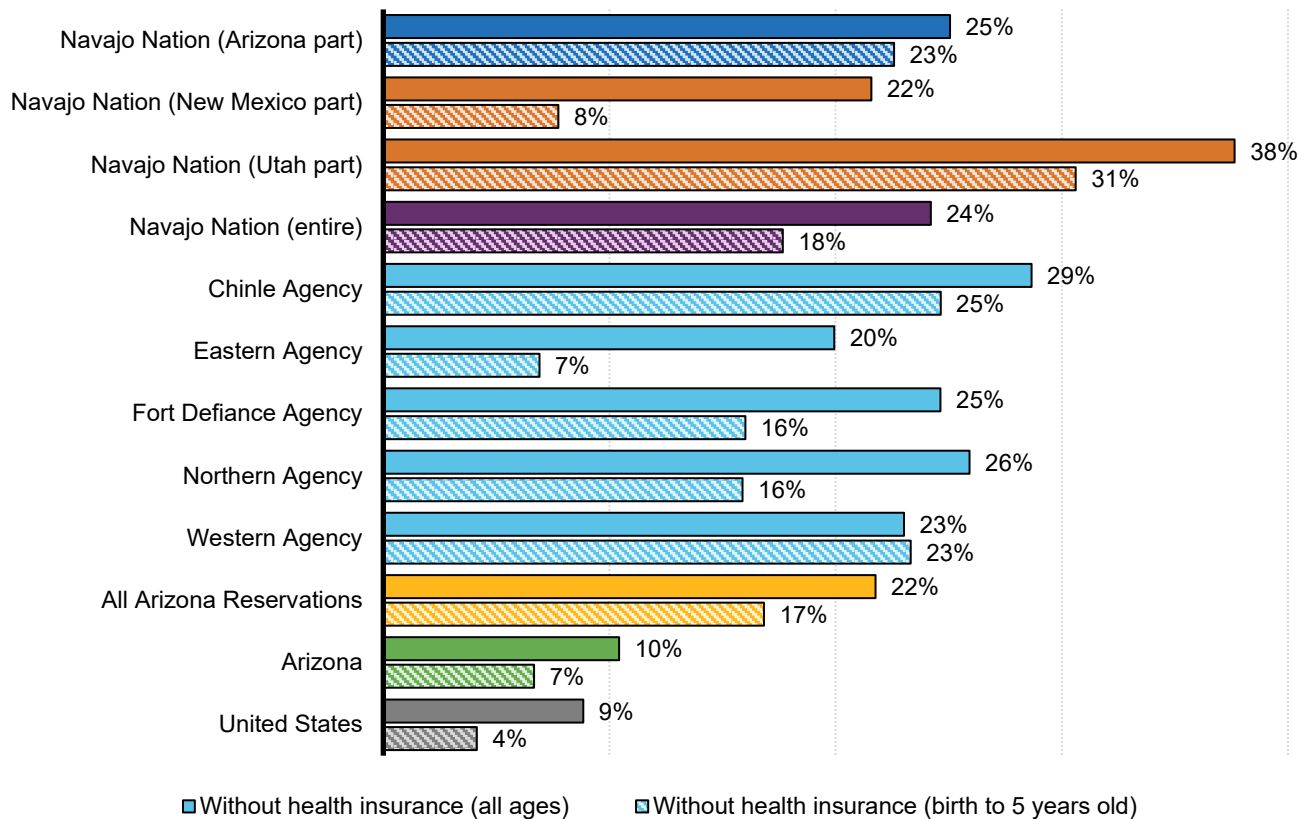
- Tsehootsooi Medical Center in Fort Defiance
- Tuba City Regional Health Care Corporation in Tuba City
- Winslow Indian Health Care Corporation in Winslow.

A key factor in accessing health care is health insurance. In the Navajo Nation Region, according to American Community Survey (ACS) data averaged over the five years from 2015 to 2019, an estimated one-quarter (25%) of the population do not have health insurance coverage, a higher percentage than seen across all Arizona reservations (22%) (Figure 53). Coverage is, however, slightly higher for children birth to 5, with 23% of young children in the region uninsured, a rate that is also higher than that across all Arizona reservations combined (17%). Insurance coverage varies across the agencies within the Navajo Nation Region: in the Western Agency, for instance, equal proportions of people in the general population and among young children are uninsured (23% in both cases), and these rates are similar to those across the region. The Chinle Agency has the highest share of uninsured people in the general population (29%) and among young children. As mentioned above in the *Economic Indicators*

section, the Chinle Agency also has the highest rates of poverty among both adults and young children (Figure 15). The proportion of the population that does not have health insurance is similar in the Fort Defiance (25%) and Northern Agencies (26%), and in both agencies the uninsured rates for young children are much lower than those among all residents (16%) (Figure 53).

It is important to note that the U.S. Census Bureau does not consider coverage by IHS, including care at 638 or other Urban Indian health care facilities, to be insurance coverage. Members of the Navajo Nation with or without health insurance may access health care services at the tribally-operated or IHS facilities listed above.

Figure 53. Health insurance coverage, 2015-2019 ACS



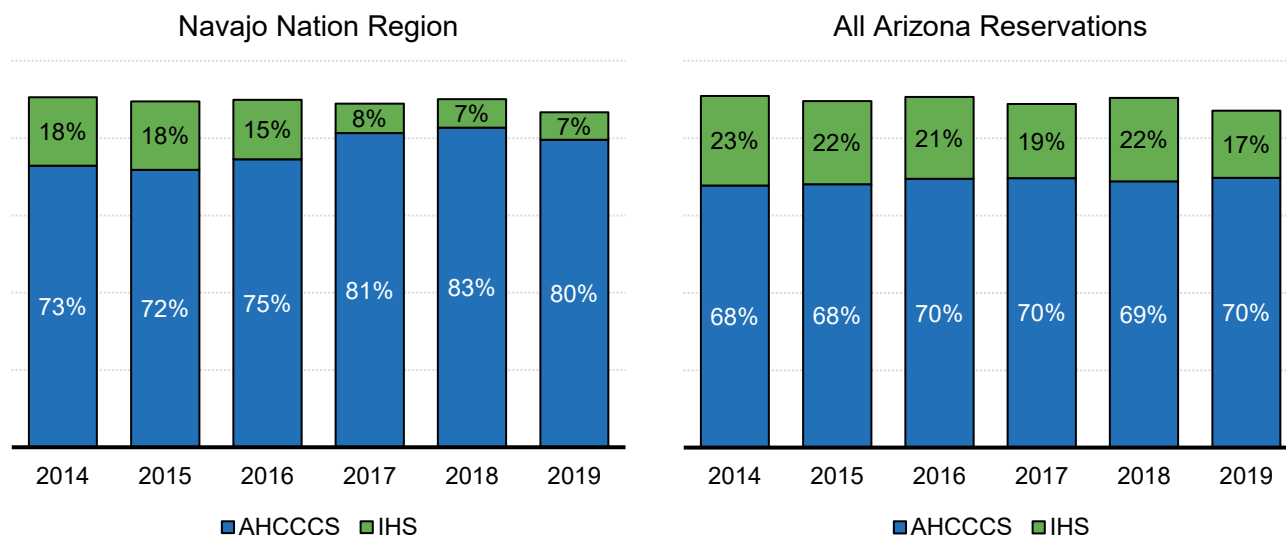
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B27001

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.

Another source of information about insurance coverage is the payor of births. About three-quarters of births in the region were paid for by AHCCCS between 2014 and 2016 (Figure 54). This proportion increased to 81% in 2017 and remained relatively stable for the next two years. In 2019, 80% of births were covered by AHCCCS and 7% by IHS. In all the years for which data were available (2014 – 2019) a higher share of births in the region were covered by AHCCCS compared to births across all Arizona reservations, where in 2019 70% of births were paid for by AHCCCS.

Facilitating enrollment in AHCCCS and other insurance plans can offer benefits both at the individual and community levels. Community members who enroll in AHCCCS can gain increased access to health care services by being able to receive care through AHCCCS providers. At the community level, tribes can benefit when their healthcare system bills AHCCCS, Medicare, or private insurance for health care services rendered and uses collections from these third-party payors to support and improve ongoing healthcare operations. The funds collected can therefore be of benefit to the tribal community as a whole.

Figure 54. Births paid by AHCCCS or IHS, 2014 to 2019



Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from <https://pub.azdhs.gov/health-stats/report/hspam/index.php>

Note: 'All Arizona Reservations' row reflects only births to American Indian mothers residing on Arizona reservations.

Federal relief efforts during the pandemic have included expansion of subsidies for health insurance purchased on Affordable Care Act marketplaces as well as special and expanded enrollment periods for insurance through these marketplaces.<sup>231</sup> These efforts helped prevent losses of insurance for many Americans despite the enormous number of jobs lost and may make health insurance more accessible for families in Arizona.<sup>232</sup> The Coronavirus Aid, Relief, and Economic Security (CARES) Act, Families First Coronavirus Response Act (FFCRA), and American Rescue Plan (ARP) also included several billion dollars of funding for IHS. Though much of this funding was directed toward immediate response to the COVID-19 pandemic in Indian Country, some of the funding was allocated for updating facilities, funding community health representative and public health nursing programs, and supporting mental health care and substance use programs.<sup>233, 234</sup>

## Prenatal Care

Consistent and accessible health care during and after pregnancy is critical for supporting pregnant mothers and young children. Prenatal care, starting early in pregnancy and continuing at regular intervals to delivery, can improve health outcomes for mothers and infants and reduces the risk of prenatal smoking, pregnancy complications, prematurity, and maternal and infant mortality.<sup>235,236,237,238</sup>

In 2019, there were 1,201 births in the Navajo Nation Region. Among these births, only 60.2% were to mothers who began prenatal care in their first trimester, which is noticeably lower than in all Arizona reservations (75.3%) and is far below the Healthy People 2020 target of 84.8% (Table 40). The percentage of births to women who had fewer than five prenatal care visits (15%) was also lower in the region compared to births across all Arizona reservations combined (20%). In contrast, the proportion of births to mothers who had no prenatal care in the region mirrored that in reservation lands across the state (6%).

Table 40. Prenatal care for the mothers of babies born in 2018 and 2019

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 Nation Region	2018	1,071	3%	11%	65.4%
	2019	1,201	6%	15%	60.2%
All Arizona Reservations	2018	1,990	5%	18%	64.4%
	2019	2,180	6%	20%	75.3%
Arizona	2018	80,539	3%	8%	68.8%
	2019	79,183	3%	8%	68.9%
Healthy People 2020 target					84.8%

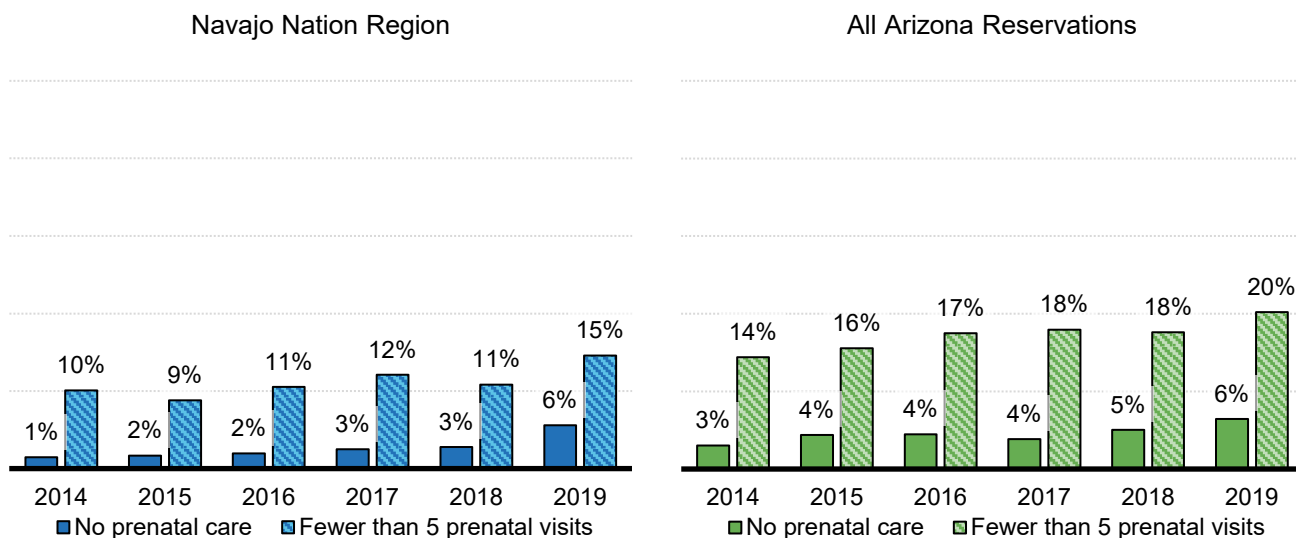
Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from <https://pub.azdhs.gov/health-stats/report/hspam/index.php>

Note: 'All Arizona Reservations' reflects only births to American Indian mothers residing on Arizona reservations. Mothers of twins are counted twice in this table.

Examining trends over time shows that in the Navajo Nation Region, the percentage of births to mothers with inadequate prenatal care has been consistently lower than across all Arizona reservations over the past several years. From 2014 to 2018 the share of births to mothers who had less than five prenatal visits remained stable, with about one in 10 births being to women receiving this level of care. In 2019, that proportion increased to 15%. The percentage of births to women who had no prenatal care at all increased slightly from 1% in 2014 to 3% in 2018, and increased again in 2019 to 6% (Figure 55). Key informants indicated that some expectant mothers might have mistrust in the health care system and may also not be fully aware of the importance of prenatal care. Lack of resources and adequate infrastructure,

were mentioned as another barrier to accessing services such as prenatal care. In addition, key informants indicated that teenaged mothers may experience feelings of shame when accessing prenatal care services. Although rates of inadequate prenatal care in the region are generally lower than across Arizona reservations, continued efforts around health education and outreach to expectant mothers can help prevent the increasing trend in rates seen in 2019.

Figure 55. Births to mothers with inadequate prenatal care, 2014 to 2019



Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from <https://pub.azdhs.gov/health-stats/report/hspam/index.php>

Note: 'All Arizona Reservations' reflects only births to American Indian mothers residing on Arizona reservations. Mothers of twins are counted twice in these figures.

Data on prenatal care were available for this report at the agency level for those agencies that fall within the Navajo Nation Region. Due to the small number of births each year in the Northern Agency, Table 41 below shows data combined for two three-year periods: 2014-2016 and 2017-2019. The increase in the rates of births to mothers who had inadequate prenatal care in those two periods is also visible at the agency level.

Table 41. Prenatal care for the mothers of babies born in 2014-2016 and 2017-2019

Subregion	Three-year period	Number of births	Mother had no prenatal care	Mother had fewer than five prenatal visits	Mother began prenatal care in the first trimester
Navajo Nation Region	2014-2016	4,049	2%	10%	66.5%
	2017-2019	3,588	4%	13%	63.9%
Chinle Agency	2014-2016	1,517	2%	10%	65.2%
	2017-2019	1,281	3%	13%	66.5%
Fort Defiance Agency	2014-2016	1,080	1%	8%	69.1%
	2017-2019	935	4%	13%	65.8%
Northern Agency	2014-2016	108	[2% to 15%]	8%	64.8%
	2017-2019	84	[2% to 19%]	11%	61.9%
Western Agency	2014-2016	1,344	2%	11%	66.0%
	2017-2019	1,288	3%	12%	60.1%

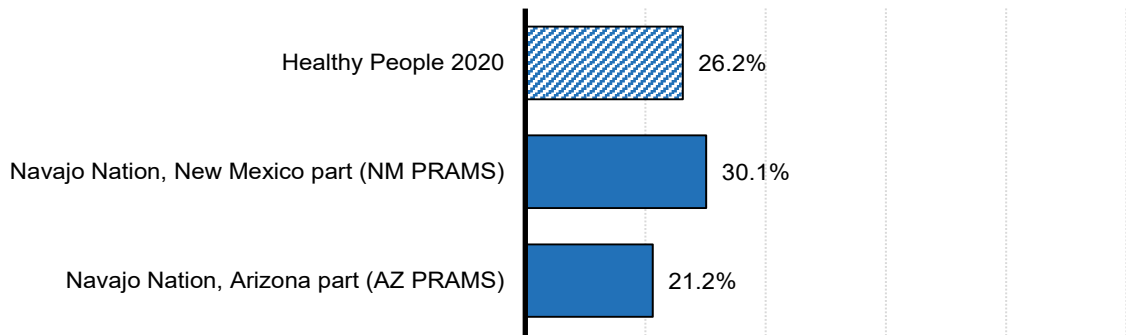
Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from <https://pub.azdhs.gov/health-stats/report/hspam/index.php>

Note: 'All Arizona Reservations' reflects only births to American Indian mothers residing on Arizona reservations. Mothers of twins are counted twice in this table.

Daily prenatal vitamin use is recommended during the pregnancy and postpartum periods. The Navajo Nation Maternal and Child Health Needs Assessment report includes data on prenatal vitamin use from the Centers for Disease Control and Prevention Pregnancy Risk Assessment Monitoring System (PRAMS) systems in Arizona and New Mexico<sup>xxi</sup>. On the Arizona side of the Navajo Nation, 21.2% of mothers who gave birth between 2016 and 2018 reported daily use of prenatal vitamins ( Figure 56).

<sup>xxi</sup> For more information about PRAMS see <https://www.cdc.gov/prams/index.htm>

Figure 56. Percent of mothers giving birth who reported using prenatal vitamins every day, 2016-2018



Source: Waters et al. (2021). 2020 Navajo Nation Maternal and Child Health Needs Assessment. Report received by request.

### Maternal Characteristics

Certain maternal characteristics can increase the risk of poor health outcomes for both mothers and their babies. A mother’s health status before, during and after pregnancy influences her child’s health. A mother’s use of substances, such as drugs and alcohol, has implications for her baby. Pregnancy during the teen years is also associated with a number of health concerns for children, including neonatal death, sudden infant death syndrome and child abuse and neglect.<sup>239</sup>

In 2019, the percent of births to teenaged mothers in the Navajo Nation Region was slightly lower than the percentage seen in all Arizona reservations; 3% of births were to mothers younger than 18 compared to 4% across all reservations in Arizona, and 9% were to mothers younger than 20 compared to 10% in statewide reservation lands (Table 42).

Maternal obesity is associated with increased risk of birth complications and neonatal and infant mortality.<sup>240,241</sup> In addition to health implications early in life, babies of mothers who have obesity are at an increased risk for chronic conditions in childhood and adulthood, including asthma, diabetes and heart disease.<sup>242</sup> Of total births in the region in 2019, 43% were to mothers with pre-pregnancy obesity (compared to 30% statewide), a large increase from 2018 when 30% of births were to mothers with pre-pregnancy obesity. Nearly one in five births (18%) were to mothers who had gestational diabetes, a proportion that was twice that seen across the state (9%) (Table 42).

Babies born to mothers who smoke are more likely to be born early (pre-term), have low birthweight, die from sudden unexpected infant death (SUID) and have weaker lungs than babies born to mothers who do not smoke.<sup>243, 244</sup> The share of births to mothers who used tobacco during pregnancy was lower in the region (1.8%) than in all Arizona reservations combined (3.2%) and the state (4.3%), though it was still slightly over the Healthy People 2020 target of no more than 1.4% of births being to women who use tobacco while pregnant (Table 42).



Table 42. Selected characteristics of mothers giving birth, 2018 to 2019

Geography	Calendar year	Number of births	Mother was younger than 18	Mother was younger than 20	Birth was covered by AHCCCS	Birth was covered by IHS	Mother had gestational diabetes	Mother had pre-pregnancy obesity	Mother used tobacco during pregnancy
Navajo Nation Region	2018	1,071	3%	9%	83%	7%	17%	30%	2.2%
	2019	1,201	3%	9%	80%	7%	18%	43%	1.8%
All Arizona Reservations	2018	1,990	5%	11%	69%	22%	N/A	N/A	4.0%
	2019	2,180	4%	10%	70%	17%	N/A	N/A	3.2%
Arizona	2018	80,539	2%	6%	50%	1%	8%	29%	4.5%
	2019	79,183	1%	5%	49%	1%	9%	30%	4.3%
Healthy People 2020 target									1.4%

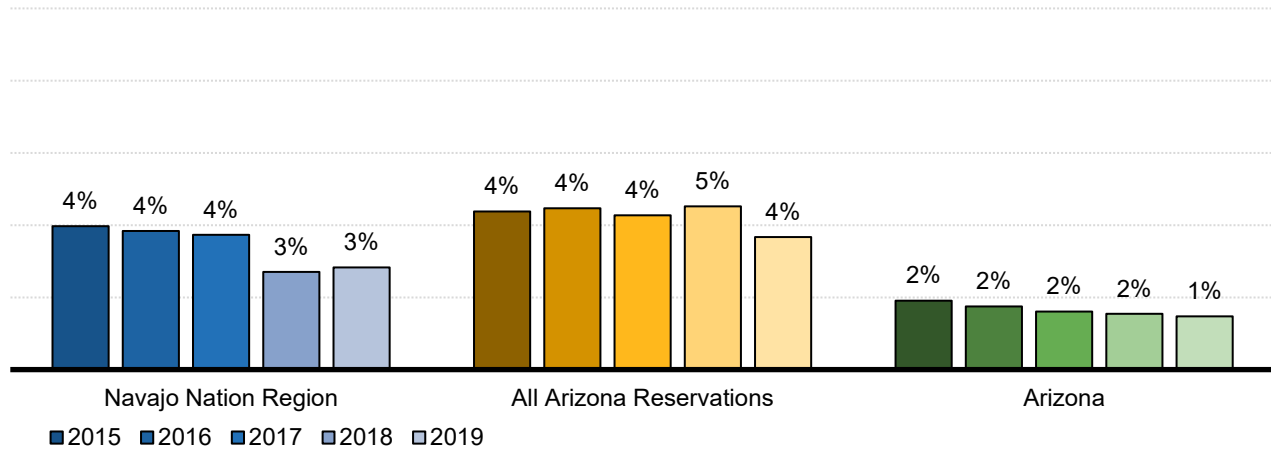
Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from <https://pub.azdhs.gov/health-stats/report/hspam/index.php>

Note: 'All Arizona Reservations' reflects only births to American Indian mothers residing on Arizona reservations. Mothers of twins are counted twice in this table.

Note: The Healthy People 2030 target for maternal use of tobacco during pregnancy was increased to no more than 4.3% of females giving birth reporting smoking during pregnancy, or alternatively 95.7% of females reporting abstaining from smoking during pregnancy.

Looking at trends between 2015 and 2019 shows that the percentage of births to teenaged mothers under age 18 has decreased very slightly from 4% to 3%. Across those years, this proportion was the same or lower than in all Arizona reservations combined, but higher than across the state as a whole (Figure 57).

Figure 57. Births to mothers younger than 18, 2015 to 2019



Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from <https://pub.azdhs.gov/health-stats/report/hspam/index.php>

Note: 'All Arizona Reservations' reflects only births to American Indian mothers residing on Arizona reservations. Mothers of twins are counted twice in this figure.

## Birth Outcomes

Preterm birth, defined as birth at less than 37 weeks of gestation, is associated with higher infant and child mortality and often results in longer hospitalization, increased health care costs and longer-term impacts such as physical and developmental impairments.<sup>245,246</sup> In 2019, 10.4% of babies born in the Navajo Nation Region were preterm, a lower proportion than across all Arizona reservations (11.5%), but higher than across Arizona (9.3%) (Table 43). Rates of preterm births in the region, however, varied each year between 2014 and 2019 ranging from 7.1% in 2015 and 2018, to 11.3% in 2017. This means that in half of the years in that period, the region met the Healthy People 2020 target of no more than of 9.4% of babies born preterm. Across Arizona reservations, on the other hand, there was an overall rise in the rate of preterm births from 9.5% to 11.5% over the same period (Figure 58).

Babies born at a low birthweight (less than 5 pounds, 8 ounces) are at increased risk of infant mortality and longer-term health problems such as diabetes, hypertension and cardiac disease.<sup>247,248</sup> In 2019, 7.7% of births in the Navajo Nation Region were low-birthweight, compared to 8.3% of births in all Arizona reservations and 7.4% in the state (Table 43). There has been an overall increase in the rates of low-birthweight births in the region from 5.6% in 2014 to 7.7% in 2019. Despite this increasing trend, the region has met the Healthy People 2020 target of less than 7.8% of babies born at low birthweight (Figure 59).

Table 43. Selected birth outcomes, 2018 to 2019

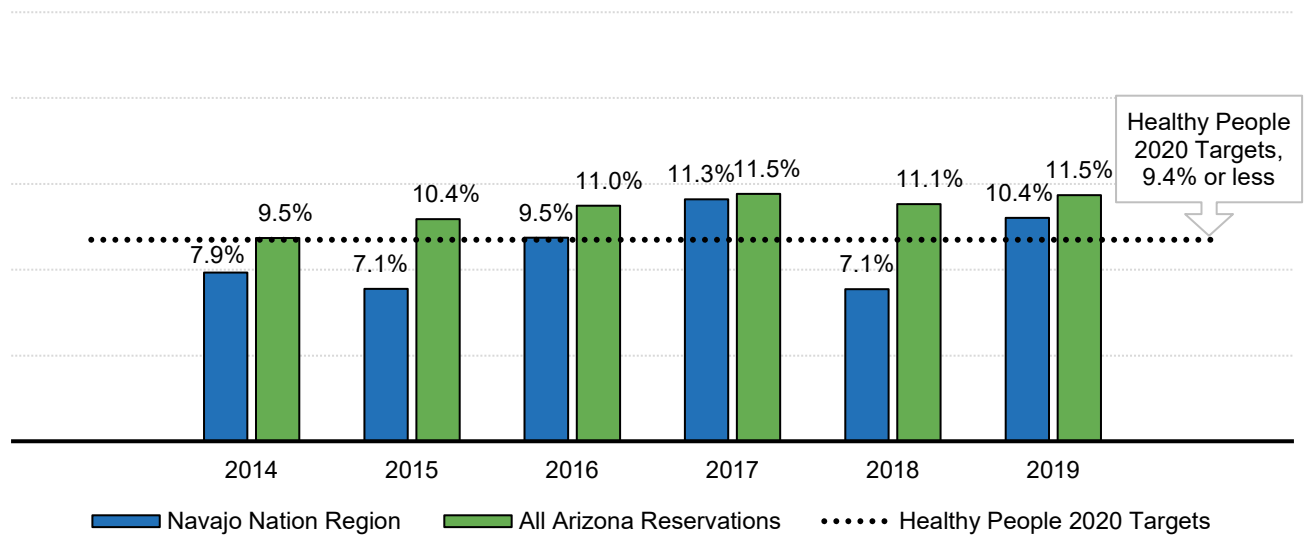
Geography	Calendar year	Number of births	Baby weighed less than 2500 grams	Baby was preterm (less than 37 weeks)	Baby was admitted to a NICU
Navajo Nation Region	2018	1,071	6.4%	7.1%	4%
	2019	1,201	7.7%	10.4%	7%
All Arizona Reservations	2018	1,990	7.5%	11.1%	N/A
	2019	2,180	8.3%	11.5%	N/A
Arizona	2018	80,539	7.6%	9.5%	8%
	2019	79,183	7.4%	9.3%	8%
Healthy People 2020 targets			7.8%	9.4%	

Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from <https://pub.azdhs.gov/health-stats/report/hspam/index.php>

Note: 'All Arizona Reservations' row reflects only births to American Indian mothers residing on Arizona reservations.

Note: The Healthy People 2030 target for preterm births remains 9.4% or fewer of live births.

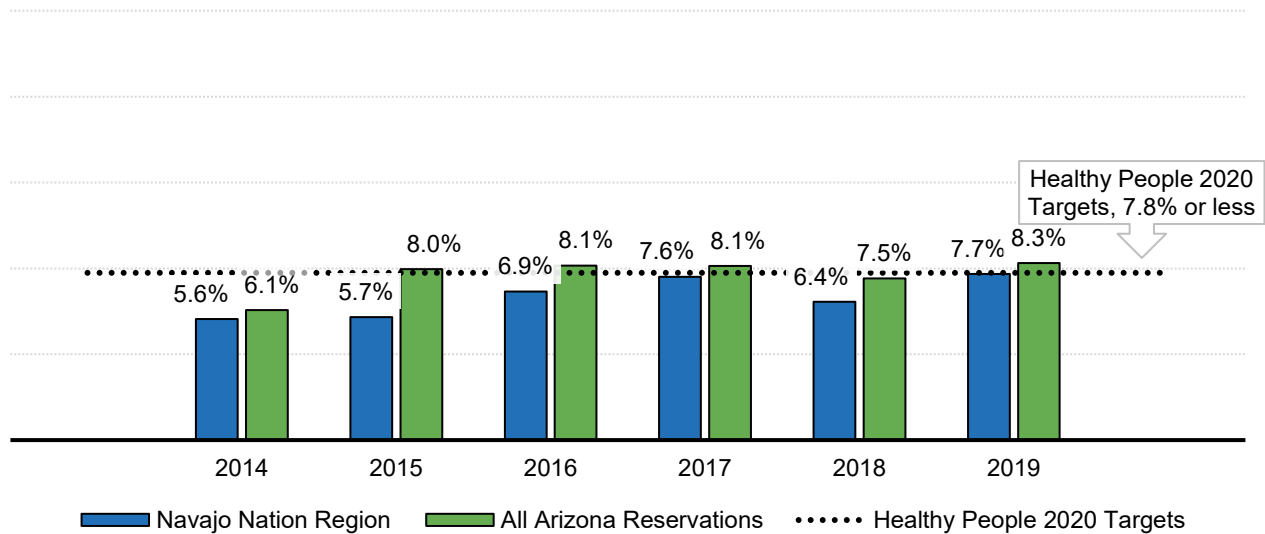
Figure 58. Preterm births (less than 37 weeks gestation), 2014 to 2019



Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from <https://pub.azdhs.gov/health-stats/report/hspam/index.php>

Note: 'All Arizona Reservations' row reflects only births to American Indian mothers residing on Arizona reservations.

Figure 59. Low birthweight births (less than 2,500 grams), 2014 to 2019

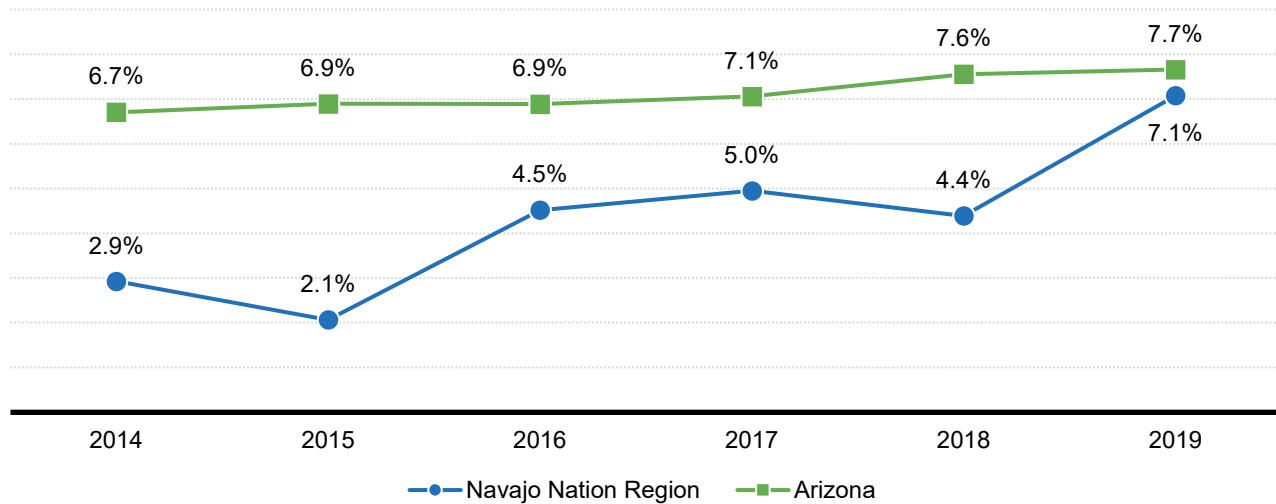


Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from <https://pub.azdhs.gov/health-stats/report/hspam/index.php>

Note: 'All Arizona Reservations' row reflects only births to American Indian mothers residing on Arizona reservations.

Newborns are admitted into neonatal intensive care units (NICUs) for numerous reasons that have implications for the short and long-term health of babies.<sup>249</sup> In 2019, 7.1% of babies born in the Navajo Nation Region were admitted to the NICU. This proportion is slightly lower than that across all Arizona reservations (7.7%) (Figure 60). However, looking at data over time, the rate of babies admitted into the NICU more than doubled from 2.9% in 2014 to 7.1% in 2019. In comparison, the proportion of NICU admissions among babies born in all Arizona reservations has increased only slightly over the same period (from 6.7% to 7.7%) and has been much higher each year than in the region with the exception of 2019 (Figure 60). This increasing pattern in NICU admissions in the region generally mirrors the increase in the rates of low-birthweight births, and may be related to that negative birth outcome. While NICU admissions may be an indicator of important health concerns in newborns, including low birthweight, they can also be leveraged as a potential site of family-based interventions that can positively impact infant development and parent-child relationships.<sup>250</sup>

Figure 60. Babies admitted to a neonatal intensive care unit (NICU), 2014 to 2020



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

A mother’s use of substances such as drugs and alcohol also has implications for her baby. Opiate use during pregnancy, either illegal or prescribed, has been associated with neonatal abstinence syndrome (NAS), a group of conditions that causes infants exposed to these substances in the womb to be born exhibiting withdrawal symptoms.<sup>251</sup> This can create longer hospital stays, increase health care costs and increase complications for infants born with NAS. Infants exposed to cannabis (marijuana) in utero often have lower birthweights and are more likely to be placed in neonatal intensive care compared to infants whose mothers had not used the drug during pregnancy.<sup>252</sup> In the Navajo Nation Region, there were 44 newborns hospitalized because of maternal drug use during pregnancy between January 2016 and June 2020. Their average hospital length of stay (10.1 days) was longer than for newborns in the same circumstance statewide (6.0) (Table 44).

Table 44. Newborns hospitalized because of maternal drug use during pregnancy, January 2016-June 2020 (cumulative)

Geography	Newborns hospitalized	Average length of stay (days)
<b>Navajo Nation Region</b>	<b>44</b>	<b>10.1</b>
Arizona	11,027	6.0

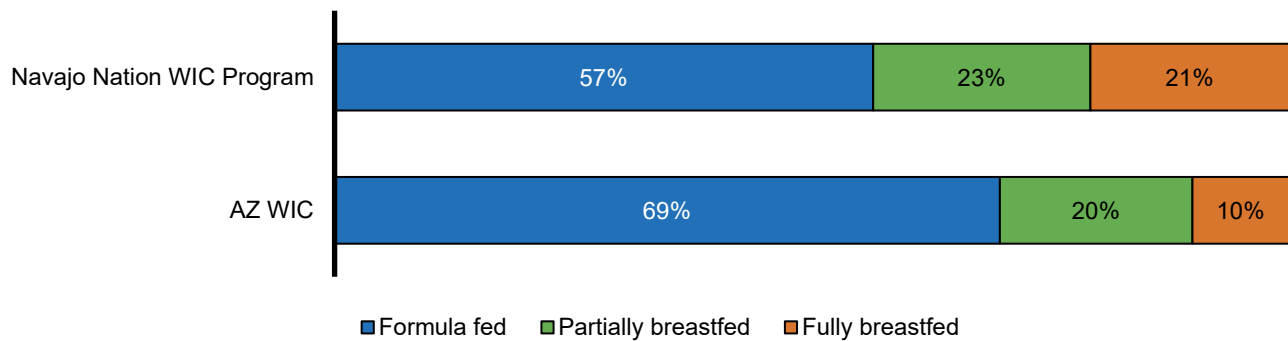
Source: Arizona Department of Health Services (2021). [Hospital Discharge dataset]. Unpublished data.

## Nutrition and Weight Status

After birth, a number of factors have been associated with improved health outcomes for infants and young children. One factor is breastfeeding, which has been shown to reduce the risk of ear, respiratory and gastrointestinal infections, SIDS, overweight, and type 2 diabetes.<sup>253</sup>

According to the 2020 Navajo Nation Maternal and Child Health Needs Assessment, in 2016-2018 about two in five infants (44%) enrolled in the Navajo Nation Women, Infants and Children (WIC) program were breastfed, whether partially (23%) or fully (21%). In comparison, only 30% of infants in the Arizona state WIC program were breastfed (20% partially and 10% fully) (Figure 61).

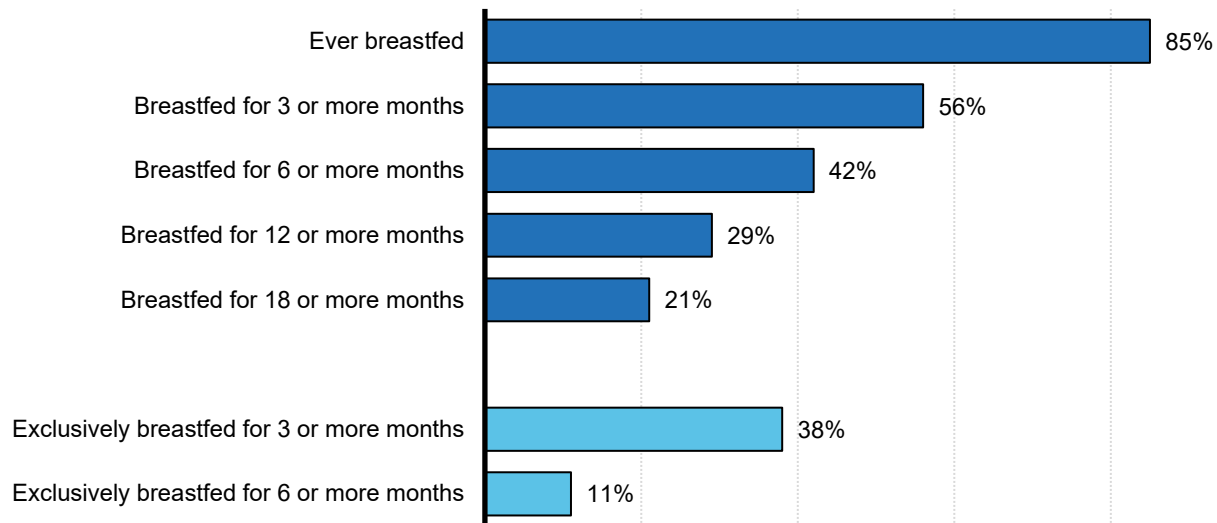
Figure 61. Feeding method for infants enrolled in WIC, 2016-2018



Source: Waters et al. (2021). 2020 Navajo Nation Maternal and Child Health Needs Assessment. Report received by request.

Data provided by the Navajo Nation WIC program indicate that in 2019, 85% of infants were ever breastfed or given human milk at birth or sometime after, 42% were breastfed for at least six months and 29% for at least one year (Figure 62). The American Academy of Pediatrics recommends exclusive breastfeeding for about six months, and continuing to breastfeed as new foods are introduced for one year or longer.<sup>254</sup> About one in 10 infants (11%) in the Navajo Nation WIC program were exclusively breastfed for six months (Figure 62).

Figure 62. Breastfeeding rates for infants enrolled in Navajo Nation WIC, 2019

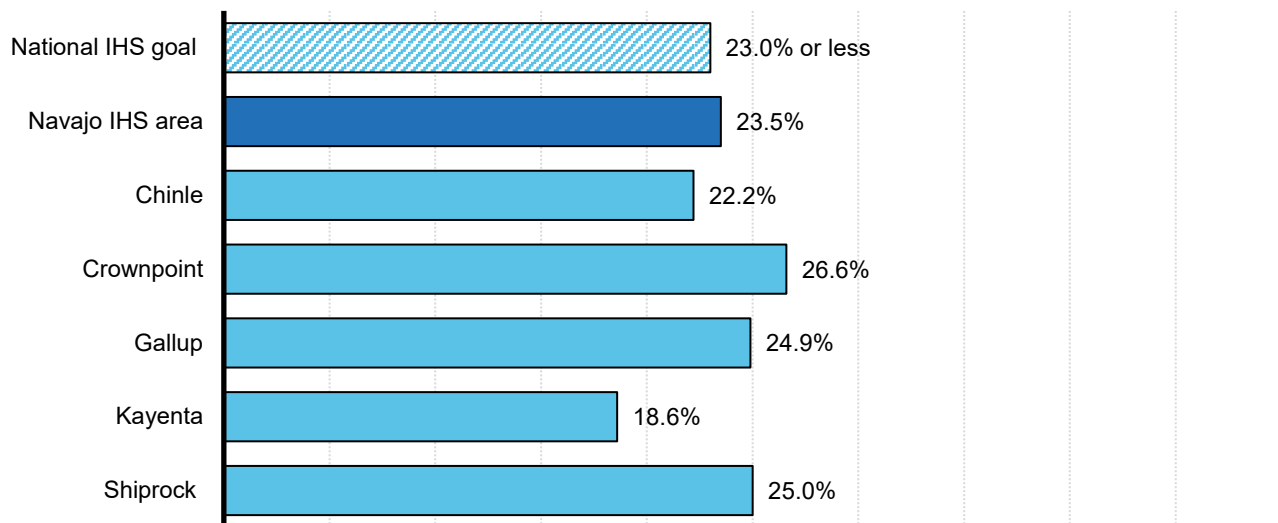


Source: Arizona Department of Health Services (2021). [2019 Navajo Nation WIC data]. Unpublished tribal data received by request.

A child’s weight status can have long-term impacts on health and well-being. Nationwide, an estimated 19% of children (ages 2-19) are obese and 4% are underweight, numbers that have both increased in recent years.<sup>255,256</sup> Obesity can have negative consequences on physical, social and psychological well-being that begin in childhood and continue into and throughout adulthood.<sup>257</sup> Higher birthweight and higher infancy weight, as well as lower-socioeconomic status and low-quality mother-child relationships, have all been shown to be related to higher childhood weight and increased risk for obesity and metabolic syndrome (which is linked to an increased risk of heart disease, stroke and diabetes).<sup>258, 259</sup>

Data on the obesity rate for young children were available from the 2020 Navajo Nation Maternal and Child Health Needs Assessment. These data are part of the IHS Navajo Area Government Performance and Results Act (GPRA) reporting, and show that 23.5% of children ages 2 to 5 in the Navajo IHS Area had obesity, a rate that is slightly above the national IHS goal of 23% (Figure 63). Obesity rates varied by geographic area, with Kayenta having the lowest rate (18.6%), meeting the IHS goal.

Figure 63. Obesity rate for children ages 2-5, Navajo IHS GPRA, 2019



Source: Waters et al. (2021). 2020 Navajo Nation Maternal and Child Health Needs Assessment. Report received by request.

## Oral Health

Oral health and good oral hygiene practices are important to children’s overall health. Tooth decay and early childhood cavities can have short- and long-term consequences including pain, poor appetite, disturbed sleep, lost school days, and reduced ability to learn and concentrate.<sup>260</sup> In 2010, IHS implemented an ongoing oral health surveillance system to monitor the oral health of American Indian and Alaska Native (AI/AN) children.<sup>261</sup> Historically, this population has seen the highest rates of tooth decay in the United States, and it continues today at a rate that is three times than that of White children. The most recent data available from the 2018-19 IHS oral health survey of children ages 1 to 5 found that rates of cavities and untreated tooth decay are declining for AI/AN children nationwide. Despite this improvement, more than half of young AI/AN children ages 1 to 5 (54%) have early childhood caries.

Data specific for the Navajo IHS Area show a 24% reduction in the prevalence of early childhood caries from 78% in the 2010 IHS oral health survey, to 59.5% in the 2018-19 one. The IHS Navajo Area also had a statistically significant reduction in the prevalence of untreated decay.<sup>262</sup> These positive trends are a strength in the Navajo Nation Region. However, the prevalence rates of early childhood caries in the IHS Navajo Area continue to be relatively high and suggest a continued need for timely oral health care for young children.

According to the Inter Tribal Council of Arizona’s 2020 Oral Health Surveillance report, access to dental care for active IHS users of all ages in Arizona remained steady between 2013 and 2018 with nearly 80% having at least one dental encounter. Access to care, however, was generally lower for children birth to 5 and decreased over time from 68% in 2013 to 53% in 2018. Dental sealant encounters for young IHS active users in Arizona also decreased in this period, especially for children ages birth to 2, who had the lowest percentage of sealant encounters all of age groups and decreased from 23% in



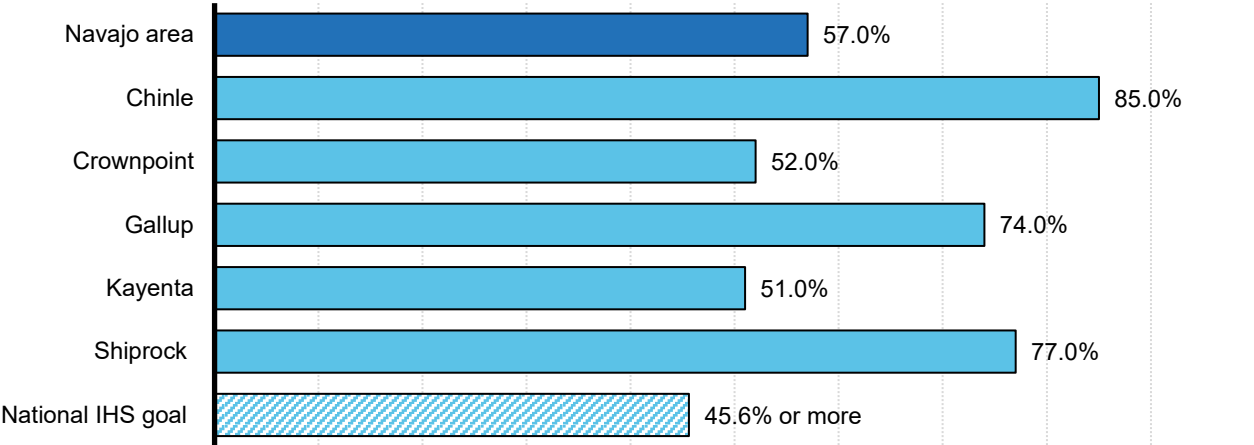
2013 to 1% in 2018. Topical fluoride is another common tooth decay prevention method. Among Arizona young IHS users, about two-thirds of children ages 3 to 5 received at least one topical fluoride treatment each year between 2013 and 2018. In that same period, however, the proportion of children birth to 2 receiving topical fluoride treatments decreased sharply from 61% to 40%.<sup>263</sup> These data suggest that there remains a strong need for focused oral health efforts on primary prevention in tribal communities across the state.

**Immunizations and Infectious Disease**

Vaccination against preventable diseases protects children and the surrounding community from illness and potentially death. Childhood vaccinations also have long-term effects on the physical, social and economic welfare of children, their families and their communities.<sup>264</sup> In order to attend licensed child care programs and schools, children must obtain all required vaccinations or obtain an official exemption, which can be requested based on a specific medical condition or based on personal or religious beliefs.<sup>265</sup> Data on the immunization rates for young children in the Navajo Nation Region were available from two sources: the Navajo Indian Health Service Government Performance and Results Act (GPRA) reporting system, and from ADHS for children enrolled in selected child care and preschool programs.

According to data from the Navajo IHS Area included in the 2020 Navajo Nation Maternal and Child Health Needs Assessment, 57% of children ages 19 to 35 months were up-to-date in their immunizations in 2018. The overall immunization rate for the Area met the National IHS goal of 45.6% or more children in that age range being fully vaccinated (Figure 69). Immunization rates varied widely in the various subregions within the Navajo IHS Area: Chinle had the highest rate (85%), and Kayenta had the lowest one, with only 51% of children being up-to-date on their immunizations (Figure 69).

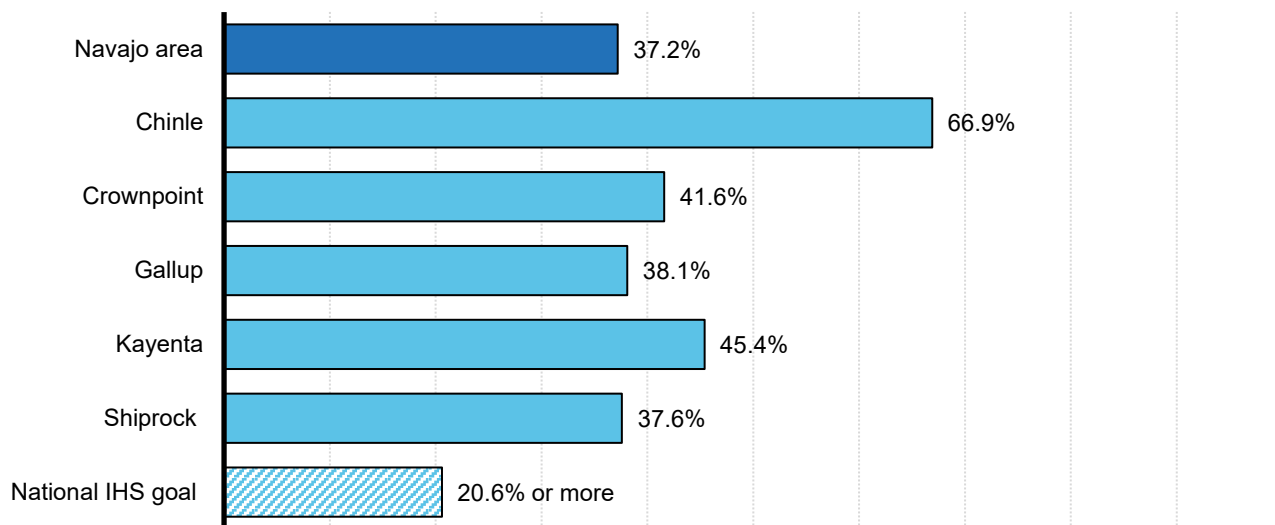
Figure 64. Percent of children (ages 19-35 months) who are up-to-date on all early childhood immunizations, Navajo IHS GPRA, 2018



Source: Waters et al. (2021). 2020 Navajo Nation Maternal and Child Health Needs Assessment. Report received by request.

Data on the percent of children ages 6 months to 17 years were also available from the 2020 Navajo Nation Maternal and Child Health Needs Assessment for children who received their annual influenza immunization in 2018. For the entire IHS Navajo Area, 37.2% of children were immunized against influenza, meeting the national IHS goal of 20.6% or more children receiving this vaccination. Rates also varied by geographic area, with Chinle’s rate (66.9%) notably higher than the rate in the Navajo IHS Area as a whole (Figure 65).

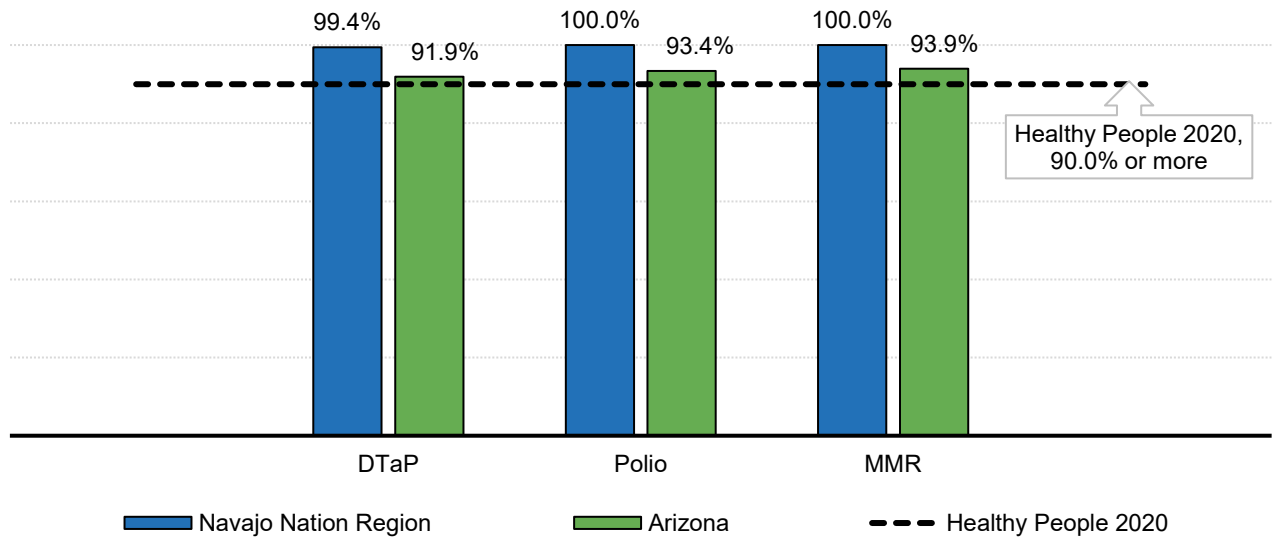
Figure 65. Percent of children (children 6 months to 17 years old) with annual influenza immunization, Navajo IHS GPRA, 2018



Source: Waters et al. (2021). 2020 Navajo Nation Maternal and Child Health Needs Assessment. Report received by request.

Data on immunization rates were also available for children enrolled in selected child care and preschool programs in the Navajo Nation Region including Indian Wells Preschool, Tuba City Primary, Pinon Elementary, Chinle Elementary, Tuba City High, Many Farms Elementary, Tsaile Public, Canyon de Chelly, and Dine Family Learning Center. The Healthy People 2020 target for vaccination coverage for children ages 19-35 months for the three major vaccine series (DTaP, polio, and MMR) is 90%. The combined rates for children in child care centers and preschool programs in the region are above target for all of these vaccines: 99.4% for DTaP and 100% for polio and MMR (Figure 66). These immunization rates are notably higher than those reported by the IHS Navajo Area (Figure 64). This is likely due to the fact that child care and preschool programs require children to be up-to-date on their immunizations.

Figure 66. Children in child care or preschool with required immunizations, 2019-20



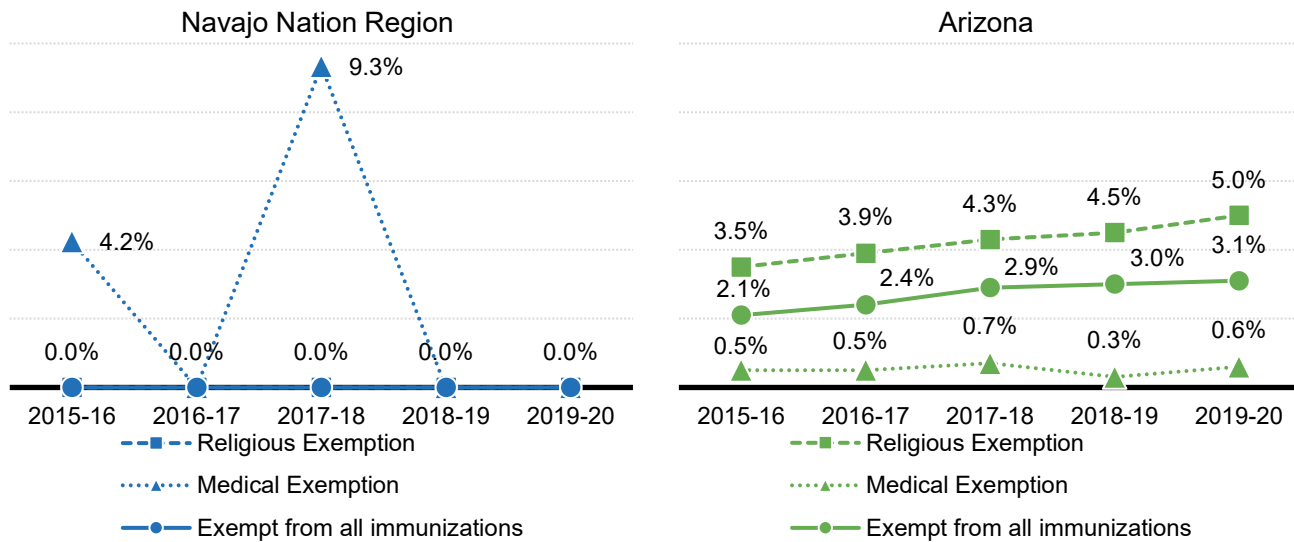
Source: Arizona Department of Health Services (2021). *Childcare Immunization Coverage, 2019-2020 School Year*. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2020). *Childcare Immunization Coverage by County, 2019-2020 School Year*. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Schools represented: Indian Wells Preschool, Tuba City Primary, Pinon Elementary, Chinle Elementary, Tuba City High, Many Farms Elementary, Tsale Public, Canyon de Chelly, and Dine Family Learning Center

The Healthy People 2030 target for immunization rates of children in kindergarten for the MMR vaccine remained at 95%; goals for DTaP and polio were not included.

If medical conditions or religious beliefs stand in the way of a young child receiving a required vaccine, parents are able to file for an exemption. In the period of 2015-16 to 2019-29 there were only two school years in which children enrolled in selected child care centers and preschool programs in the region had a vaccine exemption: In 2015-16, 4.2% of children had a medical vaccine exemption, and in 2017-18, 9.3% of children had an exemption also for medical reasons. In the remaining years, there were no vaccine exemptions, whether religious or medical (Figure 67).

Figure 67. Child care immunization exemption rates, 2015-16 to 2019-20



Source: Arizona Department of Health Services (2021). *Childcare Immunization Coverage, 2015-2016 to 2019-2020 School Years*. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2021). *Childcare Immunization Coverage by County, 2015-2016 through 2019-2020 School Years*. Retrieved from: <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Schools represented: Indian Wells Preschool (2016-17 to 2019-20), Tuba City Primary (2018-19 to 2019-20), Pinon Elementary (2015-16 to 2019-20), Chinle Elementary (2015-16 to 2016-17, 2019-20), Tuba City High (2018-19 to 2019-20), Many Farms Elementary (2015-16 to 2017-18, 2019-20), Tsaile Public (2015-16 2019-20), Canyon de Chelly (2017-18, to 2019-20), Dine Family Learning Center (2019-20), Kin Dah Lichi'I Olta (2015-16, 2018-19), Tsehooitsooi Primary Learning Center (2015-16), Leupp Public (2015-16 to 2017-18), Leupp Boarding School (2017-18) Kayenta Early Childhood Education (2015-16 to 2016-17), Red Mesa Elementary (2017-18 to 2018-19), Ganado Primary (2017-18) and St Michaels Indian School (2015-16 to 2017-18)

To enroll a child in kindergarten, whether in a district, charter, private or parochial school, Arizona law requires that parents provide proof of certain required immunizations. Data on immunizations rates were available for kindergarteners in the following schools in the Navajo Nation Region: Canyon de Chelly Elementary, Chinle Elementary, Dilcon Elementary, Hunters Point Boarding School, Indian Wells Elementary, Jeddito School, Jeehdeez'a Academy (Low Mountain), Leupp Boarding School, Leupp Public School, Many Farms Community, Many Farms Public, Pine Springs Day, Pinon Elementary, Saint Michael Indian School, Tsaile Elementary, Tsehootsooi Dine Bi'olta' and Tuba City Elementary. Rates for the three major vaccine series (DTAP, polio, and MMR) for kindergarteners in these schools were higher (98.1%, 98.6%, 98.1%) than rates seen statewide in the 2019-20 school year. All three rates met the Healthy People 2020 target of at least 95% of children vaccinated. Exemption rates in kindergarten in these schools were lower than rates seen statewide (Table 45).

Table 45. Kindergarteners with required immunizations, 2019-20

Geography	Number enrolled	DTaP	Polio	MMR	Personal belief exemption	Medical exemption	Exempt from every required vaccine
<b>Navajo Nation Region</b>	<b>624</b>	<b>98.1%</b>	<b>98.6%</b>	<b>98.1%</b>	<b>0.0%</b>	<b>0.2%</b>	<b>0.0%</b>
Arizona	82,358	93.2%	93.8%	93.5%	5.4%	0.3%	3.4%
Healthy People 2020 targets		95.0%	95.0%	95.0%			

Source: Arizona Department of Health Services (2021). Kindergarten Immunization Coverage, 2019-2020 School Year. Unpublished data received by request & aggregated by the Community, Research, & Development Team. Arizona Department of Health Services (2020). Kindergarten Immunization Coverage by County, 2019-2020 School Year. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Schools represented: Canyon de Chelly Elementary, Chinle Elementary, Dilcon Elementary, Hunters Point Boarding School, Indian Wells Elementary, Jeddito School, Jeehdeez'a Academy (Low Mountain), Leupp Boarding School, Leupp Public School, Many Farms Community, Many Farms Public, Pine Springs Day, Pinon Elementary, Saint Michael Indian School, Tsaile Elementary, Tsehootsooi Dine Bi'olta', Tuba City Elementary

### Illness, Injury and Mortality

Asthma is the most common chronic illness affecting children,<sup>266</sup> and it is more prevalent among boys, Black children, American Indian or Alaska Native children, and children in low-income households.<sup>267,268</sup> The total healthcare costs of childhood asthma in the United States are estimated to be between \$1.4 billion and \$6.4 billion, but these costs could be reduced through better management of asthma to prevent hospitalizations.<sup>269</sup>

In the Navajo Nation Region, between 2016 and 2020, there were 226 emergency room visits due to asthma for children up to age 14 (Table 46). A smaller set of children presented with cases severe enough to need hospitalization. In the region, 15 children ages birth to 14, of whom fewer than 10 were children ages birth to 4 (both excluding newborns), were hospitalized due to asthma during the same 5-year period. The average length of a child's hospital stay was 2.9 days, higher than the average statewide (2.0 days).

Table 46. Hospitalizations and emergency room visits due to asthma, 2016-2020 combined

Geography	Number of inpatient asthma hospitalizations for children ages birth to 4 (except newborns)	Number of inpatient asthma hospitalizations for children ages birth to 14 (except newborns)	Average length of stay for asthma hospitalization for children ages birth to 14	Number of emergency department visits for asthma, children ages birth to 14
<b>Navajo Nation Region</b>	<b>&lt;10</b>	<b>15</b>	<b>2.9</b>	<b>226</b>
Arizona	2,214	5,672	2.0	41,103

Source: Arizona Department of Health Services (2021). [Hospital Discharge dataset]. Unpublished data.

Unintentional injuries are the leading cause of death for children in Arizona and nationwide.<sup>270,271</sup> It is estimated that as many as 90% of unintentional injury-related deaths could be preventable through better safety practices, such as use of proper child restraints (i.e., car seats) in vehicles and supervision of children around water, including pools.<sup>272</sup> Research has shown that children in rural areas are at higher risk of unintentional injuries than those who live in more urban areas, as are children in Native communities, suggesting that injury prevention is an especially salient need in these areas.<sup>273,274</sup>

Data on non-fatal hospitalizations and emergency department visits due to unintentional injuries were available from the ADHS Hospital Discharge Dataset. In the Navajo Nation Region, Sage Memorial Hospital in Ganado, Arizona, is the only on-reservation hospital that reports to this dataset.

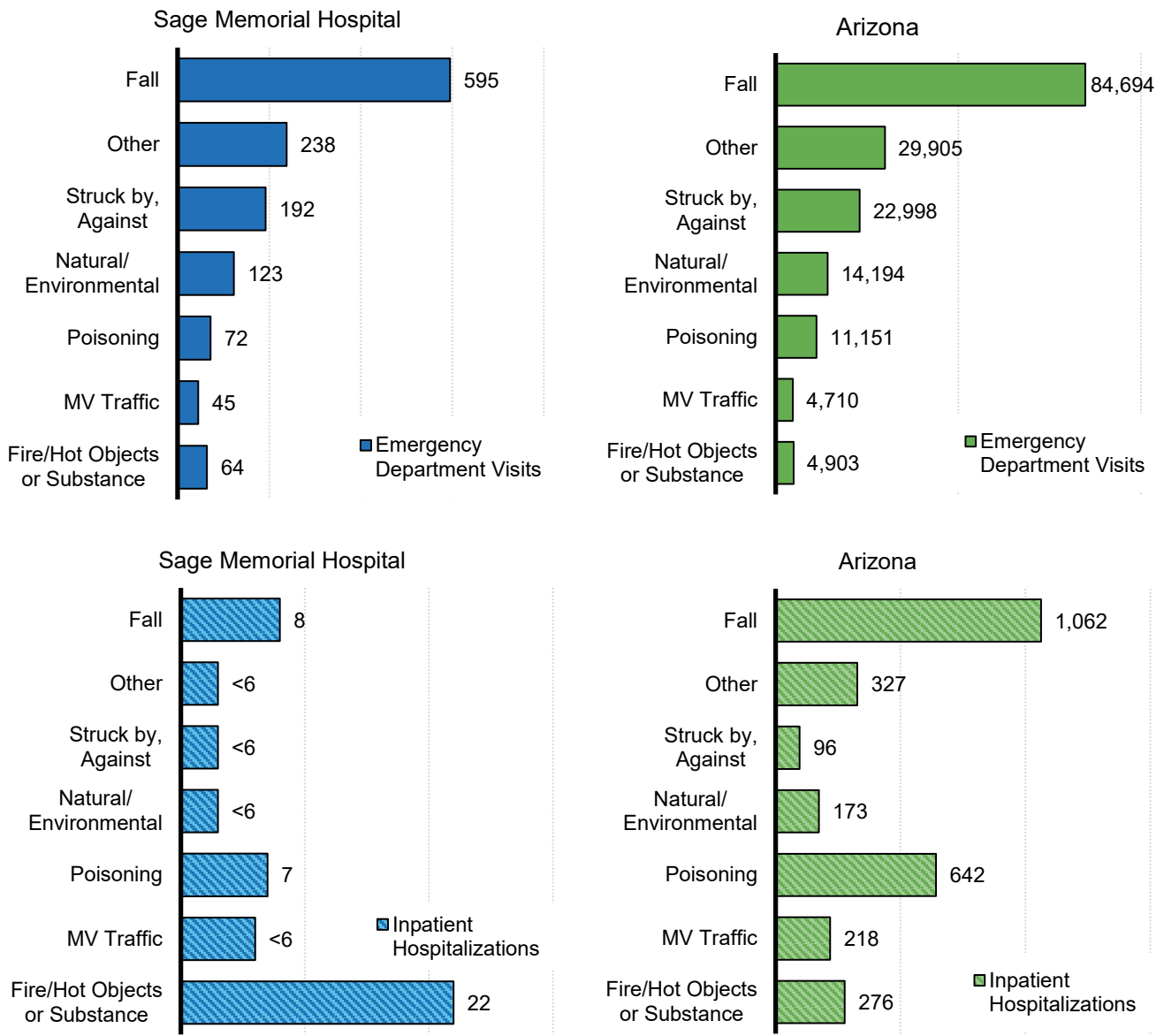
Between 2016 and 2020, there were 1,431 non-fatal emergency department visits and 52 non-fatal inpatient hospitalizations for unintentional injuries at Sage Memorial Hospital among children ages birth to 4 (Table 47). The most common reasons for emergency departments visits were falls, accounting for nearly half of emergency department visits (Figure 68). The pattern of unintentional injuries in the region resembles the same pattern seen statewide. Injuries due to fire/hot objects of substance were the main cause of hospitalization at Sage Memorial Hospital in that same period.

**Table 47. Non-fatal hospitalizations and emergency department visits due to unintentional injuries for children ages birth to 4, 2016-2020 combined**

Geography	Non-fatal inpatient hospitalizations for unintentional injuries	Non-fatal emergency department visits for unintentional injuries
<b>Sage Memorial Hospital</b>	<b>52</b>	<b>1,431</b>
Arizona	2,890	181,035

*Source: Arizona Department of Health Services (2021). [Hospital Discharge dataset]. Unpublished data.*

Figure 68. Non-fatal emergency department visits due to unintentional injuries for children ages birth to 4 by selected mechanism of injury, 2016-2020 combined



Source: Arizona Department of Health Services (2021). [Hospital Discharge dataset]. Unpublished data.

Infant mortality describes the number of deaths of children under 1 year of age relative to live births. Arizona ranks in the middle of U.S. states in terms of infant mortality, with the 20<sup>th</sup> lowest infant mortality rate nationwide in 2019.<sup>275</sup> The most common causes of infant mortality in Arizona and the U.S. are congenital abnormalities, low birthweight and preterm birth, with a smaller proportion related to maternal pregnancy complications, sudden infant death syndrome (SIDS) and unintentional injuries.<sup>276,277</sup>

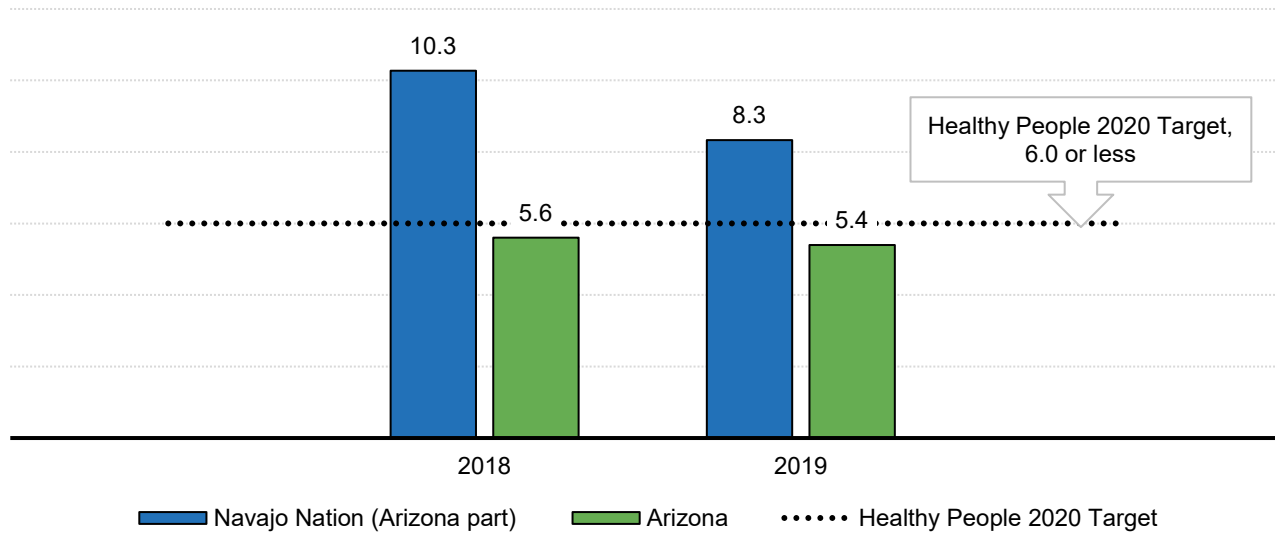
In the Navajo Nation Region, 11 infants died in 2018 and 10 in 2019 (data on the cause of these deaths was not available) (Table 48). Given the population of infants, in both years this put the region above the Healthy People 2020 target for infant mortality rate of 6.0 (Figure 69).

Table 48. Numbers of deaths and mortality rates for infants, young children ages birth to 4, and all children ages birth to 17, 2018 to 2019

Geography	Calendar year	Number of infant deaths	Infant mortality rate (per 1,000 live births)	Number of young child deaths (ages 0-4)	Young child mortality rate (per 100,000 population)	All child deaths (0-17 years old)	All child mortality rate (per 100,000 population)
Navajo Nation (entire) Region	2018	11	10.3	13	N/A	25	N/A
	2019	10	8.3	12	N/A	17	N/A
Arizona	2018	447	5.6	562	127.4	824	65.2
	2019	430	5.4	513	117.4	777	61.6
Healthy People 2020 target			6.0				

Source: Arizona Department of Health Services (2021). [Vital Statistics FTF Death Report dataset]. Unpublished data.  
 Note: The Healthy People 2030 target for infant mortality rate was decreased to no more than 5 infant deaths per 1,000 live births.

Figure 69. Infant mortality rates, 2018 and 2019



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

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

Responsive relationships and language-rich experiences for young children help build a strong foundation for later success in school and in life. Families and caregivers play a critical role as their child's first and most important teacher. Positive and responsive early relationships and interactions support optimal brain development, academic skills, and literacy during a child's earliest years and lead to better social, physical, academic, and economic outcomes later in life.<sup>278,279,280,281,282</sup> Early literacy promotion, through singing, telling stories, and reading together, is so central to a child's development that the American Academy of Pediatrics has emphasized it as a key issue in primary pediatric care, aiming to make parents more aware of their important role in literacy.<sup>283</sup> Storytelling is an important practice in many Native communities that passes on cultural values and beliefs and supports emergent literacy for young children.<sup>284,285,286</sup> A strong sense of cultural identity can be a key protective factor in fostering resilience in Native children and youth to cope with stress and maintain well-being.<sup>287,288</sup>

Children benefit when their families have the knowledge, resources, and support to use positive parenting practices that support their child's healthy development, nutrition, early learning, and language acquisition. Specifically, parental knowledge of positive parenting practices and child development is one of five key protective factors that improve child outcomes and reduce the incidence of child abuse and neglect.<sup>xxii,289</sup>

Unfortunately, not all children are able to begin their lives in positive, stable, nurturing environments. Adverse childhood experiences (ACEs)<sup>xxiii</sup> have been associated with developmental disruption, mental illness, drug and alcohol use and overall increased healthcare utilization.<sup>290,291</sup> Arizona is among the top 10 states with the highest proportion of children birth to 5 who have experienced at least one ACE, with nearly one in three (31.8%) young children in Arizona having one or more ACEs.<sup>292</sup> Future poor health outcomes are more likely as an individual's ACE score increases.<sup>293</sup> Children in Arizona are nearly twice as likely to have experienced two or more ACEs (15.5%) compared to children across the country (8.6%).<sup>294</sup> Very young children are most at risk for extremely adverse experiences, such as child abuse, neglect and fatalities from abuse and neglect. In 2019, children ages birth to 5 made up more than half (55%) of child maltreatment victims in Arizona.<sup>295</sup> These children and their families may require specific, targeted resources and interventions in order to reduce harm and prevent future risk.<sup>296</sup>

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<sup>xxii</sup> The Center for the Study of Social Policy developed Strengthening Families: A Protective Factors Framework™ to define and promote quality practice for families. The research-based, evidence-informed Protective Factors are characteristics that have been shown to make positive outcomes more likely for young children and their families, and to reduce the likelihood of child abuse and neglect. Protective factors include: parental resilience, social connections, concrete supports, knowledge of parenting and child development, and social and emotional competence of children.

<sup>xxiii</sup> 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.

Alternatively, Positive Childhood Experiences (PCEs), including positive parent-child relationships and feelings of safety and support, have been shown to have similarly cumulative, though positive, long-term impacts on mental and relational health.<sup>297</sup> Strategies for preventing ACEs include: strengthening economic supports for families; promoting social norms that protect against violence and adversity; ensuring a strong start for children; enhancing skills to help parents and children handle stress, manage emotions, and tackle everyday challenges; connecting youth to caring adults and activities; and intervening to lessen immediate and long-term harms.<sup>298</sup>

## What the Data Tell Us

### Home Visitation

A child's reading skills when entering elementary school have been shown to strongly predict academic performance in later grades, emphasizing the importance of early literacy for future academic success.<sup>299,300</sup> Home-based literacy practices between parents and caregivers and young children, specifically, have been shown to improve children's reading and comprehension, as well as children's motivation to learn.<sup>301,302</sup> However, low-income families may face additional barriers to home-based literacy practices, including limited free time with children, limited access to books at home, and a lack of knowledge of kindergarten readiness.<sup>303</sup> Communities may employ many resources to support families in engaging with their children, including through targeted programs like home visitation programs and "stay and play" programs, or participating in larger initiatives like Read On Arizona or the national "Reach Out & Read" program.<sup>304</sup>

Home visitation services are offered by the Navajo Nation Office of Special Education and Rehabilitation Services Growing in Beauty program with Funding from the Navajo Nation First Things First Regional Partnership Council. Pregnant women and families with children ages birth to 3 are eligible to participate in this program. Services include the following Bureau of Indian Education (BIE) schools: Black Mesa Community School, Cottonwood Day School, Dennehotso Boarding School, Pinon Community School, Seba Dalkai Boarding School, and Tuba City Boarding School.

In 2020, 159 families with young children participated in the Growing in Beauty Home Visitation program, with a total of 199 children being served. Twenty families graduated from the program that year (Table 49).

Table 49. Growing in Beauty FTF home visitation program data, 2019 to 2020

	2019	2020
Number of families with children ages 0-5 participating in the program	161	159
Number of children 0-5 participating in the program	209	199
Number of families graduating from the program	19	20

*Source: Navajo Nation Office of Special Education and Rehabilitation Services (2021). [Home visitation program data.] Unpublished tribal data received by request.*

### Mental and Behavioral Health

Behavioral health supports, both for children and caregivers, are often needed to address exposure to adverse childhood events. The foundation for sound mental health is built early in life, as early experiences shape the architecture of the developing brain. Sound mental health provides an essential foundation of stability that supports all other aspects of human development—from the formation of friendships and the ability to cope with adversity to the achievement of success in school, work, and community life.<sup>305</sup> When young children experience stress and trauma they often suffer physical, psychological, and behavioral consequences and have limited responses available to react to those experiences. Understanding the behavioral health of mothers is also important for the well-being of Arizona’s young children. Mothers dealing with behavioral health issues, such as depression, may not be able to perform daily caregiving activities, form positive bonds with their children, or maintain relationships that serve as family supports.<sup>306</sup> Improving supports available through coordinated, collaborative efforts are key to early identification and intervention with young children and their families.<sup>307,308</sup>

In Arizona, the Arizona Health Care Cost Containment System (AHCCCS, Arizona’s Medicaid program) contracts with community-based organizations, known as Regional Behavioral Health Authorities (RBHAs) and Tribal Regional Behavioral Health Authorities (TRBHAs), to administer publicly-funded behavioral health services. Arizona is divided into separate geographical service areas (GSAs) served by various RBHAs or TRBHAs. The TRBHA for the Navajo Nation Region is the Navajo Nation Regional Behavioral Health Authority. Behavioral health services for community members in the Navajo Nation region are also provided by the Navajo Nation Division of Behavioral Health Services (NDBHS). NDBHS services are tribally-operated and provided through a 638 contract with federal funding. The division is administered through the Navajo Nation Division of Health.

The pandemic has exacerbated many of the pre-existing challenges around mental and behavioral health care access in the region and across the entire country. Disruptions to daily life heightened stress, anxiety and depression in both children and caregivers nationwide.<sup>309</sup> Additionally, the deaths caused by the COVID-19 pandemic also affect children nationwide. A recent study estimated that approximately 140,000 children in the U.S. and 4,800 in Arizona, lost a parent or caregiver (such as a grandparent) to COVID-19 between April 2020 and June 2021.<sup>310</sup> The same study found that American Indian or Alaska

Native children were 4.5 times as likely to have lost a parent or caregiver than White children due to the high rates of death from COVID-19 in Native communities. According to the Navajo Department of Health, as of October 27, 2022 there had been a total of 76,651 confirmed COVID cases on the Nation, and 1,939 deaths recorded since the beginning of the pandemic.<sup>311</sup>

### **Substance Use Disorders**

Much like mental health, parental substance use has major implications for children's health and well-being. A mother's use of substances such as drugs and alcohol during pregnancy can impact her newborn's health. Babies born to mothers who smoke are more likely to be born early (preterm), have low birth weight, die from sudden unexplained infant death (SUID) and have weaker lungs than babies born to mothers who do not smoke.<sup>312,313</sup> Opiate use during pregnancy, either illegal or prescribed, has been associated with neonatal abstinence syndrome (NAS), a group of conditions that causes infants exposed to these substances in the womb to be born exhibiting withdrawal symptoms.<sup>314</sup> As noted previously (Table 44), between 2016 and 2020, there were 44 newborns in the Navajo Nation Region hospitalized because of maternal drug use during pregnancy.

Parental substance use also has other impacts on family well-being. According to the National Survey of Children's Health, young children in Arizona are more than twice as likely to live with someone with a problem with alcohol or drugs than children in the U.S. as a whole (9.8% compared to 4.5%).<sup>315</sup> Children of parents with substance use disorders are more likely to be neglected or abused and face a higher risk of later mental and behavioral health issues, including developing substance use disorders themselves.<sup>316,317</sup> Substance use treatment and supports for parents and families grappling with these issues can help to ameliorate the short- and long-term impacts on young children.<sup>318</sup> According to the 2020 Navajo Nation Maternal and Child Health Needs Assessment report, substance use continues to be a concern in the Navajo Nation. While treatment centers that offer culturally appropriate care for residents in the region are available, the report highlights structural challenges such as lack of family support, stigma and limited anti-drug/alcohol enforcement that contribute to substance use on the Nation. The Maternal and Child Health Needs Assessment report also emphasizes lack of prevalence data on substance use as another ongoing challenge.<sup>319</sup>

Along with an increase in stress and mental health concerns among adults in the U.S., data from the Census Bureau's Household Pulse Survey show that more than one in 10 adults (12%) reported increases in alcohol consumption or substance use during the pandemic.<sup>320</sup> Drug overdose deaths in the early months of the pandemic, when many states instituted stay at home or lockdown orders, were notably higher than pre-pandemic levels, particularly for synthetic opioids.<sup>321</sup> While drug overdose deaths increased across all racial and ethnic groups during the pandemic, American Indian and Alaska Native, Black, and Hispanic individuals showed greater increases compared to White individuals.<sup>322</sup>

### **Child Removals and Foster Care**

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. Children involved in foster care

systems often have physical and behavioral health issues, in addition to the social-emotional needs brought on by being removed from a parent’s care.<sup>323</sup> Foster parents often need education, support, and resources to ensure they are able to successfully care for foster children who may have these added health needs.

Child welfare services in the Navajo Nation Region are overseen by the Navajo Nation Division of Social Services, Department of Family Services. In 2020 there were 706 substantiated cases of child abuse or neglect. That same year, there were 9,499 children ages birth to 17 in out-of-home care.

Table 50. Child abuse or neglect cases and children in out-of-home care, 2019 to 2020

	2019	2020
Substantiated cases of child abuse or neglect	1,017	706
Children (ages 0-17) in out-of-home care	10,035	9,499

Source: Navajo Nation Social Services, Department of Family Services (2021). [Social Services data.] Unpublished tribal data received by request.

In 2020, the majority of children in out-of-home care were placed with relatives (N=6,466). Another 746 children were placed with their parents, 709 in contracted foster homes, 456 in contracted group homes and 959 in foster homes licensed by the Navajo Nation. According to key informants, most of the children placed with relatives and parents live on the Navajo Nation, while all contract foster homes and group homes are located off-reservation in border towns or farther away from the Nation.

Table 51. Placement of children (ages 0-17) in out-of-home care, 2019 to 2020

	2019	2020
Children (ages 0-17) placed with relatives	6,767	6,466
Children (ages 0-17) placed with parents	1,019	746
Children (ages 0-17) in contract foster homes	474	709
Children (ages 0-17) in contract group homes	609	456
Children (ages 0-17) placed in Navajo Nation-licensed foster homes	474	959

Source: Navajo Nation Social Services, Department of Family Services (2021). [Social Services data.] Unpublished tribal data received by request.

In 2020, there were 22 non-relative foster care homes licensed by the Navajo Nation Department of Family Services. Twelve of those were located on the reservation and 10 were off-reservation. These homes had a total availability of 55 beds, 30 of them were in the homes on-reservation, and 25 in the off-reservation homes (Table 52). The number of children placed in Navajo Nation-licensed homes in

2020 (N=959) was notably higher than the total number of foster care homes available that year. Key informants explained that most of those children were placed with relatives who became licensed foster care providers as part of the process of caring for the child or children placed with them. Their homes are not included in the numbers shown in Table 52, which shows only those that are designated as “non-relative foster care homes.” According to key informants, there are important advantages to becoming a licensed foster caregiver for relatives who agree to care of a child in out-of-home placement: they can have access to monthly financial support and can also qualify for other subsidies (e.g. child care subsidies).

**Table 52. Foster Care Availability, 2019 to 2020**

	2019 On-Reservation	2019 Off-Reservation	2020 On-Reservation	2020 Off-Reservation
Navajo Nation-licensed Foster Care Homes (non-relative)	12	4	12	10
Beds in Navajo Nation Foster Care Homes (non-relative)	30	12	30	25

*Source: Navajo Nation Social Services, Department of Family Services (2021).[Social Services data.] Unpublished tribal data received by request.*

Special federal guidelines are currently in place to regulate how Native children and their families interact with the state’s child welfare system. In 1978, Congress passed the Indian Child Welfare Act (ICWA). ICWA established federal guidelines that are to be followed when an Indian child enters the welfare system in all state custody proceedings. Under ICWA, an Indian child’s family and tribe are able and encouraged to be actively involved in the decision-making that takes place regarding the child, and they may petition for tribal jurisdiction over the custody case. ICWA also mandates that states make every effort to preserve Indian family units by providing family services before an Indian child is removed from his or her family, and after an Indian child is removed through family reunification efforts.<sup>324</sup>

ICWA cases in the Navajo Nation are overseen by the Navajo Indian Child Welfare Act Program, which is part of the Navajo Nation Division of Social Services. In 2020, the largest number of Navajo Nation ICWA placements were in the state of Arizona, with 241 ICWA cases on average, representing a total of 476 children (ages birth to 17). Arizona cases are followed by those in the state of New Mexico, with an average of 113 cases representing 217 children. The state of Utah had the third largest number of ICWA placements, with an average of 53 cases that represented 122 children. In all other states in the country combined there were, on average, 104 ICWA cases that involved 196 children (Table 53). Key informants indicated that the majority of ICWA cases in Arizona are located in the Phoenix area followed by those in the Flagstaff region, though there are ICWA cases dispersed throughout the state.

In 2020, 93 children in ICWA placements were reunified with their parents, 55 were adopted by, or under the legal guardianship of a relative, and 14 were adopted into a non-relative Navajo home (Table 54).

Table 53. Average ICWA Cases, 2019 to 2020

	Number of Cases (2019)	Number of Children (2019)	Number of Cases (2020)	Number of Children (2020)
Arizona	214	419	241	476
New Mexico	100	194	113	217
Utah	53	111	53	122
All other states	119	221	104	196

Source: Navajo Nation Social Services, Navajo Indian Child Welfare Act Program. (2021). [ICWA data.] Unpublished tribal data received by request.

Table 54. ICWA Permanent Placement Outcomes, 2019 to 2020

	2019	2020
Children reunified with parents	177	93
Children established permanency in the form of Guardianship or Adoption by a Relative.	171	55
Children established permanency in the form of Adoption by a non-relative, Navajo Adoptive home.	24	14

Source: Navajo Nation Social Services, Navajo Indian Child Welfare Act Program. (2021). [ICWA data.] Unpublished tribal data received by request.



# SUMMARY AND CONCLUSIONS

This Needs and Assets Report is the eighth biennial assessment of the challenges and opportunities facing children birth to age 5 and their families in the Navajo Nation Region. The quantitative data reported here, as well as qualitative information provided by key informants, highlight some of the Navajo Nation Region's many strengths. A summary of identified regional assets is included below.

## *Population Characteristics*

- There is a high proportion of residents in the region who speak a language other than English or Spanish, likely the Navajo or Diné language. As language preservation and revitalization efforts continue to take place across schools in the Navajo Nation, the Department of Diné Education has developed new instruments to assess those efforts. These assessments will help measure progress towards proficiency in the Diné language among students in the region.
- Complex family living arrangements that involve extended family members provide children in the region with the presence and support of a wide network of supporting adults, even if they live with a single-parent by official Census Bureau definitions.

## *Economic Circumstances*

- Participation of young children and their families in the Navajo Nation tribal Temporary Assistance to Needy Families program, known as Navajo Nation Department for Self Reliance has seen an overall increasing trend, contrary to that across the state. The ability of tribal TANF programs to determine eligibility requirements and lifetime limits may allow families in need to more easily access this resource.
- A higher proportion of women and children enrolled in the Navajo Nation Special Supplemental Nutrition Program for Women, Infants and Children (WIC) program were able to actively participate in the programs and use their benefits in 2020. This higher participation took place at a time when the pandemic imposed a higher level of financial stress on many families. Availability of phone-based and drive-through appointments may have facilitated participation during this difficult time.

## *Educational Indicators*

- Graduation rates in the region were higher than those for all American Indian students in Arizona public and charter schools.
- Dropout rates among students in Arizona Department of Education (ADE) schools the region have been decreasing in recent years.

### ***Early Learning***

- The early care and education system in the region is complex and offers a variety of services to families in the region. This includes programs such as Navajo Head Start and Early Head Start and Family and Child Education, which include Navajo cultural and language components.
- As the population of young children changes in the region, the Navajo Head Start and Early Head Start program is conducting population assessments to be able to better provide services where they are most needed.

### ***Child Health***

- The rates of tobacco use during pregnancy are lower in the region compared to rates across all Arizona reservations and the state.
- Infants in the region are being breastfed at higher rates than infants in the state of Arizona.
- The prevalence of early childhood caries and untreated tooth decay fell substantially in the Indian Health Service Navajo Area.

Even with substantial strengths in the region, there continue to be challenges to fully serving the needs of families with young children. These include:

### ***Population Characteristics***

- Grandparents who are their grandchildren's main caregivers are more likely to not speak English fluently compared to grandparents across all Arizona reservations, requiring additional support to ensure they are able to access the services available for their grandchildren. Awareness of regional differences at the agency level might help service providers better tailor their support for these grandparents.

### ***Economic Circumstances***

- Poverty rates are similar in the region and in all Arizona reservations. Nevertheless, there are important differences in the share of young children living in poverty across agencies. Families with young children in the Chinle Agency, in particular, may benefit from safety-net programs as this agency has the highest poverty rate for children ages birth to 5 in the region.
- There is limited access to computers, smartphones and internet connectivity in the region. The limited infrastructure was particularly challenging during the pandemic, and resulted in families not being able to access services when they were only available remotely.

### ***Educational Indicators***

- For children enrolled in grades K-3, chronic absenteeism rates are notably higher in the region than across the state, with important variability across school districts. Missing school regularly can impact the ability of these children to make academic progress.
- The results of standardized assessments among children in the region are much lower in the region compared to children in the state. This is the case across ADE public and charter schools, as well as Grant and Bureau of Indian Education-operated schools, though there is wide variability in the passing scores of children at the school and school district levels. The high rates of chronic absenteeism may contribute to this trend.

### ***Early Learning***

- Less than 1% of young children in the region received services from the Arizona Early Intervention Program (AzEIP)/Growing in Beauty and the Division of Developmental Disabilities, the agencies in charge of providing services to children with special needs in the region. With national estimates suggesting that about 13% of children could benefit from these interventions, it is likely that many more young children in the region are not receiving services they would benefit from.

### ***Child Health***

- There has been an increase in the proportion of low-birthweight births and of newborns who are admitted into neonatal intensive care units (NICUs) in the region.

### ***Family Support and Literacy***

- Substance use has been identified as a concern in the region. Children of parents with substance use disorders are more likely to be neglected or abused and face a higher risk of later mental and behavioral health issues. Substance use treatment and supports for parents and families grappling with these issues can help to ameliorate the short- and long-term impacts on young children. Treatment services are available in the region, but structural challenges may prevent people from accessing these services.

These needs are complex issues that have root causes that no single department or organization can tackle alone. Successfully addressing the needs outlined in this report will require the continued concentrated effort of collaboration between Navajo Nation departments, divisions and programs, the First Things First Regional Partnership Council, federal and state agencies, and other community stakeholders in and around the region. Ongoing collaborations and coordinated services that integrate the Navajo culture as the foundation for the well-being of families will ensure that young children and their caregivers thrive in the Navajo Nation Region.

# APPENDIX 1: ADDITIONAL DATA TABLES

## Population Characteristics

Table 55. Population and households in the 2020 U.S. Census

Geography	Total population	Children (ages 0-17)	Total number of households
<b>Navajo Nation Region</b>	<b>94,511</b>	<b>25,998</b>	<b>28,856</b>
Navajo Nation Reservation (entire)	165,158	45,552	57,479
All Arizona Reservations	173,499	51,848	50,362
Arizona	7,151,502	1,609,526	2,705,878
United States	331,449,281	73,106,000	126,817,580

Source: U.S. Census Bureau. (2021). 2020 Decennial Census, Redistricting Data PL 94-171, Tables P1, P2, P3, P4, & H1.

Note: These data are drawn from the redistricting file, which is the only Decennial Census data available at the sub-county level at the time of publication. More detailed data files from the 2020 Census are expected to be released in late 2022 and early 2023.

Table 56. Language spoken at home (by persons ages 5 and older), 2015-2019 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
<b>Navajo Nation Region</b>	<b>93,303</b>	<b>31%</b>	<b>0%</b>	<b>68%</b>
Navajo Nation (New Mexico part)	61,505	37%	1%	62%
Navajo Nation (Utah part)	5,861	20%	1%	80%
Navajo Nation (entire)	160,669	33%	1%	66%
Chinle Agency	23,986	30%	0%	70%
Eastern Agency	31,380	34%	1%	65%
Fort Defiance Agency	41,552	36%	1%	64%
Northern Agency	28,580	36%	1%	64%
Western Agency	35,171	28%	0%	71%
All Arizona Reservations	170,803	46%	3%	51%
Arizona	6,616,331	73%	20%	7%
United States	304,930,125	78%	13%	8%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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 57. English-language proficiency (for persons ages 5 and older), 2015-2019 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
<b>Navajo Nation Region</b>	<b>93,303</b>	<b>31%</b>	<b>50%</b>	<b>19%</b>
Navajo Nation (New Mexico part)	61,505	37%	50%	13%
Navajo Nation (Utah part)	5,861	20%	63%	17%
Navajo Nation (entire)	160,669	33%	50%	17%
Chinle Agency	23,986	30%	39%	31%
Eastern Agency	31,380	34%	51%	15%
Fort Defiance Agency	41,552	36%	52%	12%
Northern Agency	28,580	36%	48%	16%
Western Agency	35,171	28%	57%	14%
All Arizona Reservations	170,803	46%	41%	13%
Arizona	6,616,331	73%	19%	9%
United States	304,930,125	78%	13%	8%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16001

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

Table 58. Limited-English-speaking households, 2015-2019 ACS

Geography	Estimated number of households	Number and percent of limited-English-speaking households	
		Number	Percent
<b>Navajo Nation Region</b>	<b>27,647</b>	<b>5,837</b>	<b>21%</b>
Navajo Nation (New Mexico part)	18,310	2,383	13%
Navajo Nation (Utah part)	1,573	213	14%
Navajo Nation (entire)	47,530	8,433	18%
Chinle Agency	7,556	2,838	38%
Eastern Agency	9,337	1,404	15%
Fort Defiance Agency	12,060	1,583	13%
Northern Agency	8,426	1,328	16%
Western Agency	10,151	1,280	13%
All Arizona Reservations	50,231	6,698	13%
Arizona	2,571,268	102,677	4%
United States	120,756,048	5,308,496	4%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16002

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

Table 59. Navajo speaking students in ADE schools (PHLOTE data) by school, 2017-18 to 2019-20

Geography	Percent of students in Navajo-speaking homes (of PHLOTE survey completers)			Number of students in Navajo-speaking homes, 2017-18 to 2019-20 combined
	2017-18	2018-19	2019-20	
<b>Navajo Nation (ADE schools)</b>	<b>30%</b>	<b>22%</b>	<b>48%</b>	<b>1,229</b>
Sanders Elementary School	9%	70%	92%	44
Sanders Elementary School	8%	38%	60%	34
Valley High School	4%	20%	56%	28
Flagstaff High School	32%	30%	17%	19
Page Middle School	13%	6%	28%	22
Page High School	30%	22%	27%	26
Winslow High School	7%	N/A	N/A	DS

Holbrook Junior High School	N/A	N/A	60%	DS
Holbrook High School	12%	6%	55%	16
Sinagua Middle School	6%	17%	21%	22
Tsehootsooi Intermediate Learning Center	31%	31%	85%	44
Tsehootsooi Primary Learning Center	10%	2%	6%	DS
Tsehootsooi Middle School	14%	5%	>98%	29
Window Rock High School	33%	25%	90%	30
Ganado Primary School	N/A	N/A	90%	DS
Ganado Intermediate School	N/A	N/A	83%	15
Ganado Middle School	N/A	2%	97%	35
Ganado High School	3%	N/A	97%	29
Chinle Junior High School	3%	19%	28%	14
Chinle Elementary School	36%	46%	45%	33
Canyon De Chelly Elementary School	9%	N/A	21%	DS
Many Farms Elementary School	4%	N/A	5%	DS
Tsaile Elementary School	15%	12%	12%	13
Mesa View Elementary	20%	25%	28%	20
Chinle High School	7%	<2%	29%	27
Round Rock Elementary School	N/A	N/A	9%	DS
Red Mesa High School	N/A	7%	6%	DS
Leupp Public School	76%	74%	64%	43
Tuba City Elementary School	80%	55%	>98%	75
Dzil Libei Elementary School	83%	>98%	N/A	DS
Tsinaabaas Habitiin Elementary School	80%	83%	>98%	18
Tuba City Junior High School	74%	53%	67%	77
Tuba City High School	73%	79%	58%	60
Pinon Elementary School	4%	2%	35%	18
Pinon Accelerated Middle School	10%	N/A	23%	14
Pinon High School	37%	9%	N/A	DS



Jeddito School	8%	12%	50%	13
Kayenta Middle School	75%	76%	85%	127
Kayenta Elementary School	80%	73%	96%	155
Monument Valley High School	67%	66%	77%	94
Shonto Preparatory Technology High School	92%	56%	79%	31
Nizhoni Accelerated Academy (Tuba City Alternative School)	>98%	N/A	N/A	DS
Indian Wells Elementary	9%	8%	79%	24
NATIVE - Monument Valley High School	68%	50%	70%	25
NATIVE - Pinon High School	43%	11%	N/A	DS
NATIVE - Chinle High School	7%	2%	33%	22
NATIVE - Ganado High School	N/A	N/A	>98%	21
NATIVE - Red Mesa High School	N/A	7%	6%	DS
NATIVE - Window Rock High School	20%	33%	89%	12
Tsehootsooi Dine Bi'Olta	2%	3%	7%	DS
NATIVE - Tuba City High School	>98%	80%	62%	35
NATIVE Central Campus	N/A	50%	>98%	DS
Arizona Schools	<2%	<2%	<2%	1,515

Source: Arizona Department of Education (2021). [Primary Home Language Other Than English results Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Table 60. Living arrangements for children ages birth to 5, 2015-2019 ACS

Geography	Estimated number of children (birth to 5 years old) living in households	Living with two parents	Living with one parent	Living not with parents but with other relatives	Living with non-relatives
<b>Navajo Nation Region</b>	<b>8,835</b>	<b>30%</b>	<b>63%</b>	<b>7%</b>	<b>1%</b>
Navajo Nation (New Mexico part)	5,257	28%	64%	7%	1%
Navajo Nation (Utah part)	663	31%	67%	3%	0%
Navajo Nation (entire)	14,755	29%	64%	6%	1%
Chinle Agency	2,585	41%	52%	7%	0%
Eastern Agency	2,667	31%	62%	7%	0%
Fort Defiance Agency	3,457	28%	66%	6%	1%
Northern Agency	2,392	26%	67%	7%	0%
Western Agency	3,654	23%	69%	7%	2%
All Arizona Reservations	18,182	28%	62%	8%	2%
Arizona	517,483	59%	37%	3%	2%
United States	23,640,563	63%	33%	2%	2%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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 step-parents.

Table 61. Grandchildren ages birth to 5 living in a grandparent's household, 2015-2019 ACS

Geography	Estimated number of children (birth to 5 years old) living in households	Number and percent living in their grandparent's household	
		Number	Percent
<b>Navajo Nation Region</b>	<b>8,835</b>	<b>3,977</b>	<b>45%</b>
Navajo Nation (New Mexico part)	5,257	2,429	46%
Navajo Nation (Utah part)	663	276	42%
Navajo Nation (entire)	14,755	6,682	45%
Chinle Agency	2,585	818	32%
Eastern Agency	2,667	989	37%
Fort Defiance Agency	3,457	1,567	45%
Northern Agency	2,392	1,236	52%
Western Agency	3,654	2,072	57%
All Arizona Reservations	18,182	8,177	45%
Arizona	517,483	67,495	13%
United States	23,640,563	2,521,583	11%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B10001 & B27001

Note: This table includes all children (under six 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 62. Median annual family income, 2015-2019 ACS

Geography	Median annual income for all families	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
<b>Navajo Nation Region</b>	<b>\$35,700</b>	<b>\$49,900</b>	<b>\$24,100</b>	<b>\$21,300</b>
Navajo Nation (New Mexico part)	\$34,700	\$42,600	\$21,500	\$17,800
Navajo Nation (Utah part)	\$31,200	\$52,000	\$31,300	\$12,900
Navajo Nation (entire)	\$35,100	\$47,500	\$23,000	\$19,800
Arizona	\$70,200	\$88,400	\$42,900	\$30,400
United States	\$77,300	\$100,000	\$45,100	\$29,000

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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. The medians have been rounded to the nearest hundred dollars.

Figure 70. Rates of poverty for persons of all ages and for children ages birth to 5, 2015-2019 ACS

Geography	Estimated population for whom poverty status can be determined (all ages)	Percent of the population below the poverty level	Estimated number of children for whom poverty status can be determined (birth to 5 years old)	Percent of children below the poverty level
<b>Navajo Nation Region</b>	<b>100,105</b>	<b>39%</b>	<b>8,769</b>	<b>49%</b>
Navajo Nation (New Mexico part)	65,419	38%	5,228	49%
Navajo Nation (Utah part)	6,434	39%	663	49%
Navajo Nation (entire)	171,958	39%	14,660	49%
Chinle Agency	25,754	45%	2,580	57%
Eastern Agency	33,280	44%	2,659	55%
Fort Defiance Agency	44,182	39%	3,438	50%
Northern Agency	30,544	33%	2,386	45%
Western Agency	38,198	35%	3,597	41%
All Arizona Reservations	183,717	39%	17,906	51%
Arizona	6,891,224	15%	508,453	23%
United States	316,715,051	13%	23,253,254	20%

Source: U.S. Census Bureau. (2020). American Community Survey five-year estimates 2015-2019, Table B17001

Note: This table 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 2019, the poverty threshold for a family of two adults and two children was \$25,926; for a single parent with one child, it was \$17,622.

Table 63. Children ages birth to 5 served by the Navajo Nation Department for Self Reliance (Tribal TANF Program)

Month	Number of children ages 0-5
Oct 2018	1,489
Nov 2018	1,634
Dec 2018	1,746
Jan 2019	1,830
Feb 2019	1,813
Mar 2019	1,863
Apr 2019	1,893
May 2019	1,926
Jun 2019	1,995
Jul 2019	2,083
Aug 2019	2,139
Sept 2019	2,224
Oct 2019	2,267
Nov 2019	2,247
Dec 2019	2,315
Jan 2020	2,358
Feb 2020	2,304
Mar 2020	2,219
Apr 2020	2,155
May 2020	2,046
Jun 2020	1,988
Jul 2020	1,950
Aug 2020	1,989
Sept 2020	1,994

Source: Navajo Nation Division of Social Services, Department for Self Reliance (2021) [TANF Dataset]. Unpublished data received by request.

Table 64. Children served by the Navajo Nation Department for Self Reliance (Tribal TANF Program) by type of case, FY 2019 to 2020

	Average monthly number of children ages 0-5 (FY2019)	Share of children ages 0-5 receiving TANF (FY2019)	Average monthly number of children ages 0-5 (FY2020)	Share of children ages 0-5 receiving TANF (FY2020)	Average monthly number of children ages 0-17 (FY2019)	Share of children ages 0-17 receiving TANF (FY2019)	Average monthly number of children ages 0-17 (FY2020)	Share of children ages 0-17 receiving TANF (FY2020)
Total	1,886		2,153		5,851		6,601	
Child only	211	11%	259	12%	1,234	21%	1,465	22%
One-parent	1,215	64%	1,408	65%	3,595	61%	4,029	61%
Two-parent	460	24%	486	23%	1,022	17%	1,107	17%

Source: Navajo Nation Division of Social Services, Department for Self Reliance (2021) [TANF Dataset]. Unpublished data received by request.

Table 65. Children served by the Navajo Nation Department for Self Reliance (Tribal TANF) by NNDSR field office, FY 2019 to 2020

	Average monthly number of children ages 0-5 (FY2019)	Share of children ages 0-5 receiving TANF (FY2019)	Average monthly number of children ages 0-5 (FY2020)	Share of children ages 0-5 receiving TANF (FY2020)	Average monthly number of children ages 0-17 (FY2019)	Share of children ages 0-17 receiving TANF (FY2019)	Average monthly number of children ages 0-17 (FY2020)	Share of children ages 0-17 receiving TANF (FY2020)
Navajo Nation (entire)	1,886	N/A	2,153	N/A	5,851	N/A	6,601	N/A
Chinle field office	368	20%	457	21%	1,143	20%	1,413	21%
Crownpoint field office	187	10%	248	12%	523	9%	638	10%
Farmington field office	357	19%	386	18%	1,104	19%	1,195	18%
Gallup field office	289	15%	349	16%	918	16%	1,057	16%
Kayenta field office	128	7%	155	7%	410	7%	497	8%
Tuba City field office	240	13%	245	11%	748	13%	782	12%
Window Rock field office	317	17%	312	15%	1,006	17%	1,019	15%

Source: Navajo Nation Division of Social Services, Department for Self Reliance (2021) [TANF Dataset]. Unpublished data received by request.

Table 66. Navajo Nation WIC participation and enrollment, 2019 to 2020

	Enrolled (2019)	Participating (2019)	Participation Rate (2019)	Enrolled (2020)	Participating (2020)	Participation Rate (2020)
<b>Total</b>	<b>8,778</b>	<b>6,820</b>	<b>77.7%</b>	<b>8,450</b>	<b>6,916</b>	<b>81.8%</b>
Women	1,796	1,419	79.0%	1,788	1,467	82.0%
Infants	1,695	1,426	84.1%	1,635	1,415	86.5%
Children	5,287	3,975	75.2%	5,027	4,034	80.2%

*Source: Navajo Nation WIC Program (2021) [WIC Dataset]. Unpublished data received by request.*



Table 67. Emergency food assistance resources by type

Site name	Type of site
Blue Gap Bible Ministries	Emergency food site
Cameron Assembly of God	Emergency food site
Chinle USD	Emergency food site
Our Lady of Fatima	TEFAP/CFSP
Dilcon Community School	Emergency food site
Running Elk Ministries	TEFAP
Klagetoh Chapter	TEFAP
St Mary's Food Bank at Ganado	TEFAP
Chilchinbeto Community Food Bank	TEFAP
Kayenta USD	Emergency food site
Lukachukai Chapter	TEFAP
Cove Chapter	Emergency food site
Navajo Evangelical Lutheran Mission	Emergency food site
Nahata Dził Sanders Chapter	TEFAP
Sanders USD	TEFAP
Shonto Preparatory School District	TEFAP
St Michaels Chapter House	TEFAP
Tolikan Senior Council Center	Emergency food site
Inscription House Ts'ah Bii Kin	TEFAP
Tonalea Chapter House	TEFAP
Life Sharing Center	CFSP
Oak Pine Springs Chapter	TEFAP
Teesto Chapter	TEFAP
Tolani Lake Senior Center	Emergency food site

Source: Arizona Department of Economic Security <https://des.az.gov/services/basic-needs/food-assistance/emergency-food-assistance>

Table 68. Percent of students eligible for free or reduced-price lunch, 2017-18 to 2019-20

	2017-18	2018-19	2019-20
<b>Navajo Nation Region</b>	<b>93%</b>	<b>96%</b>	<b>93%</b>
Window Rock Unified District	92%	92%	92%
Ganado Unified School District	95%	95%	94%
Chinle Unified District	94%	94%	94%
Red Mesa Unified District	83%	93%	93%
Leupp Public School (FUSD)	93%	93%	93%
Tuba City Unified School District #15	91%	93%	93%
Indian Wells Elementary (HUSD)	>98%	>98%	93%
Pinon Unified District	>98%	>98%	>98%
Cedar Unified District	>98%	>98%	>98%
Kayenta Unified School District #27	90%	90%	83%
Navajo Nation Private Schools	>98%	>98%	96%
Shonto Preparatory Technology High School	96%	96%	96%
Navajo Nation Arizona BIE Schools	91%	>98%	94%
Off-Reservation ADE Schools serving Navajo Nation students (All Students)	56%	55%	53%
Arizona schools	57%	56%	55%

Source: Arizona Department of Education (2021). [Health & Nutrition dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Note: The selected off-reservation schools serving Navajo Nation students included in this report are as follows: Sinagua Middle School and Flagstaff High School in Flagstaff Unified District; Page Middle School, Page High School and Sand & Sage Academy in Page Unified District; Holbrook Junior High School and Holbrook High School in Holbrook Unified District; and Sanders Elementary School and Valley High School in Sanders Unified District.

Table 69. Unemployment and labor-force participation for the adult population (ages 16 and older), 2015-2019 ACS

Geography	Estimated working-age population (age 16 and older)	Unemployment rate	Labor-force participation rate	Percent of working-age population in the labor force and employed	Percent of working-age population in the labor force but unemployed	Percent of working-age population not in the labor force
<b>Navajo Nation Region</b>	<b>74,860</b>	<b>15%</b>	<b>41%</b>	<b>35%</b>	<b>6%</b>	<b>59%</b>
Navajo Nation (New Mexico part)	49,969	19%	48%	38%	9%	52%
Navajo Nation (Utah part)	4,730	20%	47%	38%	9%	53%
Navajo Nation (entire)	129,559	17%	44%	36%	7%	56%
Chinle Agency	18,845	17%	35%	29%	6%	65%
Eastern Agency	25,324	22%	48%	37%	11%	52%
Fort Defiance Agency	33,772	14%	41%	35%	6%	59%
Northern Agency	23,405	18%	48%	39%	9%	52%
Western Agency	28,213	14%	46%	40%	6%	54%
All Arizona Reservations	136,151	17%	45%	37%	8%	55%
Arizona	5,600,921	6%	60%	56%	3%	40%
United States	259,662,880	5%	63%	60%	3%	37%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, 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 three percentages in each row (employed, unemployed, and not in the labor force) should sum to 100%, but may not because of rounding.

Table 70. Monthly unemployment claims, November 2019 - November 2020 (Navajo Nation Region)

Month	Total Claims (All Outcomes)	Claims found eligible and paid	Claims found eligible and paid (%)
Nov-19	178	42	24%
Dec-19	214	76	36%
Jan-20	219	62	28%
Feb-20	111	20	18%
Mar-20	684	238	35%
Apr-20	1,218	447	37%
May-20	1,288	433	34%
Jun-20	1,475	574	39%
Jul-20	1,225	455	37%
Aug-20	710	242	34%
Sep-20	455	109	24%
Oct-20	417	116	28%
Nov-20	256	42	16%

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

Table 71. Housing-cost burden for all households, and for owners and renters separately, 2015-2019 ACS

Geography	Estimated number of households	Housing costs 30 percent or more of household income	Estimated number of owner-occupied housing units	Housing costs 30 percent or more of household income	Estimated number of renter-occupied housing units	Housing costs 30 percent or more of household income
<b>Navajo Nation Region</b>	<b>27,647</b>	<b>12%</b>	<b>20,956</b>	<b>10%</b>	<b>6,691</b>	<b>19%</b>
Navajo Nation (New Mexico part)	18,310	13%	13,999	11%	4,311	18%
Navajo Nation (Utah part)	1,573	14%	1,353	15%	220	11%
Navajo Nation (entire)	47,530	13%	36,308	11%	11,222	18%
Chinle Agency	7,556	13%	5,913	12%	1,643	18%
Eastern Agency	9,337	13%	7,220	13%	2,117	16%
Fort Defiance Agency	12,060	12%	9,224	10%	2,836	18%
Northern Agency	8,426	12%	6,430	10%	1,996	18%
Western Agency	10,151	13%	7,521	10%	2,630	21%
All Arizona Reservations	50,231	14%	34,358	12%	15,873	18%
Arizona	2,571,268	30%	1,656,756	22%	914,512	45%
United States	120,756,048	31%	77,274,381	22%	43,481,667	46%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B25106

Note: An "occupied housing unit" is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied as separate living quarters. Buildings such as dormitories, bunkhouses and motel rooms are not counted as housing units. The number of households is equal to the number of occupied housing units.

## Educational Indicators

Table 72. Navajo Nation students enrolled in schools in Arizona, 2020-21

District	School	Students
Arizona Public Schools- On Navajo Nation		12,022
Cedar Unified District		105
	Jeddito School (K-8)	105
Chinle Unified School District		3,198
	Canyon De Chelly Elementary Sch (K-6)	312
	Chinle Elementary School (PS-6)	492

	Chinle Junior High School (7-8)	314
	Chinle High School (9-12)	880
	Many Farms Elementary School (K-8)	363
	Mesa View Elementary School (K-6)	371
	Tsaile Elementary School (K-8)	466
Flagstaff Unified School District		152
	Leupp Public School (PS-5)	152
Ganado Unified District		1,297
	Ganado Primary School (PS-2)	235
	Ganado Intermediate School (3-5)	229
	Ganado Middle School (6-8)	361
	Ganado High School (9-12)	472
Holbrook Unified School District		367
	Indian Wells Elementary School (PS-6)	367
Kayenta Unified School District		1,650
	Kayenta Elementary School (PS-4)	533
	Kayenta Middle School (5-8)	472
	Monument Valley High School (9-12)	645
Pinon Unified School District		990
	Pinon Elementary School (PS-5)	414
	Pinon Accelerated Middle School (6-8)	278
	Pinon High School (9-12)	298
Red Mesa Unified School District		420
	Red Mesa Elementary School (K-5)	113
	Red Mesa Junior High School (6-8)	70
	Red Mesa High School (9-12)	163
	Red Valley/Cove High School (9-12)	15
	Round Rock Elementary School (K-8)	59
Sanders Unified School District		645
	Sanders Elementary School (PS-5)	261
	Sanders Middle School (6-8)	171
	Valley High School (9-12)	213
Tuba City Unified School District		1,386
	Dzil Libei Elementary School (K-5)	38
	Nizhoni Accelerated Academy (9-12)	32
	Tsinaabaas Habitiin Elementary School (K-4)	37
	Tuba City Elementary School (PS-5)	431
	Tuba City Junior High School (6-8)	290
	Tuba City High School (9-12)	558
Window Rock Unified School District		1,812
	Integrated Preschool (PS)	27
	Dine Bi'Olta (Immersion School) (K-6)	97
	Tse'Hootsooi Primary Learning Center (K-3)	403

	Tse'Hootsooi Intmd. Learning Center (4-6)	350
	Tse'Hootsooi Middle School (7-8)	308
	Window Rock High School (9-12)	627
Arizona Charter Schools- On Navajo Nation		82
	Little Singer Community Junior High School (7-8)	ND
	Shonto Preparatory Technology High School (9-12)	82
Arizona Public Schools- Off Navajo Nation		14,380
Flagstaff Unified School District		8,785
	Charles W Sechrist Elementary School (PS-5)	404
	Coconino High School (9-12)	1,344
	Eva Marshall Elementary School (K-5)	437
	Flagstaff High School (9-12)	1,573
	John Q Thomas Elementary School (PS-5)	345
	Lura Kinsey Elementary School (PS-5)	334
	Manuel DeMiguel Elementary School (PS-5)	551
	Mount Elden Middle School (6-8)	779
	Northern Arizona Distance Learning (8-12)	177
	Sinagua Middle School (6-8)	1,102
	Sturgeon Cromer Elementary School (PS-5)	412
	Summit High School (9-12)	102
	Thomas M Knoles Elementary School (PS-5)	465
	W F Killip Elementary School (PS-5)	366
	Weitzel's Puente de Hozho Bilngl Magnet School (K-5)	394
Holbrook Unified School District		1,468
	Holbrook Junior High School (6-8)	392
	Holbrook High School (9-12)	630
	Hulet Elementary School (PS, 2-5)	308
	Park Elementary School (K-1)	138
Page Unified School District		2,290
	Desert View Elementary School (PS, 3-5)	528
	Lake View Elementary School (K-2)	465
	Manson Mesa High School (9-12)	24
	Page Middle School (6-8)	530
	Page High School	743
Winslow Unified School District		1,837
	Bonnie Brennan School (PS-K; 3-4)	359
	Jefferson Elementary School (1-2)	274
	Washington School (5-6)	254
	Winslow Junior High School (7-8)	336
	Winslow High School (9-12)	614
BIE & Grant Schools on Navajo Nation		6,040
Arizona Navajo Central		2,011
Grant	Black Mesa Community School (K-8)	68

	BIE	Cottonwood Day School (K-8)	176
	BIE	Jeehdeez'a Academy, Inc (K-5)	122
	Grant	Lukachukai Community School (K-8)	269
	Grant	Many Farms Community School (K-8)	252
	BIE	Many Farms High School (9-12)	374
	Grant	Nazlini Community School (K-6)	187
	Grant	Pinon Community School (K)	27
	Grant	Rock Point Community School (K-12)	397
	Grant	Rough Rock Community School (K-12)	139
Arizona Navajo North			3,150
	Grant	Chilchinbeto Community School (K-8)	110
	BIE	Dennehotso Boarding School (K-8)	156
	Grant	Greyhills Academy High School (9-12)	201
	BIE	Kaibeto Boarding School (K-8)	227
	BIE	Kayenta Community School (K-8)	303
	Grant	Leupp Schools, Inc. (K-12)	118
	Grant	Little Singer Community School (K-6)	211
	Grant	Naa Tsis Aan Community School (K-8)	81
	BIE	Rocky Ridge Boarding School (K-8)	94
	Grant	Shonto Preparatory School (K-8)	315
	BIE	Tonalea Day School (K-8)	148
	BIE	Tuba City Boarding School (K-8)	1,186
Arizona Navajo South			879
	BIE	Crystal Boarding School (K-6)	90
	Grant	Dilcon Community School (K-8)	152
	Grant	Greasewood Springs Comm Sch (K-8)	172
	Grant	Hunters Point Boarding School (K-5)	113
	Grant	Kin Dah Lich'i Olta (K-6)	159
	BIE	Pine Springs Day School (K-4)	50
	BIE	Seba Dalkai Boarding School (K-8)	79
	Grant	Wide Ruins Community School (K-6)	64
Off Navajo Nation Residential Halls			97
		Tiisyaakin Residential Hall (Holbrook)	25
		Winslow Residential Hall	72

Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [Enrollment dataset]. Unpublished tribal data received by request.



Table 73. Navajo Nation students enrolled in districts in Arizona, 2020-21

District	Students
Total students in school in Arizona	32,621
Arizona Public Schools- On Navajo Nation	12,022
Cedar Unified District	105
Chinle Unified School District	3,198
Flagstaff Unified School District	152
Ganado Unified District	1,297
Holbrook Unified School District	367
Kayenta Unified School District	1,650
Pinon Unified School District	990
Red Mesa Unified School District	420
Sanders Unified School District	645
Tuba City Unified School District	1,386
Window Rock Unified School District	1,812
Arizona Charter Schools- On Navajo Nation	82
Little Singer Community Junior High School (7-8)	ND
Shonto Preparatory Technology High School (9-12)	82
Arizona Public Schools- Off Navajo Nation	14,380
Flagstaff Unified School District	8,785
Holbrook Unified School District	1,468
Page Unified School District	2,290
Winslow Unified School District	1,837
BIE & Grant Schools on Navajo Nation in Arizona	6,040
Arizona Navajo Central	2,011
Arizona Navajo North	3,150
Arizona Navajo South	879
Off Navajo Nation Residential Halls in Arizona	97

Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [Enrollment dataset]. Unpublished tribal data received by request.

Table 74. Students enrolled in BIE schools, 2018-19 to 2020-21

School Name	2018-19	2019-20	2020-21	Change 2018-19 to 2020-21
Total Navajo Nation BIE Schools	7,055	6,594	6,031	-15%
Aneth Community School (K-6)	145	132	129	-11%
Baca/Dlo'ay Azhi Community School (K-6)	314	320	250	-20%
Beclabito Day School (K-4)	55	48	47	-15%
Bread Springs Day School (K-3)	117	104	172	+47%
Chi'chil'tah Community School (K-8)	127	101	88	-31%
Cottonwood Day School (K-8)	194	188	176	-9%
Cove Day School (K-6)	40	44	80	+100%
Crystal Boarding School (K-6)	133	124	90	-32%
Dennehotso Boarding School (K-8)	186	165	156	-16%
Jeehdeez'a Academy, Inc. (K-5)	142	132	122	-14%
Kaibeto Boarding School (K-8)	261	261	227	-13%
Kayenta Community School (K-8)	392	342	303	-23%
Lake Valley Navajo School (K-8)	57	37	28	-51%
Many Farms High School (9-12)	386	360	374	-3%
Mariano Lake Community School (K-6)	161	138	111	-31%
Nenahnezad Community School (K-6)	210	205	159	-24%
Ojo Encino Day School (K-8)	180	182	138	-23%
Pine Springs Day School (K-4)	69	65	50	-28%
Pueblo Pintado Community School (K-8)	211	204	148	-30%
Red Rock Day School (K-8)	155	126	114	-26%
Rocky Ridge Boarding School (K-8)	106	95	94	-11%
Sanostee Day School (K-3)	53	34	37	-30%
Seba Dalkai Boarding School K-8)	79	80	79	0%
T'iis Nazbas Community School (K-8)	157	140	119	-24%
Tiists'oozi'bi'olta Community School (K-8)	392	355	308	-21%
Tohaali' Community School (K-8)	115	108	88	-23%
Tonalea Day School (K-8)	204	161	148	-27%
Tse'ii'ahi Community School (K-4)	114	113	118	+4%
Tuba City Boarding School (K-8)	1,346	1,320	1,186	-12%
Wingate Elementary School (K-8)	490	485	548	+12%
Wingate High School (9-12)	464	425	344	-26%

Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [Enrollment dataset]. Unpublished tribal data received by request.

Table 75. Students enrolled in grant schools, 2018-19 to 2020-21

School Name	2018-19	2019-20	2020-21	Change 2018-19 to 2020- 21
Total Navajo Nation Grant Schools	6,057	5,813	6,071	+0.2%
Alamo Day School (K-12)	361	347	344	-5%
Atsa' Biya'a'zh Community School (K-6)	271	304	275	+1%
Black Mesa Community School (K-8)	64	64	68	+6%
Ch'booshgai Community School (K-8)	230	321	287	+25%
Chilchinbeto Community School (K-8)	151	156	110	-27%
Dibe Yazhi Habitiin Olta, Inc. (K-8)	153	108	117	-24%
Dilcon Community School (K-8)	202	181	152	-25%
Dzilth-Na-O-Dith-Hle Community School (K-8)	174	165	230	+32%
Greasewood Springs Community School (K-8)	201	157	172	-14%
Greyhills Academy High School (9-12)	279	275	201	-28%
Hanaa'dli Community School (K)	7	11	29	+314%
Hunters Point Boarding School (K-5)	179	146	113	-37%
Kin Dah Lich'i Olta (K-6)	147	129	159	+8%
Leupp Schools, Inc. (K-12)	142	133	118	-17%
Little Singer Community School (K-6)	99	89	211	+113%
Lukachukai Community School (K-8)	363	317	269	-26%
Many Farms Community School (K-8)	349	317	252	-28%
Na'Neelzhiin Ji' Olta Community School (K-8)	220	179	186	-15%
Naa Tsis Aan Community School (K-8)	92	93	81	-12%
Navajo Preparatory School (9-12)	269	271	693	+158%
Nazlini Community School (K-6)	114	117	187	+64%
Pine Hills School (K-12)	303	323	354	+17%
Pinon Community School (K)	39	49	27	-31%
Rock Point Community School (K-12)	443	426	397	-10%
Rough Rock Community School (K-12)	187	146	139	-26%
Shiprock Northwest High School (7-12)	193	218	203	+5%
Shonto Preparatory School (K-8)	388	377	315	-19%
To'Hajiilee-He Community School (K-12)	336	289	318	-5%
Wide Ruins Community School (K-6)	101	105	64	-37%
Wingate Elementary School (K-8)	490	485	548	+12%
Wingate High School (9-12)	464	425	344	-26%

Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [Enrollment dataset]. Unpublished tribal data received by request.

Table 76. Students enrolled in preschool through 3rd grade in Arizona public and charter schools, 2019-20 school year

Geography	Preschool	Kindergarten	1st Grade	2nd Grade	3rd Grade
<b>Navajo Nation (ADE schools)</b>	<b>335</b>	<b>703</b>	<b>819</b>	<b>813</b>	<b>871</b>
Window Rock Unified District	50	113	120	114	143
Ganado Unified School District	34	68	58	74	79
Chinle Unified District	22	192	278	256	276
Red Mesa Unified District	DS	29	25	26	25
Leupp Public School (FUSD)	21	23	25	31	17
Tuba City Unified School District #15	34	75	83	94	68
Indian Wells Elementary (HUSD)	59	47	49	54	44
Pinon Unified District	51	46	68	81	79
Cedar Unified District	DS	12	DS	DS	DS
Kayenta Unified School District #27	57	98	105	72	130
Arizona Schools (American Indian Students)	905	3,290	3,260	3,262	3,452
Arizona Schools	21,867	81,606	82,386	82,305	83,003

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Note: The selected off-reservation schools serving Navajo Nation students included in this report are as follows: Sand & Sage Academy in Page Unified District; and Sanders Elementary School in Sanders Unified District.

Table 77. Kindergarten through 3rd grade chronic absence rates, 2018-19 and 2019-20

Geography	K-3 students enrolled, 2018-19	K-3 students with chronic absences, 2018-19	Chronic absence rate, 2018-19	K-3 students enrolled, 2019-20	K-3 students with chronic absences, 2019-20	Chronic absence rate, 2019-20
<b>Navajo Nation (ADE schools)</b>	<b>3,428</b>	<b>1,124</b>	<b>33%</b>	<b>3,206</b>	<b>608</b>	<b>19%</b>
Window Rock Unified District	485	176	36%	490	101	21%
Ganado Unified School District	298	62	21%	279	36	13%
Chinle Unified District	1,103	398	36%	1,002	213	21%
Red Mesa Unified District	98	38	39%	105	18	17%
Leupp Public School (FUSD)	93	26	28%	96	12	13%
Tuba City Unified School District #15	393	112	28%	320	68	21%
Indian Wells Elementary (HUSD)	192	33	17%	194	38	20%
Pinon Unified District	293	114	39%	274	35	13%
Cedar Unified District	58	35	60%	41	12	29%
Kayenta Unified School District #27	415	130	31%	405	75	19%
Arizona Schools	326,891	43,773	13%	329,300	25,382	8%

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Table 78. AzMERIT assessment results: 3rd grade English Language Arts, 2018-19

	Number of students tested	Falls far below	Approaches	Meets	Exceeds	Passing
<b>Navajo Nation (ADE schools)</b>	<b>873</b>	<b>65%</b>	<b>14%</b>	<b>18%</b>	<b>4%</b>	<b>21%</b>
Window Rock Unified District	DS	47%	18%	31%	5%	35%
Ganado Unified School District	DS	69%	11%	19%	<2%	20%
Chinle Unified District	DS	57%	17%	21%	6%	27%
Red Mesa Unified District	DS	68%	11%	16%	5%	21%
Flagstaff Unified District	DS	57%	29%	14%	<2%	14%
Tuba City Unified School District #15	DS	77%	10%	11%	<2%	13%
Holbrook Unified District	DS	67%	9%	18%	7%	24%
Pinon Unified District	DS	81%	9%	8%	3%	10%
Cedar Unified District	DS	87%	4%	9%	<2%	9%
Kayenta Unified School District #27	DS	72%	15%	13%	<2%	14%
Arizona schools	82,653	40%	14%	32%	14%	46%

Source: Arizona Department of Education (2021). [AzMERIT dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CREDE) team.

Table 79. AzMERIT assessment results: 3rd grade Math, 2018-19

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
<b>Navajo Nation (ADE schools)</b>	<b>878</b>	<b>42%</b>	<b>33%</b>	<b>21%</b>	<b>4%</b>	<b>26%</b>
Window Rock Unified District	DS	32%	27%	32%	8%	40%
Ganado Unified School District	DS	57%	34%	8%	<2%	9%
Chinle Unified District	DS	34%	31%	29%	6%	35%
Red Mesa Unified District	DS	68%	16%	16%	<2%	16%
Flagstaff Unified District	DS	52%	19%	29%	<2%	29%
Tuba City Unified School District #15	DS	29%	48%	15%	8%	23%
Holbrook Unified District	DS	58%	27%	16%	<2%	16%
Pinon Unified District	DS	54%	29%	16%	<2%	17%
Cedar Unified District	DS	61%	26%	13%	<2%	13%
Kayenta Unified School District #27	DS	45%	40%	14%	<2%	15%
Arizona Schools	83,042	23%	26%	33%	18%	51%

Source: Arizona Department of Education (2021). [AzMERIT dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Table 80. Reading/Language Arts assessment results for Navajo Nation BIE Schools, 2018-19

	Total Tested	Minimally proficient	Partially proficient	Proficient	Highly proficient	Passing
Navajo Nation BIE/Grant Schools	3,648	59%	26%	14%	1%	15%
Black Mesa Community School	40	85%	13%	3%	0%	3%
Cottonwood Day School	109	72%	22%	6%	0%	6%
Jeehdeezá Academy Inc. (Low Mountain)	68	59%	25%	16%	0%	16%
Lukachukai Community School	210	73%	20%	7%	0%	7%
Many Farms Community School	200	62%	30%	9%	0%	9%
Many Farms High School	69	59%	25%	14%	1%	15%
Nazlini Community School	47	51%	30%	17%	2%	19%
Rock Point Community School	278	79%	14%	6%	1%	7%
Rough Rock Community School	94	87%	12%	1%	0%	1%
Chilchinbeto Community School	64	86%	13%	2%	0%	2%
Dennehotso Boarding School	97	44%	41%	14%	0%	14%
Greyhills Academy High School	61	44%	33%	23%	0%	23%
Kaibeto Boarding School	131	53%	30%	17%	0%	17%
Kayenta Community School	212	67%	25%	9%	0%	9%
Leupp School, Inc	71	89%	10%	1%	0%	1%
Little Singer Community	59	76%	19%	5%	0%	5%
Naa Tsis'Aan Community School (Navajo Mountain)	59	83%	15%	2%	0%	2%
Rocky Ridge Boarding	65	74%	18%	8%	0%	8%
Shonto Preparatory School	224	56%	31%	13%	0%	13%
Tonalea (Red Lake) Day School	113	50%	33%	18%	0%	18%
Tuba City Boarding School	832	39%	33%	26%	2%	28%
Crystal Boarding School	67	46%	37%	13%	3%	16%
Dilcon Community School	107	54%	28%	17%	1%	18%
Greasewood Springs Community School Inc.	115	49%	33%	17%	1%	18%
Hunters Point Boarding School	84	64%	24%	12%	0%	12%
Kin Dah Lichi'i Olta' (Kinlichee)	67	85%	15%	0%	0%	0%
Pine Springs Day School	16	63%	19%	19%	0%	19%
Seba Dalkai Boarding School	45	22%	49%	27%	2%	29%
Wide Ruins Community School	44	91%	9%	0%	0%	0%

Source: Bureau of Indian Education (2021). Annual School Report Cards. Retrieved from <https://www.bie.edu/topic-page/performance-data-statistics>

Note: The Annual School Report Cards do not specify what grades were included in the assessment results included in this table.



Table 81. Math assessment results for Navajo Nation BIE Schools, 2018-19

	Total Tested	Minimally proficient	Partially proficient	Proficient	Highly proficient	Passing
Navajo Nation BIE Schools	3,628	68%	22%	10%	0%	11%
Black Mesa Community School	40	55%	35%	10%	0%	10%
Cottonwood Day School	108	75%	19%	5%	2%	7%
Jeehdeezá Academy Inc. (Low Mountain)	67	82%	18%	0%	0%	0%
Lukachukai Community School	210	80%	15%	5%	0%	5%
Many Farms Community School	200	58%	30%	13%	0%	13%
Many Farms High School	53	85%	13%	2%	0%	2%
Nazlini Community School	47	62%	26%	13%	0%	13%
Rock Point Community School	278	86%	12%	2%	0%	2%
Rough Rock Community School	94	87%	13%	0%	0%	0%
Chilchinbeto Community School	63	83%	14%	3%	0%	3%
Dennehotso Boarding School	97	62%	28%	10%	0%	10%
Greyhills Academy High School	55	75%	18%	7%	0%	7%
Kaibeto Boarding School	131	73%	18%	9%	0%	9%
Kayenta Community School	216	79%	17%	4%	0%	4%
Leupp School, Inc	72	94%	4%	1%	0%	1%
Little Singer Community	59	98%	2%	0%	0%	0%
Naa Tsis'Aan Community School (Navajo Mountain)	59	68%	29%	3%	0%	3%
Rocky Ridge Boarding	65	77%	17%	6%	0%	6%
Shonto Preparatory School	222	64%	24%	12%	0%	12%
Tonalea (Red Lake) Day School	113	60%	25%	14%	1%	15%
Tuba City Boarding School	833	46%	30%	24%	1%	25%
Crystal Boarding School	67	72%	21%	6%	1%	7%
Dilcon Community School	107	73%	21%	7%	0%	7%
Greasewood Springs Community School Inc.	116	80%	18%	2%	0%	2%
Hunters Point Boarding School	84	71%	25%	4%	0%	4%
Kin Dah Lichi'i Olta' (Kinlichee)	67	87%	10%	3%	0%	3%
Pine Springs Day School	16	69%	31%	0%	0%	0%
Seba Dalkai Boarding School	45	53%	31%	16%	0%	16%
Wide Ruins Community School	44	73%	25%	2%	0%	2%

Source: Bureau of Indian Education (2021). Annual School Report Cards. Retrieved from <https://www.bie.edu/topic-page/performance-data-statistics>

Note: The Annual School Report Cards do not specify what grades were included in the assessment results included in this table.

## Child Health

Table 82. Prenatal Vitamin Usage by mothers giving birth, 2016-2018

	Prenatal vitamin usage everyday	Prenatal vitamin usage 4-6 times per week	Prenatal vitamin usage 1-3 times per week	No prenatal vitamin usage
Navajo Nation, Arizona part (AZ PRAMS)	21.2%	4.3%	8.7%	65.0%
Navajo Nation, New Mexico part (NM PRAMS)	30.1%	N/A	N/A	57.2%
Healthy People 2020	26.2%	N/A	N/A	N/A

Source: Waters et al. (2021). 2020 Navajo Nation Maternal and Child Health Needs Assessment. Report received by request.

Table 83. Alcohol consumption prior to pregnancy, 2016-2018

	Alcohol consumption of 1-3 drinks per week 3 months prior to conception
Navajo Nation, Arizona part (AZ PRAMS)	36%
Navajo Nation, New Mexico part (NM PRAMS)	33%

Source: Waters et al. (2021). 2020 Navajo Nation Maternal and Child Health Needs Assessment. Report received by request.

Table 84. Breastfeeding rates for infants enrolled in Navajo Nation WIC, 2019

	Number	Percent
Total infants currently or ever breastfed	1,324	85%
Infants breastfed for 3 or more months	727	56%
Infants breastfed for 6 or more months	637	42%
Infants breastfed for 12 or more months	378	29%
Infants breastfed for 18 or more months	233	21%
Infants exclusively breastfed for 3 or more months	489	38%
Infants exclusively breastfed for 6 or more months	170	11%

Source: Navajo Nation WIC program (2021). [2019 Navajo Nation WIC data]. Unpublished tribal data received by request.

Table 85. Oral health services for children ages 1-15 seen at IHS, 2019

	Children (ages 2-15) with sealants	Children (ages 1-15) with topical fluoride
Navajo IHS area	19%	30%
Chinle	23%	54%
Crownpoint	11%	25%
Gallup	20%	27%
Kayenta	42%	49%
Shiprock	17%	23%
National IHS goal	16%	30%

Source: Waters et al. (2021). 2020 Navajo Nation Maternal and Child Health Needs Assessment. Report received by request.

## Early Learning

Figure 71. Children ages 0-13 receiving child care services through CCDF by reason for care, FY 2020Me

	Total	Parents working	Parents in training or education program	Child receiving or needing protective services	Parents working	Parents in training or education program	Child receiving or needing protective services
Navajo Nation (entire)	605	498	88	19	82%	15%	3%
Chinle	149	112	28	<10	75%	19%	6%
Crownpoint	73	42	30	<10	58%	41%	1%
Ft Defiance	158	144	<10	<10	91%	4%	5%
Shiprock	137	124	13	0	91%	9%	0%
Tuba City	88	76	11	<10	86%	13%	1%

Source: Navajo Nation Department of Child Care and Development (2021). 2020 Navajo Nation CCDF Annual Report Form 700. Report received by request.

Table 86. Children ages 0-13 receiving child care services through CCDF by income level, FY 2020

	Total children receiving services	Number of children by ratio of income to poverty				Percent of children by ratio of income to poverty			
		At or below 100%	101-150%	151-200%	Over 200%	At or below 100%	101-150%	151-200%	Over 200%
Navajo Nation (total)	605	253	200	114	38	42%	33%	19%	6%
Chinle	149	62	52	30	<10	42%	35%	20%	3%
Crownpoint	73	29	23	15	<10	40%	32%	21%	8%
Ft Defiance	158	62	43	42	11	39%	27%	27%	7%
Shiprock	137	48	54	19	16	35%	39%	14%	12%
Tuba City	88	52	28	<10	0	59%	32%	9%	0%

Source: Navajo Nation Department of Child Care and Development (2021). 2020 Navajo Nation CCDF Annual Report Form 700. Report received by request.

Table 87. Children ages 0-13 receiving child care services through CCDF by payment type, FY 2020

	Total	Tribally-operated center	Certificate or voucher for center-based care	Certificate or voucher for home-based care	Certificate or voucher for unlicensed relative care
Navajo Nation (entire)	605	60%	14%	14%	14%
Chinle	149	89%	1%	7%	2%
Crownpoint	73	49%	27%	0%	25%
Ft Defiance	158	78%	0%	8%	15%
Shiprock	137	36%	28%	29%	12%
Tuba City	88	26%	27%	25%	24%

Source: Navajo Nation Department of Child Care and Development (2021). 2020 Navajo Nation CCDF Annual Report Form 700. Report received by request.

Table 88. Funded enrollment in Navajo Head Start by center, 2020-21

	Total	Duration	Seasonal	Early Head Start
<b>Navajo Nation (entire)</b>	<b>1,350</b>	<b>625</b>	<b>688</b>	<b>37</b>
District 1 Shiprock	187	78	92	17
Nageezi	13	13		
Nenahnezad	12	12		
Newcomb	20		20	
Red Mesa	15	15		
Red Valley	10	10		
San Juan	18		18	
Sanostee	15	15		
Shiprock 1	20		20	
Shiprock 2	20		20	
Shiprock EHS	17			17
Two Grey Hills	12	12		
Upper Fruitland	15	15		
District 2 Crownpoint	250	115	135	0
Baahaali	14	14		
Chichiltah	13	13		
Church Rock 1	15	15		
Church Rock 2	15	15		
Crownpoint 1	20		20	
Crownpoint 2	20		20	
Little Water	15	15		
Nahodishgish	15		15	
Pinedale 1	15	15		
Pinedale 2	15	15		
Pueblo Pintado	15	15		
Red Rock	20		20	
Smith Lake	18	18		
Thoreau	20		20	
Torreon	20		20	
District 3 Window Rock	375	201	162	12

Cornfields	14	14		
Crystal	20		20	
Dilkon	15	15		
Ganado	15	15		
Jeddito	14	14		
Kin Dah Lichi'i	20		20	
Lupton	14		14	
Rural	18		18	
Sawmill	20		20	
St Michaels 1	20		20	
St Michaels 2	20		20	
Steamboat	15		15	
Tohatchi 1	19		19	
Tohatchi 2	18		18	
Tsayatoh	14	14		
Twin Lakes	17		17	
Wide Ruins	10	10		
Window Rock 1	20	20		
Window Rock 2	20	20		
Window Rock 3	20	20		
Window Rock 4	20	20		
Ft Defiance EHS	12			12
District 4 Chinle	301	111	182	8
Blue Gap	14		14	
Chinle	20		20	
Chinle Valley	18	18		
Cottonwood	14	14		
Del Muerto 1	20		20	
Del Muerto 2	18	18		
Low Mountain	14	14		
Lukachukai 1	20		20	
Lukachukai 2	20		20	
Many Farms 1	17		17	
Many Farms 2	15	15		
Many Farms 3	15	15		
Nazlini	14	14		

Pinon 1	15	15		
Pinon 2	15	15		
Rough Rock	10	10		
Tsaile	20	20		
Whippoorwill	14	14		
Dine College EHS	8			8
District 5 Kayenta/Tuba City	237	120	117	0
Cameron	20		20	
Cowsprings	14	14		
Dennehotso	14	14		
Gap	14	14		
Inscription House	14	14		
Kayenta 1	17	17		
Kayenta 2	17	17		
Kayenta 3	17	17		
Leupp	10	10		
Navajo Mountain	12		12	
Oljato	15		15	
Rock Point	18		18	
Shonto	15		15	
Tonalea	20		20	
Tuba City	20		20	

*Source: Navajo Head Start (2021). [Funded Enrollment dataset]. Unpublished data received by request.*

Table 89. Number and capacity of regulated early care and educational providers by operational status in December 2020

Geography	All providers	Capacity	Nannies or individual providers	Capacity	Child care centers	Capacity	Family child care providers	Capacity
Navajo Nation (Arizona part)	13	782	0	0	13	782	0	0
Chinle Agency	4	205	0	0	4	205	0	0
Eastern Agency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fort Defiance Agency	4	259	0	0	4	259	0	0
Northern Agency	1	57	0	0	1	57	0	0
Western Agency	4	261	0	0	4	261	0	0
All Arizona Reservations	N/A	N/A	0	0	N/A	N/A	0	0
Arizona	2,521	202,010	26	89	1,909	198,100	586	3,821

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

Note: Centers represented on this table include: Red Mesa Unified School District Preschool; Tsehootsoi Integrated Preschool Program; Flagstaff Unified School District Dine Family Learning Center/Facts; Indian Wells Preschool; Navajo Nation CCFD Karigan Center; Tsaille Public School Preschool; Navajo Nation CCDF Kii Doo Baa Child Care Center; Chinle Elementary School Pre School Preschool; Tuba City High School Child Development; Ganado Pre-K Academy; Pinon Elementary School; C.O.P.E.; and A B C Preschool.



Table 90. Preschoolers enrolled in special education by type of disability, 2019-20

	Number of preschoolers enrolled	Developmental delay	Preschool severe delay	Speech or language impairment	Other disabilities
<b>Navajo Nation (ADE schools)</b>	<b>98</b>	<b>55%</b>	<b>20%</b>	<b>23%</b>	<b>&lt;2%</b>
Window Rock Unified District	DS	43%	36%	21%	<2%
Ganado Unified School District	DS	>98%	<2%	<2%	<2%
Chinle Unified District	DS	52%	10%	33%	5%
Red Mesa Unified District	DS	80%	<2%	20%	<2%
Leupp Public School (FUSD)	DS	67%	33%	<2%	<2%
Tuba City Unified School District #15	18	28%	39%	33%	<2%
Indian Wells Elementary (HUSD)	DS	80%	20%	<2%	<2%
Pinon Unified District	DS	63%	16%	21%	<2%
Cedar Unified District	DS	<2%	50%	50%	<2%
Kayenta Unified School District #27	DS	90%	<2%	10%	<2%
Arizona Schools	10,521	43%	20%	34%	3%

Source: Arizona Department of Education (2021). [Special Needs dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

## APPENDIX 2: METHODS AND DATA SOURCES

The data contained in this report come from a variety of sources, including publicly available datasets; data requested from Arizona state agencies; data obtained from various Navajo Nation divisions, departments and programs with approval from the Navajo Nation in a Memorandum of Understanding for multiple data collection approved by the Office of the Navajo Nation President and Vice President; and qualitative data gathered through key informant interviews. Specific sources and methods used in this report are enumerated below.

### *U.S. Census and American Community Survey Data*

The U.S. Census<sup>325</sup> is an enumeration of the population of the United States. It is conducted every 10 years, and includes information about housing, race, and ethnicity. The 2010 U.S. Census data are available by census block. There are about 115,000 inhabited blocks in Arizona, with an average population of 56 people each. Both the 2010 and 2020 Census data for the Navajo Nation Region presented in this report are drawn from the Census Geography for the Arizona portion of the Navajo Nation. The Census Bureau is expected to publish new population estimates and detailed tables from the 2020 Census for tribal geographies later in 2023.

In March of 2022 the U.S. Census Bureau released its estimates of undercount and overcount in the 2020 Census. Analyses conducted by the Bureau show that several groups that have been historically undercounted were also undercounted in the 2020 Census. This includes the Black or African American population, the American Indian/Alaska Native population residing on reservations, the Hispanic or Latino population and individuals who indicated being of “Some other race.” Among age groups, the Census 2020 also undercounted children ages birth to 17, especially children birth to 4. According to the Census Bureau, the undercount rate among American Indian/Alaska Native people living on reservations was 5.64% (a percentage that was not statistically different from the undercount rate of 4.88% in the 2010 U.S. Census).<sup>326</sup>

The American Community Survey (ACS)<sup>327</sup> 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. The ACS data are available by census tract. Arizona is divided into about 1,500 census tracts, with an average of about 4,200 people in each. The ACS data for the Navajo Nation Region were also drawn from the Census Geography for the Arizona portion of the Navajo Nation. Data in this report from the ACS summarize the responses from samples of residents taken between 2015 and 2019, which is notably before the COVID-19 pandemic began. Because these estimates are based on samples rather than the full population, ACS data should not be considered exact. In general, the reliability of ACS estimates is greater for more populated areas. Statewide estimates, for example, are more reliable than county-level estimates or estimates for tribal geographies. Estimates which are based on very few respondents (fewer than 50) will not be included in the data tables in this report.

### ***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 spring of 2021. The vendor worked with the Regional Director to create a list of all public and charter schools that serve students from the region. 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 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 and business rules over the past three years, some indicators could not be presented as a time series.

### ***Data Suppression***

To protect the confidentiality of program participants, the First Things First (FTF) Data Dissemination and Suppression Guidelines preclude our reporting 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 six. In addition, some data received from state agencies are suppressed according to their own guidelines. The Arizona Department of Health Services (ADHS) does not report counts less than six; the Arizona Department of Economic Security (DES) does not report counts between one and nine; and 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 will be indicated by entries of "<6" or "<10" or "<11" for counts, or "DS" (data suppressed) for percentages. Data are sometimes not available for particular regions, either because a particular 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."

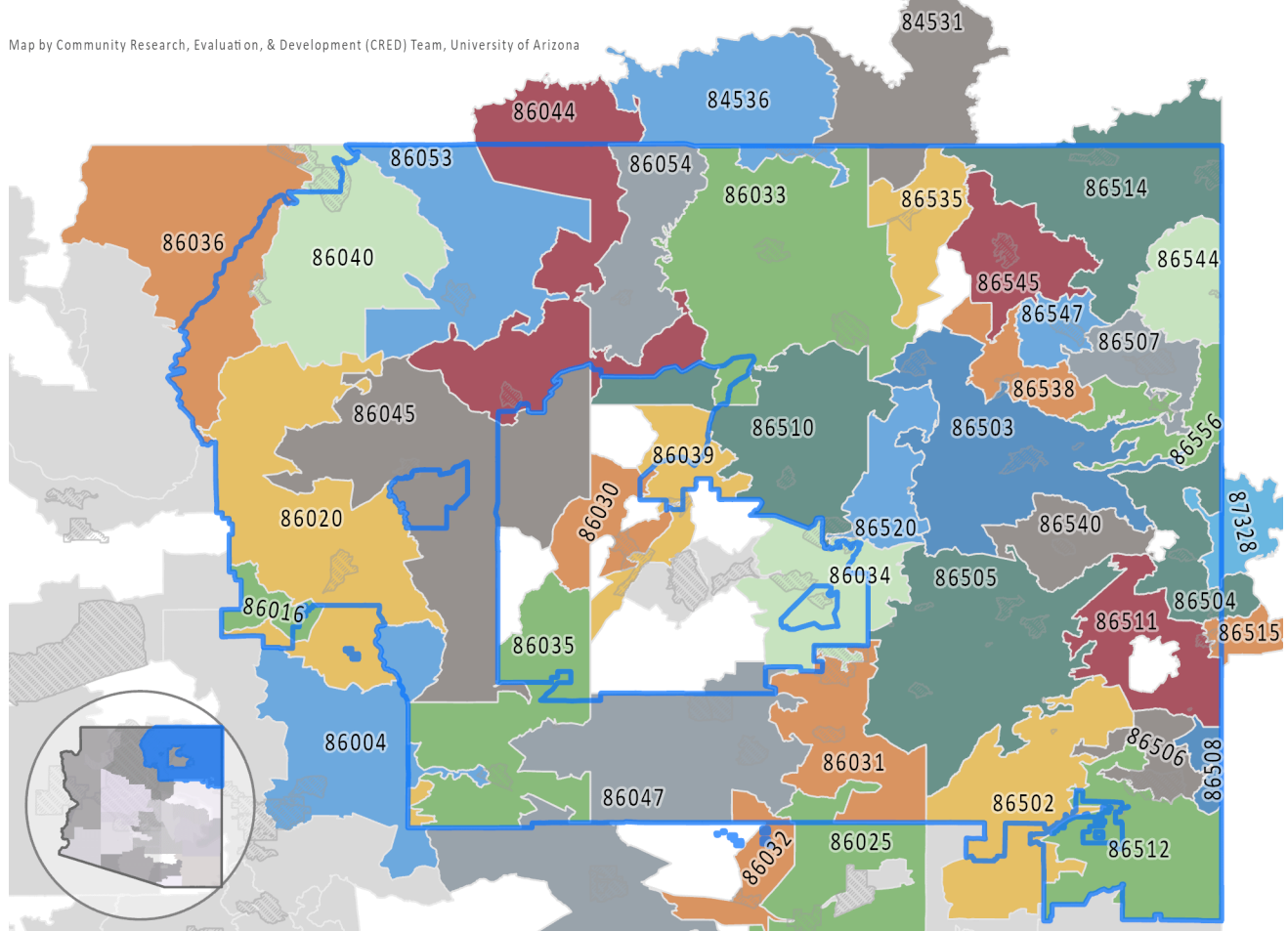
For some data, an exact number was not available because it was the sum of several numbers provided by a state agency, and some numbers were suppressed in accordance with agency guidelines or because the number was suppressed as a second-smallest value that could be used to calculate a suppressed value. 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 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 one and nine, so the possible range of values is the sum of the two known numbers plus one on the lower bound to the sum of the two known numbers plus nine on the upper bound. Ranges that include numbers below the suppression threshold of less than six or 10 may still be included if the upper limit of the range is above six or 10. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.

### ***The Report Process.***

This report was the product of collaboration between the vendor, the Regional Director, the Regional Partnership Council and the FTF Evaluation team. The vendor worked with the FTF Evaluation team to identify and review indicators for the report and prepare data requests to submit to state agencies. The Regional Partnership Council, Regional Director, and the vendor worked together to define priority areas, identify appropriate key informants, and submit tribal data requests. The vendor worked to process, compile, analyze, and visualize data gathered as well as to review data for quality and accuracy. Following data analysis, visualization, and review, the vendor facilitated a data interpretation session with the Regional Director, the Regional Partnership Council, and key stakeholders in the region. This session, which took place in three separate dates, aimed to allow participants to share their local knowledge and perspectives in interpreting the data collected. The vendor finally synthesized the data, analysis and findings from the data interpretation session in this report, which has been reviewed by the Regional Director, Regional Partnership Council, and Navajo Nation leadership prior to publication.

# APPENDIX 3: ZIP CODES OF THE NAVAJO NATION REGION

Figure 72. Zip Code Tabulation Areas (ZCTAs) in the Navajo Nation Region



Source: Custom map by the Community Research, Evaluation, & Development (CRED) Team using shapefiles obtained from First Things First and the U.S. Census Bureau 2019 TIGER/Line Shapefiles (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php>)

Table 91. Zip Code Tabulation Areas (ZCTAs) in the Navajo Nation Region

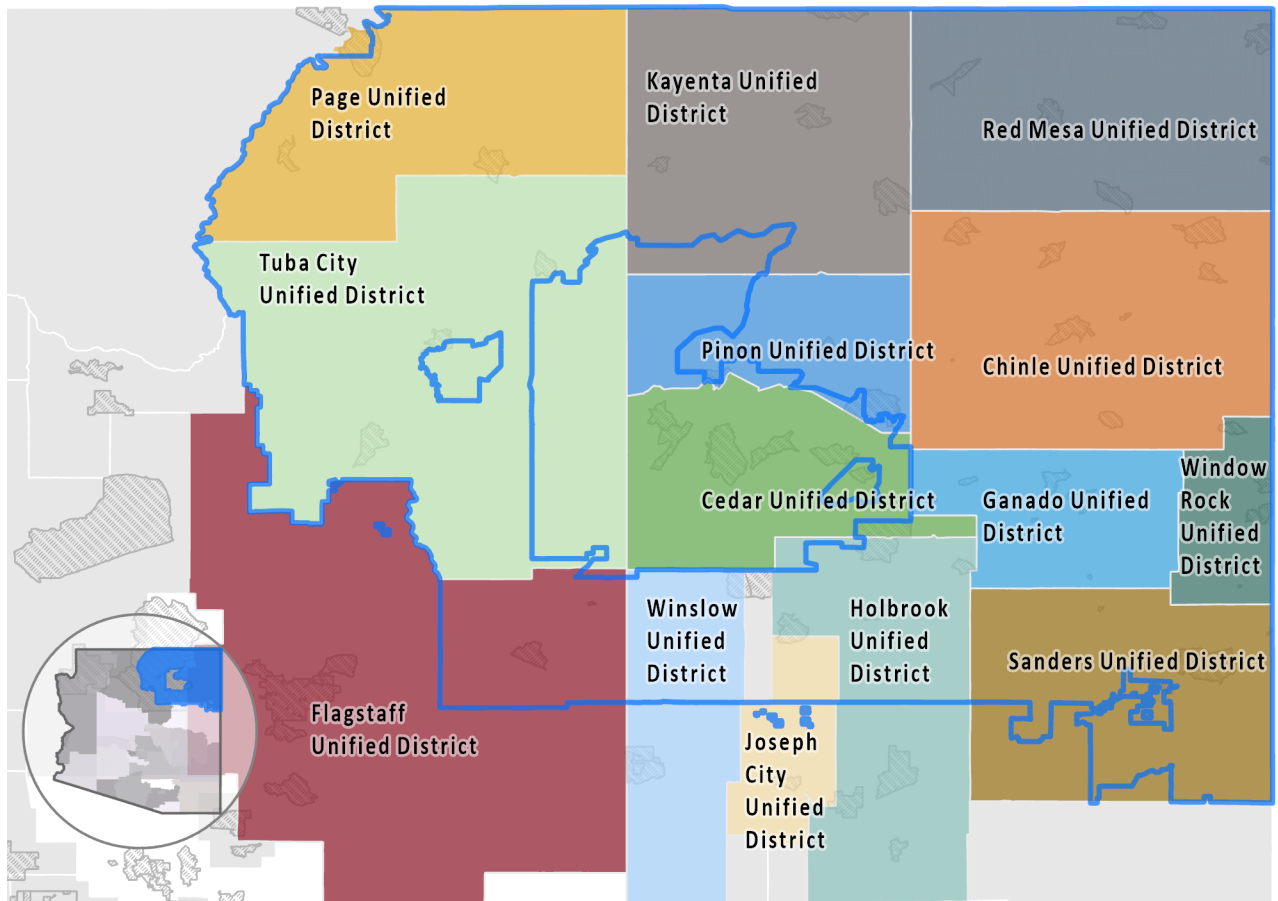
Zip Code Tabulation Area (ZCTA)	Population (all ages)	Population (ages 0-5)	Total number of households	Households with young children (ages 0-5)	Percent of this ZCTA's total population living in the Navajo Nation Region	This ZCTA is shared with
<b>Navajo Nation Region</b>	<b>101,835</b>	<b>10,894</b>	<b>29,232</b>	<b>7,159</b>		
84531	20	0	9	0	100%	
84536	280	21	74	18	100%	
86003	23	0	12	0	100%	
86004	207	14	68	6	1%	Coconino
86016	56	4	25	2	90%	Coconino
86020	1,889	181	544	120	97%	Coconino
86025	83	7	24	6	1%	Navajo/Apache
86030	226	21	69	16	16%	Coconino
86031	1,856	183	509	113	100%	
86032	46	4	15	3	3%	Navajo/Apache
86033	7,834	890	2,219	595	100%	Coconino
86034	1,667	165	501	118	73%	Coconino
86035	1,749	144	499	93	97%	Coconino
86036	147	15	42	10	38%	Coconino
86039	796	71	239	48	54%	Coconino
86040	2,645	297	671	188	26%	Coconino
86044	3,825	423	1,028	264	100%	
86045	10,344	1,194	2,732	775	91%	Coconino
86047	4,128	400	1,136	273	28%	Coconino & Navajo/Apache
86053	2,311	295	566	192	100%	
86054	1,935	189	579	125	100%	
86502	1,377	130	414	78	94%	Navajo/Apache
86503	10,714	1,225	3,100	790	100%	
86504	5,835	600	1,754	416	100%	
86505	7,682	772	2,312	499	100%	
86506	1,321	122	440	81	100%	
86507	2,340	268	697	183	100%	
86508	752	68	238	51	100%	
86510	5,350	600	1,548	395	100%	Coconino
86511	3,694	371	1,118	219	100%	
86512	2,017	221	593	140	83%	Navajo/Apache
86514	3,011	292	930	201	100%	
86515	2,894	313	882	217	100%	
86520	1,793	181	550	125	100%	
86535	1,199	130	325	89	100%	
86538	2,338	285	682	189	100%	
86540	1,088	103	318	64	100%	
86544	1,267	122	403	77	100%	
86545	1,650	187	446	120	100%	
86547	1,171	132	313	87	100%	
86556	2,090	238	549	162	100%	
87328	185	16	59	11	100%	

Source: U.S. Census Bureau (2010). 2010 Decennial Census, Summary File 1, Tables P1, P14, & P20

# APPENDIX 4: SCHOOLS AND SCHOOL DISTRICTS OF THE NAVAJO NATION REGION

Figure 73. School Districts in the Navajo Nation 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 2019 TIGER/Line Shapefiles (<https://www.census.gov/cgi-bin/geo/shapefiles/index.php>)

Table 92. Arizona Department of Education (ADE) School Districts and Local Education Authorities (LEAs) in the Navajo Nation Region

Name of district or Local Education Agency (LEA)	Number of schools	Number of students in kindergarten through third grade
<b>Navajo Nation (ADE schools)</b>	<b>41</b>	<b>3,206</b>
Window Rock Unified District	6	490
Ganado Unified School District	4	279
Chinle Unified District	7	1,002
Red Mesa Unified District	5	105
Leupp Public School (FUSD)	1	96
Tuba City Unified School District #15	7	320
Indian Wells Elementary (HUSD)	1	194
Pinon Unified District	4	274
Cedar Unified District	2	41
Kayenta Unified School District #27	3	405
Shonto Preparatory Technology High School	1	N/A
Off-Reservation ADE Schools serving Navajo Nation students (All Students)	10	187
Sanders Unified District	2	187
Holbrook Unified District	2	N/A
Flagstaff Unified District	2	N/A
Page Unified District	3	N/A
Winslow Unified District	1	N/A

Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Note: N/A indicates that no K-3 students were enrolled in the selected schools in a given district. The selected off-reservation schools serving Navajo Nation students included in this report are as follows: Sinagua Middle School and Flagstaff High School in Flagstaff Unified District; Page Middle School, Page High School and Sand & Sage Academy in Page Unified District; Holbrook Junior High School and Holbrook High School in Holbrook Unified District; and Sanders Elementary School and Valley High School in Sanders Unified District.



Table 93. Navajo Nation students enrolled in schools in Arizona, 2020-21

District	School	Students
Arizona Public Schools- On Navajo Nation		12,022
Cedar Unified District		105
	Jeddito School (K-8)	105
Chinle Unified School District		3,198
	Canyon De Chelly Elementary Sch (K-6)	312
	Chinle Elementary School (PS-6)	492
	Chinle Junior High School (7-8)	314
	Chinle High School (9-12)	880
	Many Farms Elementary School (K-8)	363
	Mesa View Elementary School (K-6)	371
	Tsaile Elementary School (K-8)	466
Flagstaff Unified School District		152
	Leupp Public School (PS-5)	152
Ganado Unified District		1,297
	Ganado Primary School (PS-2)	235
	Ganado Intermediate School (3-5)	229
	Ganado Middle School (6-8)	361
	Ganado High School (9-12)	472
Holbrook Unified School District		367
	Indian Wells Elementary School (PS-6)	367
Kayenta Unified School District		1,650
	Kayenta Elementary School (PS-4)	533
	Kayenta Middle School (5-8)	472
	Monument Valley High School (9-12)	645
Pinon Unified School District		990
	Pinon Elementary School (PS-5)	414
	Pinon Accelerated Middle School (6-8)	278
	Pinon High School (9-12)	298
Red Mesa Unified School District		420
	Red Mesa Elementary School (K-5)	113
	Red Mesa Junior High School (6-8)	70
	Red Mesa High School (9-12)	163
	Red Valley/Cove High School (9-12)	15
	Round Rock Elementary School (K-8)	59
Sanders Unified School District		645
	Sanders Elementary School (PS-5)	261
	Sanders Middle School (6-8)	171
	Valley High School (9-12)	213
Tuba City Unified School District		1,386

District	School	Students
	Dzil Libei Elementary School (K-5)	38
	Nizhoni Accelerated Academy (9-12)	32
	Tsinaabaas Habitiin Elementary School (K-4)	37
	Tuba City Elementary School (PS-5)	431
	Tuba City Junior High School (6-8)	290
	Tuba City High School (9-12)	558
Window Rock Unified School District		1,812
	Integrated Preschool (PS)	27
	Dine Bi'Olta (Immersion School) (K-6)	97
	Tse'Hootsooi Primary Learning Center (K-3)	403
	Tse'Hootsooi Intmd. Learning Center (4-6)	350
	Tse'Hootsooi Middle School (7-8)	308
	Window Rock High School (9-12)	627
Arizona Charter Schools- On Navajo Nation		82
	Little Singer Community Junior High School (7-8)	ND
	Shonto Preparatory Technology High School (9-12)	82
Arizona Public Schools- Off Navajo Nation		14,380
Flagstaff Unified School District		8,785
	Charles W Sechrist Elementary School (PS-5)	404
	Coconino High School (9-12)	1,344
	Eva Marshall Elementary School (K-5)	437
	Flagstaff High School (9-12)	1,573
	John Q Thomas Elementary School (PS-5)	345
	Lura Kinsey Elementary School (PS-5)	334
	Manuel DeMiguel Elementary School (PS-5)	551
	Mount Elden Middle School (6-8)	779
	Northern Arizona Distance Learning (8-12)	177
	Sinagua Middle School (6-8)	1,102
	Sturgeon Cromer Elementary School (PS-5)	412
	Summit High School (9-12)	102
	Thomas M Knoles Elementary School (PS-5)	465
	W F Killip Elementary School (PS-5)	366
	Weitzel's Puentedehozho Bilngl Magnet School (K-5)	394
Holbrook Unified School District		1,468
	Holbrook Junior High School (6-8)	392
	Holbrook High School (9-12)	630
	Hulet Elementary School (PS, 2-5)	308
	Park Elementary School (K-1)	138
Page Unified School District		2,290
	Desert View Elementary School (PS, 3-5)	528

District	School	Students
	Lake View Elementary School (K-2)	465
	Manson Mesa High School (9-12)	24
	Page Middle School (6-8)	530
	Page High School	743
Winslow Unified School District		1,837
	Bonnie Brennan School (PS-K; 3-4)	359
	Jefferson Elementary School (1-2)	274
	Washington School (5-6)	254
	Winslow Junior High School (7-8)	336
	Winslow High School (9-12)	614
BIE & Grant Schools on Navajo Nation		6,040
Arizona Navajo Central		2,011
Grant	Black Mesa Community School (K-8)	68
BIE	Cottonwood Day School (K-8)	176
BIE	Jeehdeez'a Academy, Inc (K-5)	122
Grant	Lukachukai Community School (K-8)	269
Grant	Many Farms Community School (K-8)	252
BIE	Many Farms High School (9-12)	374
Grant	Nazlini Community School (K-6)	187
Grant	Pinon Community School (K)	27
Grant	Rock Point Community School (K-12)	397
Grant	Rough Rock Community School (K-12)	139
Arizona Navajo North		3,150
Grant	Chilchinbeto Community School (K-8)	110
BIE	Dennehotso Boarding School (K-8)	156
Grant	Greyhills Academy High School (9-12)	201
BIE	Kaibeto Boarding School (K-8)	227
BIE	Kayenta Community School (K-8)	303
Grant	Leupp Schools, Inc. (K-12)	118
Grant	Little Singer Community School (K-6)	211
Grant	Naa Tsis Aan Community School (K-8)	81
BIE	Rocky Ridge Boarding School (K-8)	94
Grant	Shonto Preparatory School (K-8)	315
BIE	Tonalea Day School (K-8)	148
BIE	Tuba City Boarding School (K-8)	1,186
Arizona Navajo South		879
BIE	Crystal Boarding School (K-6)	90
Grant	Dilcon Community School (K-8)	152
Grant	Greasewood Springs Comm Sch (K-8)	172
Grant	Hunters Point Boarding School (K-5)	113

District	School	Students
Grant	Kin Dah Lich'i Olta (K-6)	159
BIE	Pine Springs Day School (K-4)	50
BIE	Seba Dalkai Boarding School (K-8)	79
Grant	Wide Ruins Community School (K-6)	64
Off Navajo Nation Residential Halls		97
	Tiisyaakin Residential Hall (Holbrook)	25
	Winslow Residential Hall	72

*Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [Enrollment dataset]. Unpublished tribal data received by request.*

Table 94. Navajo Nation students enrolled in districts in Arizona, 2020-21

District	Students
Total students in school in Arizona	32,621
Arizona Public Schools- On Navajo Nation	12,022
Cedar Unified District	105
Chinle Unified School District	3,198
Flagstaff Unified School District	152
Ganado Unified District	1,297
Holbrook Unified School District	367
Kayenta Unified School District	1,650
Pinon Unified School District	990
Red Mesa Unified School District	420
Sanders Unified School District	645
Tuba City Unified School District	1,386
Window Rock Unified School District	1,812
Arizona Charter Schools- On Navajo Nation	82
Little Singer Community Junior High School (7-8)	ND
Shonto Preparatory Technology High School (9-12)	82
Arizona Public Schools- Off Navajo Nation	14,380
Flagstaff Unified School District	8,785
Holbrook Unified School District	1,468
Page Unified School District	2,290
Winslow Unified School District	1,837
BIE & Grant Schools on Navajo Nation in Arizona	6,040
Arizona Navajo Central	2,011
Arizona Navajo North	3,150
Arizona Navajo South	879
Off Navajo Nation Residential Halls in Arizona	97

Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [Enrollment dataset]. Unpublished tribal data received by request.

Table 95. Students enrolled in BIE schools, 2018-19 to 2020-21

School Name	2018-19	2019-20	2020-21	Change 2018-19 to 2020-21
Total Navajo Nation BIE Schools	7,055	6,594	6,031	-15%
Aneth Community School (K-6)	145	132	129	-11%
Baca/Dlo'ay Azhi Community School (K-6)	314	320	250	-20%
Beclabito Day School (K-4)	55	48	47	-15%
Bread Springs Day School (K-3)	117	104	172	+47%
Chi'chil'tah Community School (K-8)	127	101	88	-31%
Cottonwood Day School (K-8)	194	188	176	-9%
Cove Day School (K-6)	40	44	80	+100%
Crystal Boarding School (K-6)	133	124	90	-32%
Dennehotso Boarding School (K-8)	186	165	156	-16%
Jeehdeez'a Academy, Inc. (K-5)	142	132	122	-14%
Kaibeto Boarding School (K-8)	261	261	227	-13%
Kayenta Community School (K-8)	392	342	303	-23%
Lake Valley Navajo School (K-8)	57	37	28	-51%
Many Farms High School (9-12)	386	360	374	-3%
Mariano Lake Community School (K-6)	161	138	111	-31%
Nenahnezad Community School (K-6)	210	205	159	-24%
Ojo Encino Day School (K-8)	180	182	138	-23%
Pine Springs Day School (K-4)	69	65	50	-28%
Pueblo Pintado Community School (K-8)	211	204	148	-30%
Red Rock Day School (K-8)	155	126	114	-26%
Rocky Ridge Boarding School (K-8)	106	95	94	-11%
Sanostee Day School (K-3)	53	34	37	-30%
Seba Dalkai Boarding School K-8)	79	80	79	0%
T'iis Nazbas Community School (K-8)	157	140	119	-24%
Tiists'oozi'bi'olta Community School (K-8)	392	355	308	-21%
Tohaali' Community School (K-8)	115	108	88	-23%
Tonalea Day School (K-8)	204	161	148	-27%
Tse'ii'ahi Community School (K-4)	114	113	118	+4%
Tuba City Boarding School (K-8)	1,346	1,320	1,186	-12%
Wingate Elementary School (K-8)	490	485	548	+12%
Wingate High School (9-12)	464	425	344	-26%

Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [Enrollment dataset]. Unpublished tribal data received by request.

Table 96. Students enrolled in grant schools, 2018-19 to 2020-21

School Name	2018-19	2019-20	2020-21	Change 2018-19 to 2020- 21
Total Navajo Nation Grant Schools	6,057	5,813	6,071	+0.2%
Alamo Day School (K-12)	361	347	344	-5%
Atsa' Biya'a'zh Community School (K-6)	271	304	275	+1%
Black Mesa Community School (K-8)	64	64	68	+6%
Ch'booshgai Community School (K-8)	230	321	287	+25%
Chilchinbeto Community School (K-8)	151	156	110	-27%
Dibe Yazhi Habitiin Olta, Inc. (K-8)	153	108	117	-24%
Dilcon Community School (K-8)	202	181	152	-25%
Dzilth-Na-O-Dith-Hle Community School (K-8)	174	165	230	+32%
Greasewood Springs Community School (K-8)	201	157	172	-14%
Greyhills Academy High School (9-12)	279	275	201	-28%
Hanaa'dli Community School (K)	7	11	29	+314%
Hunters Point Boarding School (K-5)	179	146	113	-37%
Kin Dah Lich'i Olta (K-6)	147	129	159	+8%
Leupp Schools, Inc. (K-12)	142	133	118	-17%
Little Singer Community School (K-6)	99	89	211	+113%
Lukachukai Community School (K-8)	363	317	269	-26%
Many Farms Community School (K-8)	349	317	252	-28%
Na'Neelzhiin Ji' Olta Community School (K-8)	220	179	186	-15%
Naa Tsis Aan Community School (K-8)	92	93	81	-12%
Navajo Preparatory School (9-12)	269	271	693	+158%
Nazlini Community School (K-6)	114	117	187	+64%
Pine Hills School (K-12)	303	323	354	+17%
Pinon Community School (K)	39	49	27	-31%
Rock Point Community School (K-12)	443	426	397	-10%
Rough Rock Community School (K-12)	187	146	139	-26%
Shiprock Northwest High School (7-12)	193	218	203	+5%
Shonto Preparatory School (K-8)	388	377	315	-19%
To'Hajiilee-He Community School (K-12)	336	289	318	-5%
Wide Ruins Community School (K-6)	101	105	64	-37%
Wingate Elementary School (K-8)	490	485	548	+12%
Wingate High School (9-12)	464	425	344	-26%

Source: Navajo Nation Department of Dine Education, Office of Educational Research and Statistics (2021). [Enrollment dataset]. Unpublished tribal data received by request.

# APPENDIX 5: DATA SOURCES

Arizona Department of Economic Security. (2021). [AzEIP Data]. Unpublished raw data received through the First Things First State Agency Data Request.

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- <sup>9</sup> Rossin-Slater, M. (2013). WIC in your neighborhood: New evidence on the impacts of geographic access to clinics. *Journal of Public Economics*, *102*, 51-69.
- <sup>10</sup> U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. (n.d.). The benefits of bilingualism. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/cultural-linguistic/docs/benefits-of-being-bilingual.pdf>
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