FIRST THINGS FIRST

White Mountain Apache Tribe Region

2022

NEEDS AND ASSETS REPORT

WHITE MOUNTAIN APACHE TRIBE REGIONAL PARTNERSHIP COUNCIL 2022 NEEDS AND ASSETS REPORT

Funded by the

First Things First White Mountain Apache Tribe Regional Partnership Council

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Introduction

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

This Needs and Assets Report for the White Mountain Apache Tribe 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 White Mountain Apache Tribe 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 White Mountain Apache Tribe 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 years old in communities throughout the region.

Acknowledgements

The White Mountain Apache Tribe Regional Council wishes to thank all of the tribal, federal, state and local partners whose contributions of data, ongoing support and partnership with First Things First made this report possible. These partners included the Inter Tribal Council of Arizona; Indian Health Service; the Arizona Departments of Economic Security and Health Services; Child Care Resource and Referral; and the U.S. Census Bureau. Local partners included Alchesay Beginnings Child Development Center, Chaghache Child Care Center, Dishchii'bikoh Preschool, Indian Health Service: Whiteriver Service Unit, John F Kennedy Day School, White Mountain Apache Tribe Child Find, White Mountain Apache Tribe Head Start, White Mountain Apache Tribe Office of Vital Records, White Mountain Apache Tribe Social Services Department, White Mountain Apache Tribal TANF Program and the Whiteriver Unified School District. We are especially grateful for the spirit of collaboration exhibited by all our partners during an unprecedented time of crisis for our state and our nation.

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 White Mountain Apache Tribe Region.

Lastly, we want to acknowledge the current and past members of the White Mountain Apache Tribe 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 White Mountain Apache Tribe Region. The boundaries of the First Things First White Mountain Apache Tribe Regional Partnership Council are the same as the White Mountain Apache Reservation (sometimes called Fort Apache Indian Reservation). The region covers more than 2,500 square miles in Apache, Gila, and Navajo counties. When First Things First 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 First Things First designated region or elect to be designated as a separate region. The White Mountain Apache Tribe Region was one of ten tribes that chose to be designated as its own region. This designation has been ratified every two years since 2006.

Population Characteristics. According to the 2010 U.S. Census, the White Mountain Apache Tribe Region had a population of 13,409, 15% of whom were children ages birth to 5 (N=2,003). A third of the region's young children live in Whiteriver. Children ages 0 to 17 represent 35% of the region's population, which is higher than the proportion seen on all Arizona reservation lands (30%) and the whole state (23%). The population in the region increased by 7% from 2010 to 2020, however the number of births decreased 4.6% annually from 2014 to 2019. While a small portion of young children are enrolled as Tribal members each year, children are being enrolled at younger ages.

The racial and ethnic composition of the White Mountain Apache Tribe Region is similar to reservation lands across the state. According to the 2020 Census, 96% of the region's young children identify as American Indian or Alaska Native, either alone or in combination with another race or ethnicity, which is higher than the percentage seen in all Arizona reservations (91%). Only 2% identify as Hispanic or Latino compared to 9% of young children on reservations statewide.

One half of the White Mountain Apache Tribe Region's residents speak languages other than English or Spanish at home, suggesting that native language usage at home is about the same in the region as across all reservations in Arizona (51%). Almost all residents who speak a language other than English at home report that they speak English "very well," meaning that 47% of White Mountain Apache Tribe region's population is proficiently bi- or multi-lingual. Only 5% of households in the region are considered "limited-English-speaking," which is lower than across all Arizona reservation lands (13%).

A higher proportion of young children in the White Mountain Apache Tribe Region (37%) live with 2 married parents when compared to all Arizona reservations (28%). The Canyon Day and North Fork areas have the highest proportions of children living with 1 parent (72% each). Similar to what is seen across all Arizona reservations, about 8% of children ages birth to 5 in the White Mountain Apache Tribe Region are in kinship arrangements, and only 1% are living with non-relatives including foster parents. The highest percentage of young children in kinship care arrangements live in Rainbow City (19%).

A smaller portion of young children in the White Mountain Apache Tribe region live in their grandparent's household (33%) than across all Arizona reservations (45%). In Rainbow City and North Fork, however, more than half of children ages birth to 5 live in their grandparent's household (54% and 52%, respectively). In the American Community Survey, almost 500 grandparents in the White Mountain Apache Tribe Region are estimated to be responsible for 1 or more grandchildren living in their household. In 30% of these households, the child's parents are not present. The poverty rate for grandparents raising grandchildren is higher in the region (44%) than across all Arizona reservations (38%), especially in the communities of Cibecue (70%), Honda McNary (67%), and Cedar Creek (60%) (Figure 12). However, the rate of responsible grandparents with limited English use is much lower than across all Arizona reservations (5% compared with 19%).

Economic Circumstances. The median family income for the White Mountain Apache Tribe Region is estimated to be $33,900, which is less than half the median income of $70,200 across all Arizona families. The median household income is higher for families with a married couple and at least 1 child ($48,600) and lower for single-headed households ($31,500 for unmarried men, $17,500 for unmarried women). It is estimated that about 2 out of every 5 residents live in poverty (43%). Over half of children under the age of 6 (51%) live in families with incomes below the poverty level. The highest rates of child poverty are seen in Canyon Day at 77% and Cibecue at 67%, and the lowest rates are in Hondah-McNary (10%). More than 4 out of every 5 young children in the region (82%) are estimated to live in households with incomes under 185% of the poverty level (N=1,487 children ages birth to five), a threshold commonly used for safety net benefits.

The number of young children supported by the White Mountain Apache Tribe Temporary Assistance for Needy Families (TANF)/ Cash Assistance program declined 79% from 2017 to 2020. In contrast to the high portion of young children living in poverty, less than 1% of children received Tribal TANF in 2020. While enrollment has been decreasing across Tribal TANF programs due to policy changes, local enrollment declined further because many families transitioned to 1 of 2 other programs funded through Apache Behavioral Health Services (ABHS): Working 2 Wellness and EVOLVD Living with Purpose.

Nutrition assistance programs, such as the Food Distribution Program on Indian Reservations (FDPIR), the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and the National School Lunch Program are important for helping those at risk of hunger. In the White Mountain Apache Tribe Region, the proportion of families who receive SNAP benefits declined between 2016 and 2020, however, nearly 3 out of 4 children ages birth to 5 still receive SNAP benefits. In addition to SNAP, the Pandemic Electronic Benefit Transfer Program (P-EBT) was established to offset the loss of meals normally received for free at schools or child care settings; only 147 of 1,469 eligible young children received P-EBT in April 2021. Enrollment in the White Mountain Apache Tribe WIC program fell from 1,410 in 2017 to 1,189 in 2020.

Nearly all students (>98%) enrolled in schools in the White Mountain Apache Tribe region were eligible for free or reduced-price lunch in the 2019-20 school year. White Mountain Apache Tribe schools served almost 800,000 meals through the NSLP in 2018-19; when the COVID-19 pandemic began,

districts served more meals through the Summer Food Service Program (SFSP). Schools in the region served over 200,000 SFSP meals to families in the 2019-20 school year, many of which were able to be transported to families via Whiteriver USD bus routes (N=73,594). Early Care and Education centers in the region served 69,862 meals through CACFP in 2019. Head Start was able to continue serving CACFP meals during the pandemic, serving 32,136 meals in 2020. Beyond federal nutrition assistance programs, there are local efforts to build food sovereignty and restore traditional food ways in the community including N'dee Bikiyaa (the People's Farm) and a Childhood Food Security Committee.

The labor force participation rate in the White Mountain Apache Tribe region is the same as across all Arizona reservations (45%). About half of children birth to five (N=770) in the White Mountain Apache Tribe Region live in households where all present parents are in the workforce, meaning that many families likely require some form of child care. The average unemployment rate from 2015 to 2019 was 26%, which exceeds the unemployment rate across all Arizona reservations (17%). Spurred by the pandemic, the number of unemployment claims jumped substantially, from fewer than 30 in any given month prior to March 2020, to a high of 200 in April 2020. Only between 57% and 28% of claims filed were found eligible and paid, suggesting there may be widespread economic challenges in families with lost incomes who requested but did not receive unemployment benefits.

The American Community Survey estimates that there are 2,103 owner-occupied housing units and 1,348 renter-occupied housing units in the White Mountain Apache Tribe Region. Residents of the region have a lower housing cost burden than residents of the state as a whole: only 7% of homeowners and 18% of renters in the region put more than 30% of their household income toward housing (22% statewide). There is a need for more quality housing in the region as well as infrastructure improvements, indicated by a significant waiting list for low-income housing units. The number of young children living "doubled up" also increased from 10 or fewer in the 2017-18 school year to 31 in 2019-20. Lack of transportation is one of the main challenges for families in the region as it represents a key barrier to family participation in programs and a reason for missing medical appointments or follow-up care. Tribally-operated shuttle services were also paused during the pandemic.

During the pandemic, access to a computing device and reliable internet connection was essential for a successful transition to remote work and school, as well as access to telehealth and other remote social services. From 2015-2019, less than half of children birth to 17 lived in households with both a computer and internet access (48%). Children living in Cibecue (27%) and Whiteriver (39%) had even lower rates of access to both a computer and internet. Pandemic CARES act funding helped to expand rural and Tribal broadband access as well as provide WiFi hotspots and devices to children enrolled in schools in the region. During the pandemic, local programs had to be creative and proactive to stay connected with families with diverse communication needs.

Educational Indicators. The White Mountain Apache Tribe Region includes 2 school districts with 6 public schools, 3 Bureau of Indian Education (BIE) schools, and 1 private school. In the 2018-19 school year, rates of chronic absences in the schools in the White Mountain Apache Tribe Region (29%) were slightly higher than rates in surrounding Apache (25%), Gila (28%), and Navajo (21%) Counties. In this

same school year, only 11% of White Mountain Apache Tribe 3rd grade students achieved passing scores on the 3rd grade ELA assessment, which is a decrease from the 2015-16 school year (15%). Conversely, students showed improvement in math scores, with the percent of students passing increasing from 15% in 2015-16 to 24% in 2018-19. Students attending BIE schools had lower passing rates on the 3rd grade ELA (6%) and math (4%) assessments than students attending district schools.

In 2019, about 2 out of 3 high school seniors at Alchesay High School graduated on time (64%), which is similar to the 4-year graduation rate for American Indian students across Arizona schools (69%). From 2017 to 2019, the drop-out rate for students enrolled in schools in the region decreased from 12% to 7% but remained between 1% and 3% above the rate for American Indian students statewide.

Just under a third of adults in the region have less than a high school education (30%). In Cibecue and Rainbow City, the proportion of adults without a high school diploma or GED decreased from about half in 2010-2014 to just over a third in 2015-2019. Mothers of babies born in 2019 had lower levels of education than the overall adult population in the region, with 41% having less than a high school education. Apache Behavioral Health Service's (ABHS) EVOLVD Living with Purpose and Rainbow Treatment Center's (RTC) scholarship programs may help parents in the region return to school.

Early Learning. Child care and early education in the White Mountain Apache Tribe Region are available through a variety of modalities. Alchesay Beginnings Child Development Center (also known as ABC Day Care) and Chaghache Day Care provide center-based care. Preschool classes are offered at Dischii'bikoh Community School and at Whiteriver Elementary School. The Family and Child Education (FACE) program at John F. Kennedy Day School provides early learning education and support for young children and their families. White Mountain Apache Head Start enrolls 4-year-olds at 3 centers across the region. All early childhood centers in the White Mountain Apache Tribe region continue to be enrolled in Quality First.

Altogether, early care and education providers in the region have a capacity to serve about 500 children ages birth to 5. This means that, in the White Mountain Apache Tribe Region, there are 4 times as many total young children as there are children with early care and education slots. Broken into age groups, this difference is especially pronounced for infants (9.3) and toddlers (8.7). Beyond formal early care and education providers, many parents in the region rely on informal care arrangements either as their main form of care or supplemental to other programs.

Participation in the White Mountain Apache Head Start program is cost-free for all children enrolled. Similarly, children with special needs enrolled in Whiteriver Elementary School receive services at no cost to their families. As a proportion of the median family income in the region, families in the White Mountain Apache Tribe Region are paying more than the recommended 10% on child care. Key informants noted that the cost of care is not a major barrier because of the availability of scholarships and subsidies. In 2020, 62 young children received Quality First scholarships and fewer than 10 children received a subsidy through Arizona Department of Economic Security (DES).

Children are screened for special health care and educational needs through the Arizona Early Intervention Program (AzEIP) and Child Find. While 131 children were referred to AzEIP for developmental screening in 2018, 106 were referred in 2019 and only 58 were referred in 2020. Between 2018 and 2019, over 250 children ages 3 to 5 were identified as having a disability through the White Mountain Apache Tribe Child Find program. The largest proportion of children had developmental delays, followed by speech/language impairments, hearing impairments, visual impairments, orthopedic impairments, other health impairments and other disabilities. A disparately high number of young children in the region, between 25% and 30%, have mild to moderate developmental delays but do not meet thresholds for publicly-funded early intervention services.

Children meeting eligibility thresholds in the region are served through AzEIP, the Division of Developmental Disabilities (DDD), Whiteriver School District, and Head Start. The number of children served by AzEIP decreased from 30 in 2018 to 22 in 2020. Between 2017 and 2020, the number of children receiving services from DDD ranged from 26 to fewer than 10. During the 2019-20 school year there were 18 preschool-age children enrolled in special education at Whiteriver Elementary School and 19 children with IEPs enrolled at Head Start.

Child Health. Health care services are available to residents through Whiteriver Indian Hospital and the Cibecue Health Center. Between October 2019 and September 2020 there were 17,262 active IHS users, 1,941 (11%) of whom were children ages birth to 5. Other health care services are provided through the White Mountain Apache Tribe Division of Health Programs, which oversees the ABHS and the Apache Diabetes and Wellness Center.

According to estimates from the American Community Survey, 13% of the total population and only 6% of children ages birth to 5 do not have health insurance coverage in the region. This is much lower than across all Arizona reservations, where 22% of the total population and 17% of young children do not have insurance. According to data from the 2020-21 school year, all children enrolled in Head Start had insurance, had an ongoing source of accessible health care, and received medical services from IHS (258, 100%). Between 2014 and 2019, almost all births in the region were paid for by AHCCCS. High insurance coverage through AHCCCS is a significant asset to the White Mountain Apache Tribe community.

In 2019, just over half (54%) of the 237 births in the White Mountain Apache Tribe Region were to mothers who began prenatal care in their first trimester, which is lower than the state overall (68.9%), all Arizona reservations (75.3%) and the Healthy People 2020 target (84.8%). Almost a quarter of births (22%) were to mothers who had fewer than 5 prenatal visits, and 7% were to mothers who had no prenatal care. Both the percent of births to mothers with no prenatal care and the percent with fewer than 5 prenatal visits were highest in 2019 out of the previous 6 years. In the same year, the percent of births to teenaged mothers, to mothers with gestational diabetes or obesity, and with tobacco use during pregnancy were all higher in the White Mountain Apache Tribe Region than statewide. According to self-reported data, no children enrolled in WIC in 2018 were exposed to smoking in the household. Over

a third (39%) of the 225 women enrolled in WIC had pre-pregnancy obesity, which is lower than across all Tribal WIC programs in Arizona.

With regard to perinatal health, babies born in the White Mountain Apache Tribe Region were doing slightly worse than babies born statewide. In 2019, about 1 in 7 babies born (13.5%) were low birthweight, about 1 in 9 (11.4%) were born before 37 weeks, and about 1 in 8 (12.2%) were admitted to the neonatal intensive care unit (NICU). Rates of each of these birth outcomes was higher in the region than across all Arizona reservations and the entire state. In the White Mountain Apache Tribe Region, 114 newborns were hospitalized between January 2016 and June 2020 due to maternal drug use during pregnancy.

Nearly 3 out every 4 infants enrolled in WIC (72%) were ever breastfed or given human milk at birth or sometime after, though a much smaller portion of WIC-enrolled infants were breastfed for 6 or more months (28%). According to the 2020 National WIC Report, 11.8% of infants in White Mountain Apache Tribe WIC program were fully breastfed, a higher proportion that the average for all ITCA WIC programs in fiscal year 2020 (10.9%). Several programs in the region support breastfeeding, including the Indian Health Service's Baby Friendly Hospital Initiative and breastfeeding-friendly policies at the local child care centers.

In fiscal year 2020, 27% of children ages 2 to 5 seen at IHS facilities in the Whiteriver Service Unit had obesity, which is higher than that seen in IHS facilities nationwide (22.7%). From 2014 to 2018, the percent of WIC-enrolled 2- to 4-year-olds in the region with obesity steadily increased from 23% to 28%, while the percent remained the same across all ITCA WIC programs (23%).

Families with young children in the White Mountain Apache Tribe Region can access dental services at the Whiteriver Indian Hospital dental clinic and at early care and education centers. Thirty-six percent of children ages 1 to 5 received topical fluoride applications and 35% of children ages 2 to 5 received sealant applications in fiscal year 2020. All 258 children enrolled in the White Mountain Apache Tribe Head Start in 2019-20 had continuous, accessible dental care and received preventive dental care that year. Nearly three-quarters (70%) were found to need dental treatment, and just over half of these children received the needed dental treatment (39%). Among parents and caregivers surveyed in the 2020-21 White Mountain Apache Tribe Head Start Community Assessment, most respondents felt that dental caries and treatment should be given top priority among health issues in the region.

Data from the IHS Whiteriver Service Unit show that 281 toddlers ages 19 to 35 months (68%) had completed their full immunization series on-time for their age group, which exceeded the IHS target of 45.9%. Young children enrolled in early care and education programs had even higher rates of immunization: 79% of children enrolled in White Mountain Apache Tribe Head Start, 95.7% of children enrolled in child care centers and 100% of students enrolled in kindergarten had completed the 3 major vaccine series (DTAP, polio, and MMR). No children had religious or medical exemptions.

In the White Mountain Apache Tribe Region, there were 46 emergency room visits between 2016 and 2020 due to asthma for children up to age 14; 10 children birth to 4 (excluding newborns) and 12

children ages 5 to 14 were hospitalized. According to data from ADHS, between 2016 and 2020, there were 391 non-fatal emergency department visits and 10 non-fatal inpatient hospitalizations for unintentional injuries among young children. Fewer than 6 children birth to 17 died in 2019.

Family Support and Literacy. The 2020-21 White Mountain Apache Tribe Head Start Community Assessment asked caregiver respondents how often they read to their child(ren). Thirty-one percent indicated every day, 41% said once a week, and 28% read to their child(ren) less frequently than that. Early literacy efforts in the region include Arizona's American Academy of Pediatrics' (AzAAP) "Reach Out and Read" program. There are very few activities available for young children outside of the local Boys and Girls Club.

Respondents to the 2020-21 White Mountain Apache Tribe Head Start Community Assessment identified specific topics for parent education in the region: love and discipline (83%), positive parenting skills (74%), child behaviors (69%), teacher strategies for behavior problems with preschoolers (44%) and at-risk factors that influence child success in school (43%). Almost all respondents (90%) also indicated the need for a fatherhood program. Both the ABHS THRIVE: Birth to Five program and FACE program include parent education components. The Parents as Teachers (PAT) program, newly implemented by Arizona's Children Association (AzCA), also focuses on parenting behaviors to promote positive attachment and child development.

Apache Behavioral Health Services (ABHS) serves as the Tribal Regional Behavioral Health Authorities (TRBHAs) for the White Mountain Apache Tribe and provides publicly-funded services through 3 community locations. The ABHS Child Adolescent and Family Services (CAFS) and THRIVE: Birth to Five programs provide counseling for families with children. Between January 2019 and March 2021, 470 children ages 0 to 5 used family counseling, 519 used family support, 339 used individual counseling, and 309 used individual skills services through ABHS. During this time period 265 young children were given a comprehensive assessment, and the Ages and Stages Questionnaire was administered to 176 young children.

Parents and caregivers surveyed in the 2020-21 White Mountain Apache Tribe Head Start Community Assessment identified alcohol and substance abuse as having the greatest overall impact on the community. Tribally-operated Rainbow Treatment Center (RTC) provides culturally-centered preventive and treatment services for substance abuse disorders. Through programs such as Working 2 Wellness, EVOLVD Living with Purpose, and RTC scholarships, clients can receive ongoing substance abuse support while working towards school and employment goals. Café Gozhóó and the Mindfulness Kitchen additionally address Apache food sovereignty.

Both substantiated cases of child abuse and neglect and the number of children removed by Tribal Child Protective Services (CPS) declined significantly from 2019 to 2020. Pandemic disruptions resulted in fewer opportunities for educators, health care professionals, and other key social service providers to identify and report child maltreatment. Between 2019 and 2020, 603 children ages birth to 17 were placed as wards of the tribe. In 2020, about half of these children were placed in state foster homes

(49%), 16% in residential care at Our Children's Shelter, 11% in tribal foster homes located on the reservation and 11% in tribal foster homes located off the reservation. The low proportion of children placed with parents or other relatives (13%) is noticeably different from what had been reported in previous Needs and Assets Reports for the region; in 2015 nearly two-thirds were placed with parents or other relatives (65%). More CPS staff and foster homes are needed to support the region's child welfare system.

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.[i] For example, children who were under 6 years old in 2010 are now between 11 and 16 years old. The Census Bureau expects to release detailed tables from the 2020 U.S. Census later in 2023,[ii] 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 (ADHS), the Arizona Department of Education (ADE), and the Arizona Department of Economic Security (DES). 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 White Mountain Apache tribe departments and agencies with approval from the White Mountain Apache Tribal Council by Resolution Number 11-2019-233; and 2) Findings from qualitative data collection conducted in 2021 and 2022 specifically for this report through key informant interviews with service providers in the region. Not all data will be available at a First Things First (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 White Mountain Apache Tribe Regional Partnership Council members and other local stakeholders participated in a facilitated data discussion on November 11, 2021 of selected data included in this report. During this session 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 FTF White Mountain Apache Tribe Region. When available, the next 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

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[i] *Only Table 1 ("Population and households") and Figure 1 ("Share of children birth to 5 by sub-region") use 2010 Census data.*

[ii] *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*

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 WHITE MOUNTAIN APACHE TRIBE REGION

The First Things First regional boundaries were initially established in 2007, creating 31 regions which were designed to (a) reflect the view of families in terms of where they access services, (b) coincide with existing boundaries or service areas of organizations providing early childhood services, (c) maximize the ability to collaborate with service systems and local governments and facilitate the ability to convene a Regional Partnership Council, and (d) allow for the collection of demographic and indicator data.

When First Things First 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 First Things First designated region or elect to be designated as a separate region. The White Mountain Apache Tribe was one of 10 tribes that chose to be designated as its own region. This decision must be ratified every two years, and the White Mountain Apache Tribe has opted to continue to be designated as its own region.

The boundaries of the First Things First White Mountain Apache Tribe Region are the same as the White Mountain Apache Reservation (sometimes called Fort Apache). The region covers more than 2,500 square miles in Apache, Gila, and Navajo counties. There are twelve reservation communities identified by the U.S. Census: Canyon Day, Carrizo, Cedar Creek, Cibecue, East Fork, Fort Apache, Hondah-McNary, North Fork, Rainbow City, Seven Mile, Turkey Creek, and Whiteriver. Whiteriver, the largest of these communities, serves as the capital. Please note that U.S. Census communities are defined differently from tribal council districts.

Figure 1 shows the geographical area covered by the First Things First White Mountain Apache Tribe Region.

Because communities may vary in terms of needs and assets, this report presents data for the following communities, where available:

The **Canyon Day** sub-region is comprised of the Census Designated Place (CDP) of Canyon Day.

The **Cedar Creek** sub-region is defined as the Cedar Creek CDP.

The **Cibecue** sub-region encompasses the Cibecue CDP.

The **East Fork-Ft Apache-Seven Mile-Turkey Creek** sub-region is defined as the East Fork, Fort Apache, Seven Mile, and Turkey Creek CDPs.

The **Hondah-McNary** sub-region is comprised of the CDPs of Hondah and McNary.

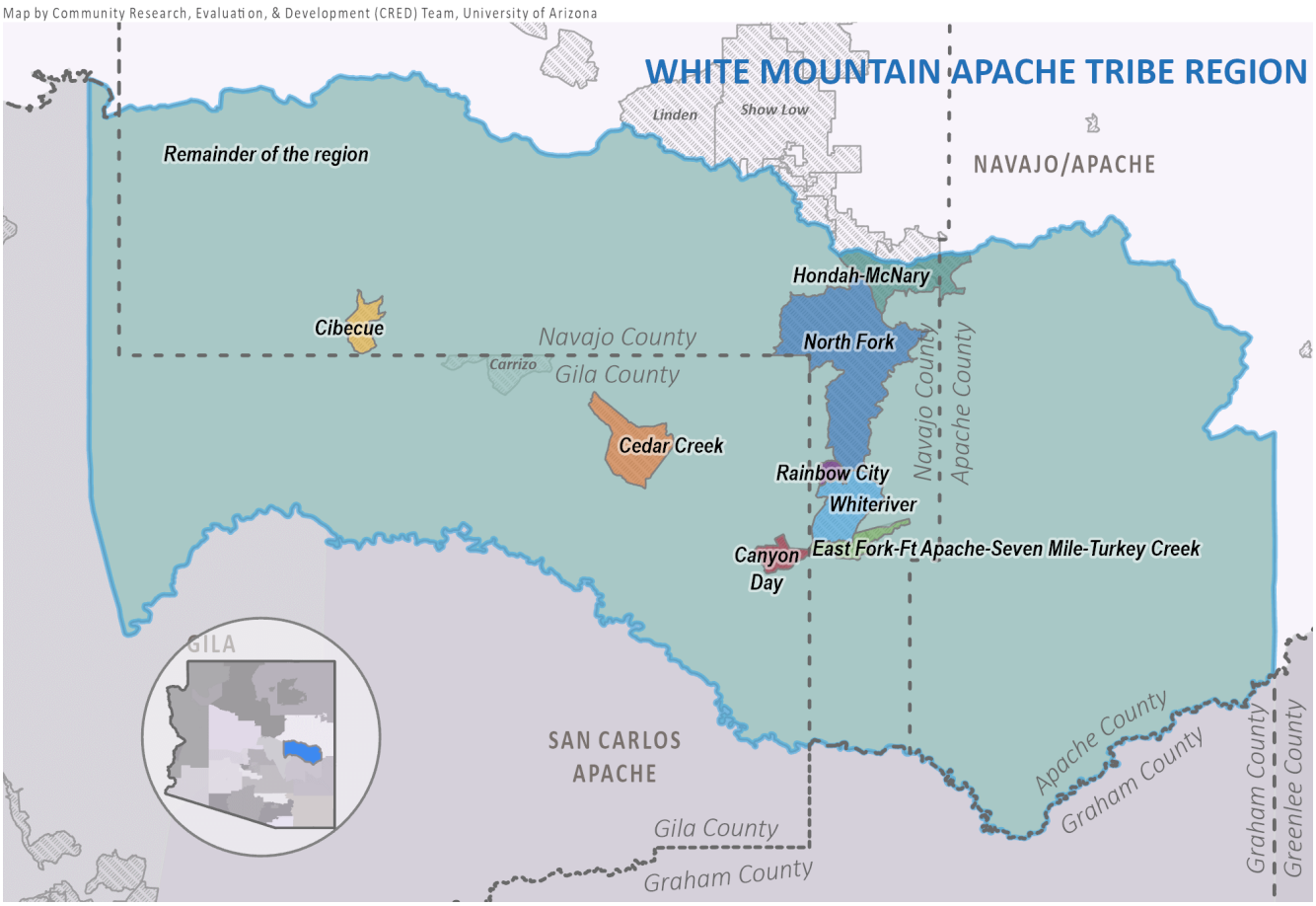
The **North Fork** sub-region is defined as the North Fork CDP.

The **Rainbow City** sub-region contains the CDP of Rainbow City.

The **Whiteriver** sub-region is comprised of the Whiteriver CDP. This area is the most populous within the White Mountain Apache Tribe Region.

The **Remainder of the Region** sub-region encompasses the portions of the region not falling within the sub-regions described above, including the unincorporated communities of Oak Creek, Grasshopper, Forestdale, and Hawley Lake as well as the Carrizo CDP. Due to its small population, some estimates are unreliable for this geography and have been suppressed in tables and figures in this report.

Figure 1. The First Things First White Mountain Apache Tribe Region



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.[1,2,3,4,5] 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.[6,7,8,9]

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 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.[10, 11] 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.[12, 13] 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.[14] 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).[15,16] Though it varies from one Native community to another, extended, multigenerational families, and kinship care are common in Native communities.[17, 18] 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.[19] Grandparents are often central to these multigenerational households, in many cases sharing and strengthening Native language, history, and culture.[20, 21]

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.[22,23,24,25] 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.[26] 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.[27,28] 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

The 2010 Decennial Census provides the most recent detailed estimate of the population by age from the U.S. Census Bureau. According to the 2010 U.S. Census, the White Mountain Apache Tribe had a population of 13,409, of whom 2,003 were children birth to five years old (15%) (Table 1). The percent of households in the region with at least 1 young child (38%) is higher than across all reservation lands in Arizona (26%). The highest number of children live in the Whiteriver area (n=653), representing about a third of the region's young children.

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)	
White Mountain Apache Tribe Region	**13,409**	**2,003**	**3,301**	**1,267**	**38%**
Canyon Day	1,209	199	298	113	38%
Cedar Creek	318	52	78	31	40%
Cibecue	1,713	259	419	172	41%
East Fork-Ft Apache-Seven Mile-Turkey Creek	1,843	261	432	163	38%
Hondah-McNary	1,340	191	335	129	39%
North Fork	1,417	185	364	121	33%
Rainbow City	968	150	223	100	45%
Whiteriver	4,104	653	1,007	403	40%
Remainder of the Region	497	53	145	35	24%
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

New redistricting data released from the 2020 Census in fall 2021 shows that the population in the White Mountain Apache Tribe increased by 7% from 2010 to 2020. This compares with a 3% decrease

in population across all Arizona Tribal lands and a 12% increase for the state (Table 2). Children ages 0 to 17 represent 35% of the region's population, which is higher than the proportion seen on all Arizona reservation lands (30%) and the state (23%).

Table 2. Population and households in the 2020 U.S. Census

Geography	Total population	Children (ages 0-17)	Total number of households
White Mountain Apache Tribe Region	**14,340**	**5,098**	**3,473**
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 1: 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.

Note 2: The total population of Arizona in the 2020 Decennial Census (7,151,502) is a 12% increase from 2010 (13,409). The total population for all reservation lands in Arizona decreased 3%, from 178,131 to 173,499. The total population of the White Mountain Apache Tribe Region increased 7%, from 13,409 to 14,340.

According to the White Mountain Apache Tribe Office of Vital Records, there were 17,062 enrolled members of the White Mountain Apache Tribe as of 2020 (Table 3). These enrolled members may be residing within or outside of the reservation boundaries, so enrollment numbers are not directly comparable with Census population numbers for the region. Table 3 shows the number of children of different ages who were enrolled as members in 2018 through 2020. About half as many children ages birth to five were enrolled in 2020 (129) as in 2019 (254), which is likely due to the COVID-19 pandemic beginning in March 2020. However, a trend to note is that young children are being enrolled earlier; while almost all young children were enrolled between ages 3 to 5 in 2018 (95%), most young children were enrolled between ages 1 to 3 in 2020 (79%). Enrollment of young children as Tribal members is important for families to access early care and education scholarships. Key informants noted that many parents have a hard time enrolling their children and may wait multiple years for enrollment to be processed after paperwork is filed. Key informants indicated that changes in staffing may have impacted the office's capacity to process applications, and that there may have been different ways of recording the enrollment data over time.

Table 3. White Mountain Apache Tribe Enrollment, 2018 to 2020

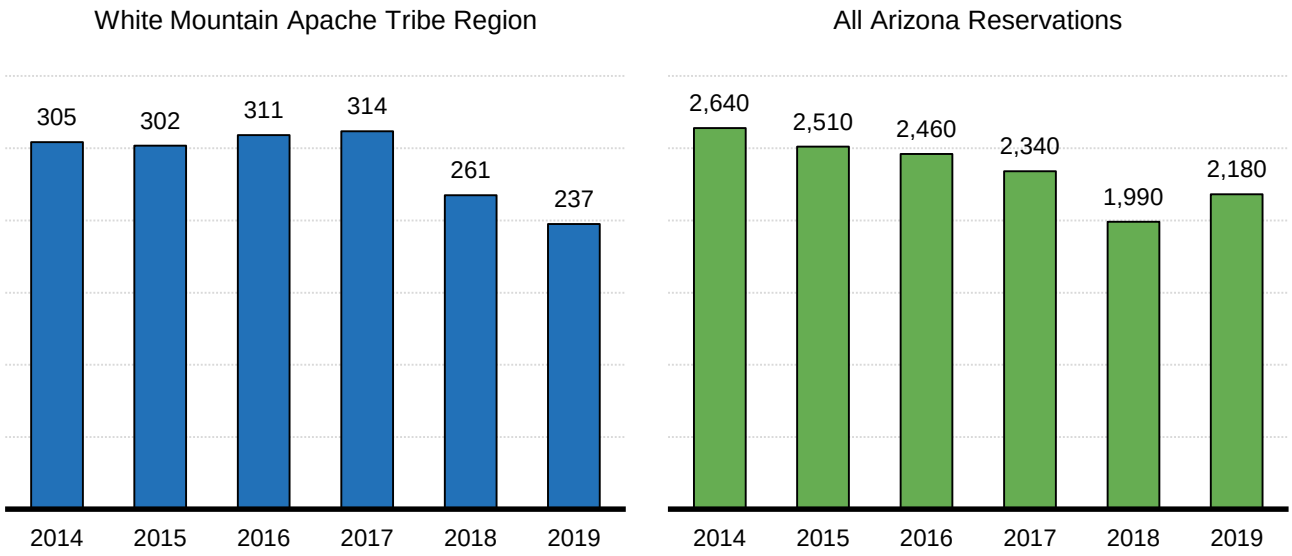
	2018	2019	2020
Children ages 0-5	**161**	**254**	**129**
Under 1	0	0	5
Age 1	0	13	48
Age 2	8	78	26
Age 3	78	81	28
Age 4	44	40	11
Age 5	31	42	11
Ages 6 to 17	65	91	23
Total population (all ages)	**16,962**	**17,044**	**17,062**

Source: White Mountain Apache Tribe Office of Vital Records (2021). [Enrollment dataset]. Unpublished tribal data received by request.

Another way to estimate the population of young children in the White Mountain Apache Tribe is from the number of births in the region (Figure 2). While more than 300 babies were born each year from 2014 to 2017, the number of births decreased to 261 in 2018 and 237 in 2019. Averaged across the past 6 years, the number of births decreased by 4.6% annually. As seen in Figure 2. Number of babies born, 2014 to 2019, the number of births on all Arizona reservations also decreased from 2014 to 2019, averaging 3.4% fewer births per year. This decrease in natality is stronger than the trend across the state of Arizona (-2%) and the U.S. as a whole (-1-2%) over the same time period.[29]

Based on the number of births, there were approximately 1,730 children ages birth to five in the region in 2019, which is lower than the 2010 Census estimate of 2,003 young children (Table 1). Comparing the number of births with the number of children enrolled as tribal members (Table 3) reveals that a small fraction of young children in the community are enrolled each year. For example, while 261 babies were born in 2018, no infants were enrolled as members in 2018, only 13 1-year-olds were enrolled in 2019 (5%), and 26 2-year-olds were enrolled in 2020 (10%).

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 2018, 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 racial and ethnic composition of the White Mountain Apache Tribe Region is similar to reservation lands across the state, with small exceptions (Table 4). According to the 2020 Census, 98% of the region's population identifies as American Indian or Alaska Native, either alone or in combination with another race or ethnicity, which is higher than the percentage seen in all Arizona reservations (93%). Conversely, smaller percentages of residents identify as Hispanic or Latino (1%) or non-Hispanic White (2%) than in all reservations (6% and 5%, respectively). No residents identify their race as Black (0%), and very few identify their race as Asian or Pacific Islander (1%) or multi-racial (1%).

Data for the racial and ethnic breakdown of young children in the region were not available from Census 2020 at the time writing this report. According to the 2015-2019 American Community Survey (ACS), nearly all young children in the region (96%) and reservation lands across Arizona (91%) identify as American Indian or Alaska Native (Figure 3). A smaller proportion of young children identify as Hispanic or Latino (2%) compared to reservations statewide (9%) (

Table 4). There is some variability in the race and ethnicity of young children sub-regionally. In North Fork, fewer young children identify as American Indian or Alaska Native (79%), while more identify as Asian or Pacific Islander (15%) or multiple races (7%). Please note the categories in the table and figures below are not exclusive, meaning that children are counted in each of their identifying categories. See subregional data in Appendix 1 Table 47 and
Table 48.

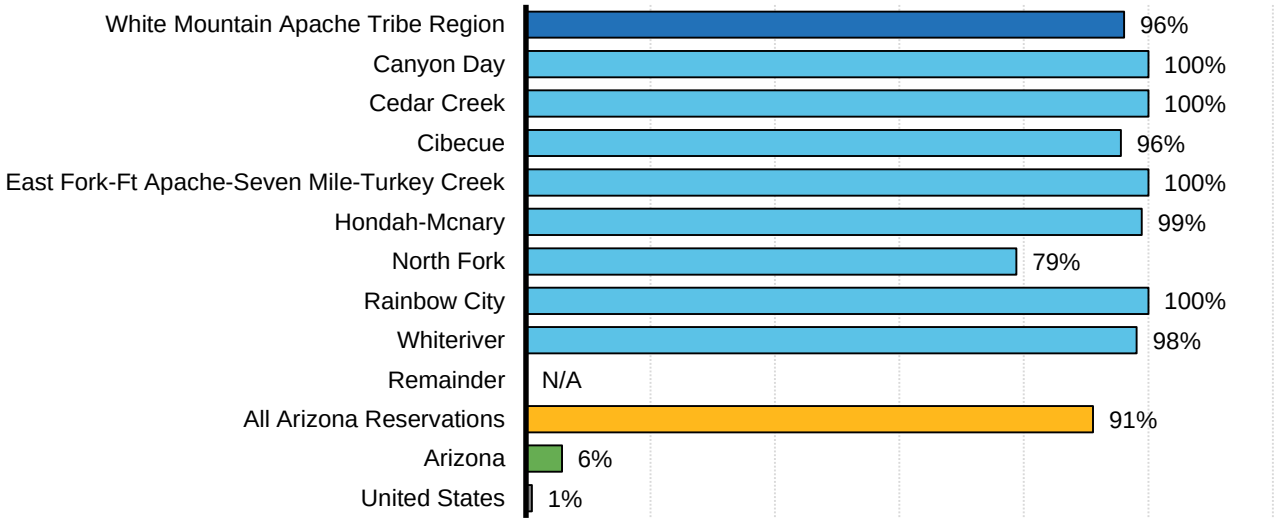
Table 4. Race and ethnicity of the population of all ages, 2020 Census

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
White Mountain Apache Tribe Region	**14,340**	**1%**	**2%**	**0%**	**98%**	**1%**	**1%**
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).

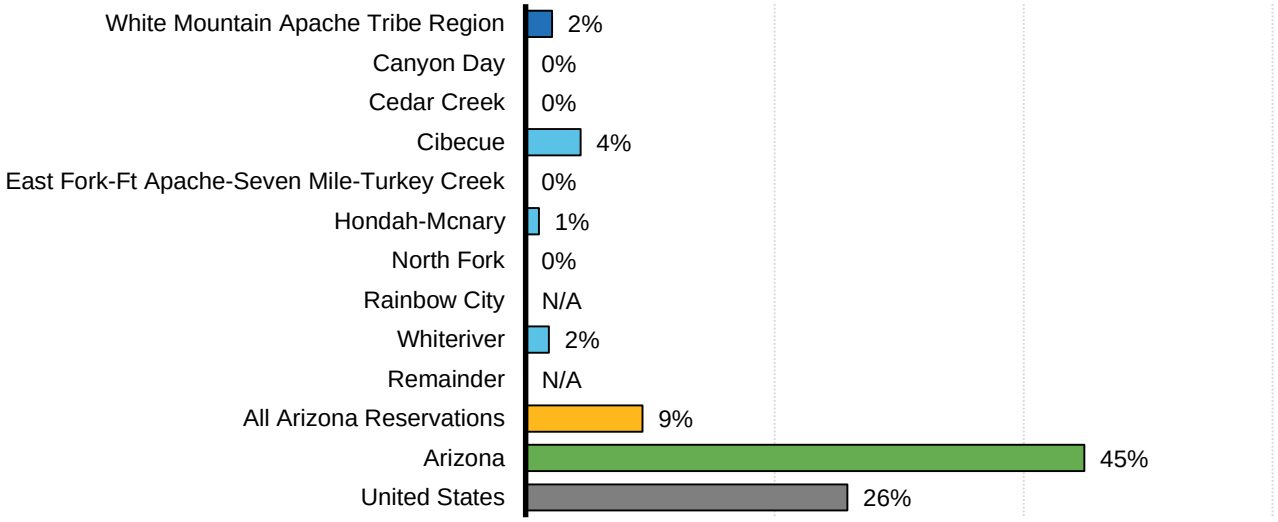
Figure 3. Percentage of children birth to 4 who identify as American Indian or Alaska Native, 2015-2019 ACS



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

Note: Due to sample size limitation, reliable estimates for the Remainder of the region are not available.

Figure 4. Percentage of children birth to 4 who identify as Hispanic or Latino, 2015-2019 ACS



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

Note: Due to sample size limitation, reliable estimates for Rainbow City and the Remainder of the region are not available.

The racial and ethnic composition for mothers giving birth in the region is similar to the total population, with 95% identifying as American Indian or Alaska Native (Table 5).

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
White Mountain Apache Tribe Region	**2018**	**261**	**[1% to 2%]**	**2%**	**0%**	**95%**	**[1% to 2%]**
	2019	**237**	**[0% to 2%]**	**3%**	**0%**	**95%**	**[0% to 2%]**
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.

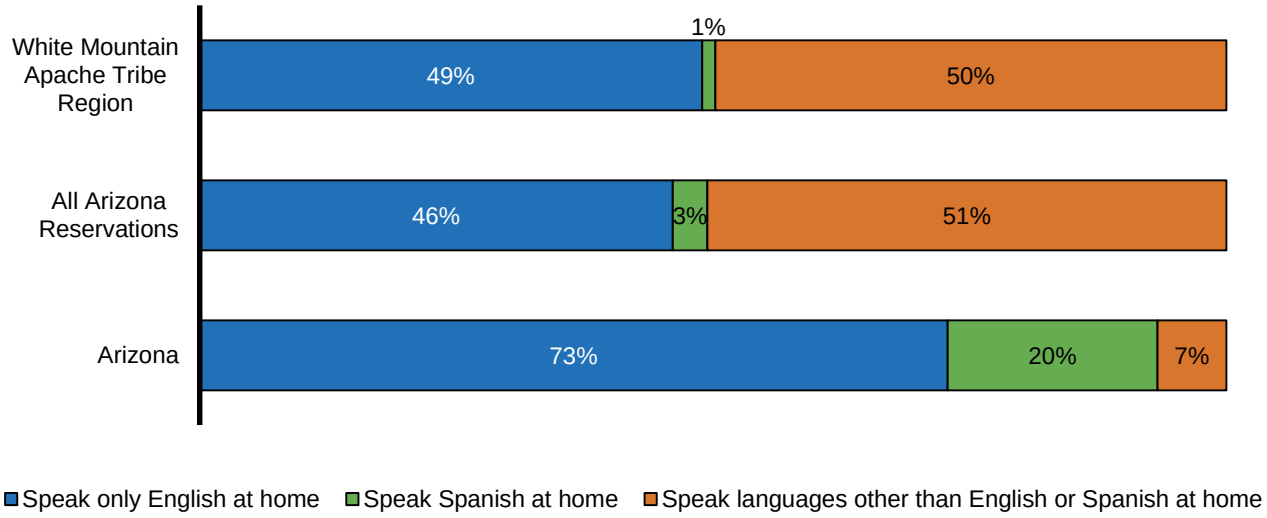
Language Use and Preservation

The American Community Survey (ACS) estimates that about half (49%) of the White Mountain Apache Tribe Region's residents speak only English at home, while the other half (50%) speak languages other than English or Spanish at home (

Figure 5). While the ACS no longer specifies the proportion of the population who speak a Native North American Language for geographies smaller than the state, based on previous ACS data it is possible to assume that the 50% of people who speak a language other than English or Spanish at home speak a Native language.[30] This suggests that Native language usage at home is about the same in the region as across all reservations in Arizona (51%). Sub-regionally, only one-third of residents in Hondah-McNary speak languages other than English or Spanish at home, and residents outside of the region's Census Designated Places are much more likely to speak a language other than English or Spanish at home (70%) (Figure 6).

The 2020-21 White Mountain Apache Tribe Head Start Community Assessment asked parents and caregivers of children enrolled at White Mountain Apache Head Start about the language they use most at home (Figure 7). Of respondents to the survey, only 19% reported speaking mainly Apache most at home. About 4 in 5 (80%) reported speaking English the most, and 2% reported speaking another non-Native North American language the most. The difference between the percent of residents reporting Apache language use at home in the Head Start Community Survey and the American Community Survey could be due to several factors. First, while many people speak at least some Apache at home, it may not be the primary language used at home. Second, parents of young children, such as the respondents to the Head Start Survey, may be less likely to speak Apache or other Native languages at home compared to older generations. It is important to note that, due to COVID-19, there were about half as many respondents to the Head Start Community Survey in 2020-21 (70 respondents) as in previous years.

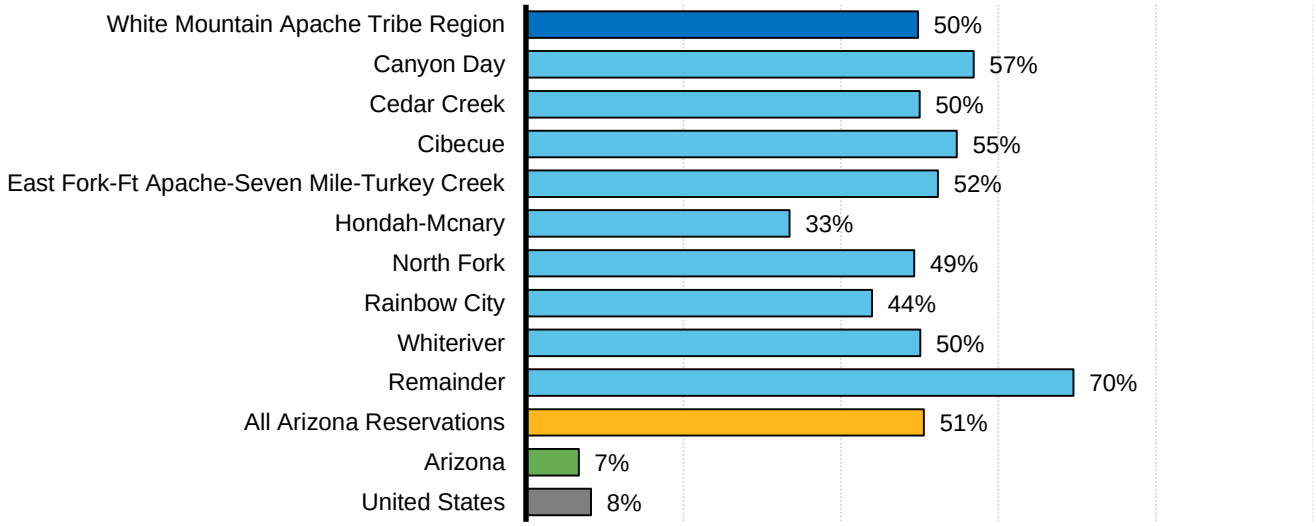
Figure 5. Language spoken at home (by persons ages 5 and older), 2015-2019 ACS



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

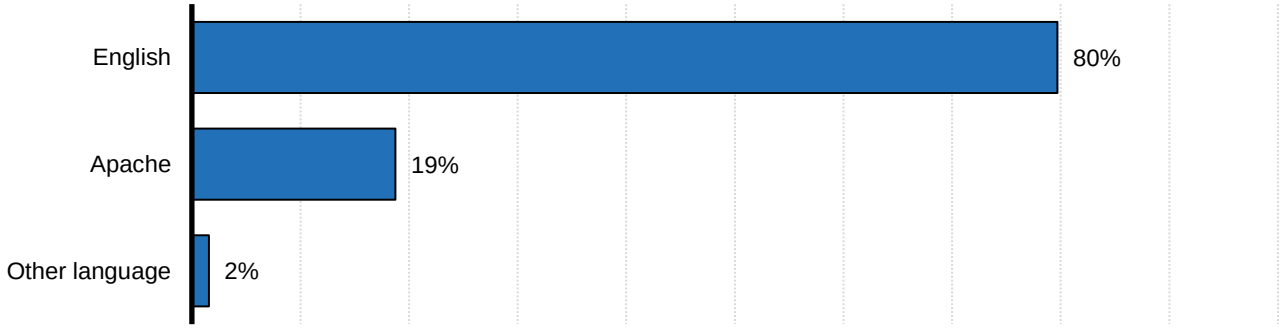
Note: The three percentages in each row may not sum to 100% because of rounding. The American Community Survey (ACS) no longer specifies the proportion of the population who speak Native North American languages for geographies smaller than the state. In Arizona, Navajo and other Native American languages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

Figure 6. 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

Figure 7. Responses to "What language do you use most at home?", Head Start Community Assessment 2020-21

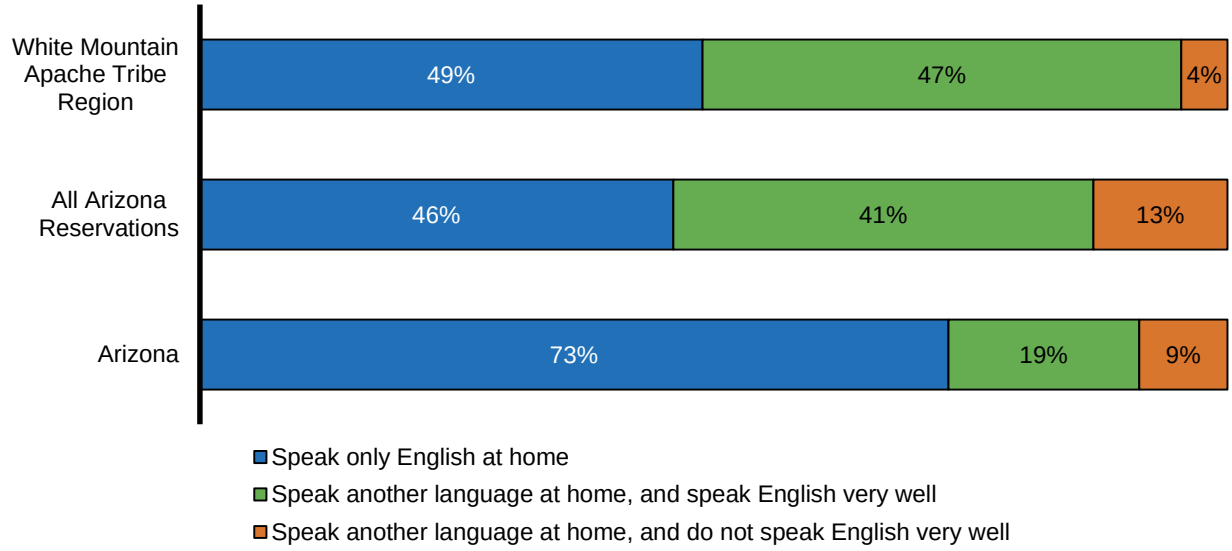


Source: White Mountain Apache Tribe Head Start Program (2021). Head Start Community Needs Assessment. Report received by request.

Almost all residents who speak a language other than English at home report that they speak English "very well," meaning that 47% of White Mountain Apache Tribe region's population is proficiently bi- or multi-lingual (Figure 8). This is higher than the proportion on all Arizona reservation lands (41%) and the state as a whole (19%). Young children can benefit from this exposure to multiple languages;

mastery of more than 1 language is an asset in school readiness and academic achievement and offers cognitive and social-emotional benefits in early school and throughout their lifetime.[31,32,33,34]

Figure 8. English-language proficiency (for persons ages 5 and older), 2015-2019 ACS

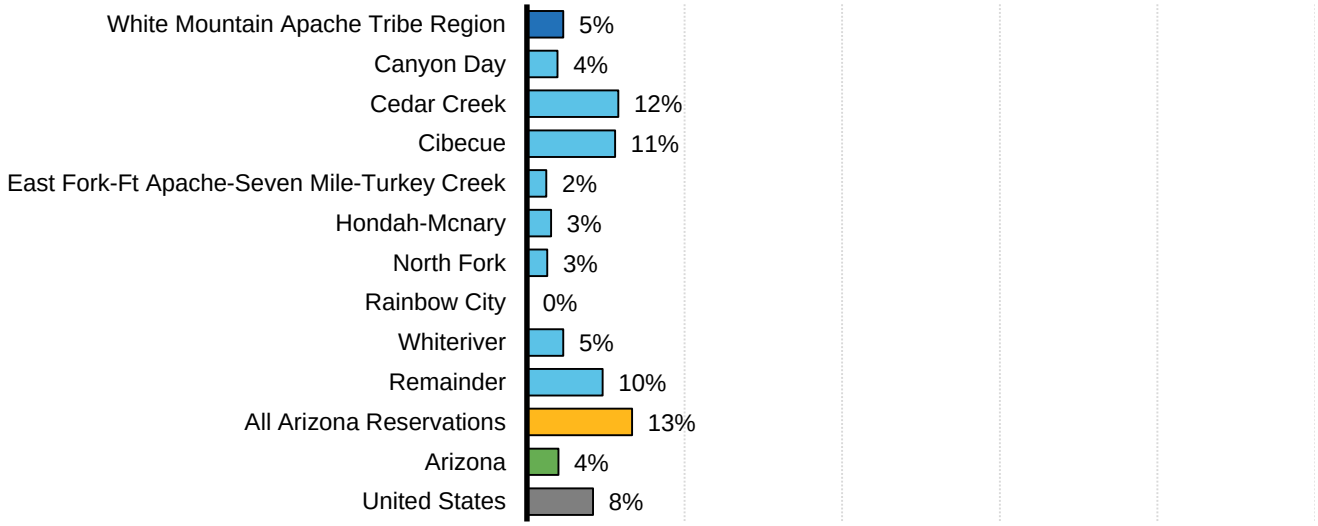


Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16001

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

A "limited-English-speaking" household is one in which no one over the age of 13 speaks English very well. Data from the American Community Survey indicate that only 5% of White Mountain Apache Tribe Region households are limited-English-speaking, compared with 13% in all Arizona reservations combined and 4% across the state (Figure 9. Proportion of households that are limited-English-speaking, 2015-2019 ACS). However, some subregions such as Cedar Creek and Cibecue have higher proportions of limited-English-speaking households (11% and 10%, respectively). Households in these communities might benefit from materials and services in the Apache language to help ensure they have access to available resources.

Figure 9. 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.

Apache language preservation was noted by key informants as a top priority in the next five years. One program undertaking language revitalization efforts in the White Mountain Apache Tribe Region is the Johnson O'Malley (JOM) Program, a federal program that provides services to Indian children in public schools located on or near reservations. The White Mountain Apache Tribe JOM Program incorporates a number of services in White Mountain Apache Tribe Region public schools, including cultural identity and language preservation programs for students. The JOM program also supervises the White Mountain Apache Tribal Youth Council, which seeks to meet the needs of White Mountain Apache youth and promote youth leadership development, higher education, cultural awareness, and good citizenship and service.[35]

Apache language is taught in all 3 elementary schools, the junior high school, and high school in the Whiteriver Unified School District via a set curriculum with multiple levels of coursework. In the early care and education setting, language instruction through vocabulary, singing and dancing is provided at White Mountain Apache Head Start centers, the Family and Child Education (FACE) program at John F. Kennedy Day School and Dishchii'bikoh Preschool. In the 2020-21 White Mountain Apache Tribe Head Start Community Assessment, 81 percent of respondents said they were aware that Apache language and culture is taught in Head Start, and 92 percent indicated they would like culture/language to play an even larger role in the curriculum.

Additionally, the First Things First regional director holds monthly meetings with community volunteers to discuss early childhood and Apache language preservation. Volunteers include elders, the community librarian, Apache language teachers, the Fort Apache Culture Center staff and other regional partnership

councilmembers. The group has been developing children's books in Apache language and centering on the Apache way of life.[36]

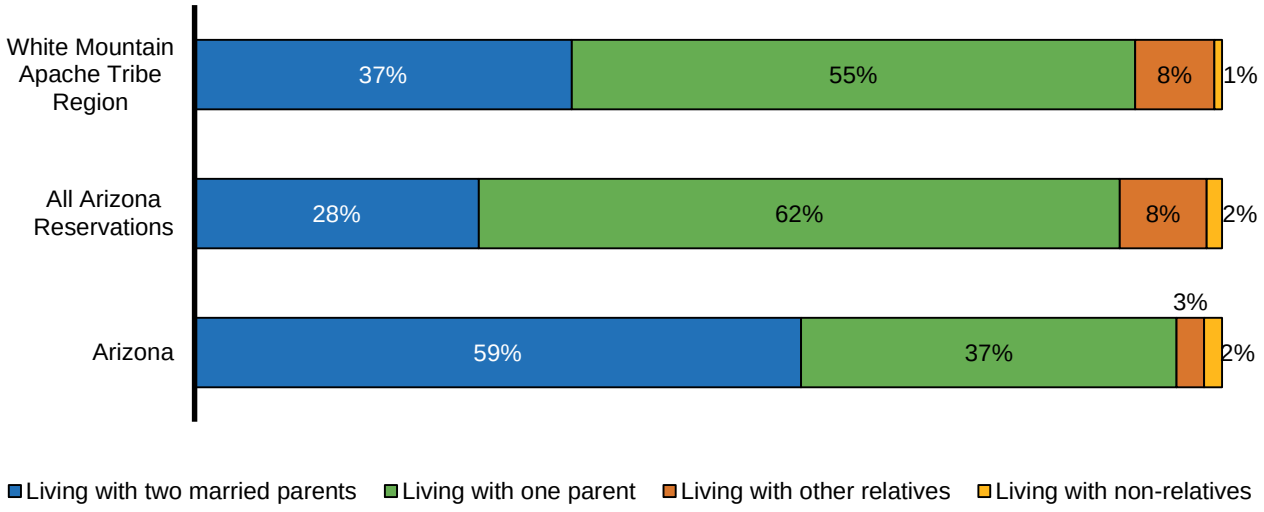
Key informants in the region noted that, despite language revitalization efforts over the past decades, the number of fluent Apache speakers in the schools has continued to decrease. It may be difficult to generate new Native language speakers through school programs because of the importance of family support and home conversational practice. They noted that the main benefit of these programs may be an increased community awareness that Apache language preservation is a vital community goal. The informants also suggested that it would be helpful for the Head Start Community Assessment to include additional questions about Apache language use at home to better understand which family member(s) speak it and why.

Living Arrangements

Based on data from the American Community Survey, 37% of young children in the White Mountain Apache Tribe Region live with 2 married parents, a higher proportion when compared to all Arizona reservations (28%) but substantially lower than the state as a whole (59%) (Figure 10). Conversely, a smaller proportion of young children in the region are living with 1 parent compared with young children in all Arizona reservations (55% and 62%, respectively). The Canyon Day and North Fork areas have the highest proportions of children living with 1 parent (72% each), while the Cedar Creek area stands out with the highest proportion of children living with two married parents (88%). During the COVID-19 pandemic, nationally-surveyed single-parent households were more likely to experience unemployment, food insecurity, difficulty paying for housing and utilities and heightened behavioral difficulties in children. [37,38,39] Single-parent households were also more likely to rely on grandparents to for primary caregiving (37%) and support of children's remote learning (20%) compared to the overall population (26% and 11%, respectively).[40]

About 8% of children ages birth to five in the White Mountain Apache Tribe Region are in kinship arrangements, and only 1% are living with non-relatives including foster parents (Figure 10. Living arrangements for children ages birth to 5, 2015-2019 ACS). These proportions are similar to what is seen across all reservations in Arizona. The highest percentages of young children in kinship care arrangements live in Rainbow City (19%). 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. 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 benefit from additional support and assistance to help them adjust and ensure they have a stable, nurturing home environment.[41]

Figure 10. Living arrangements for children ages birth to 5, 2015-2019 ACS



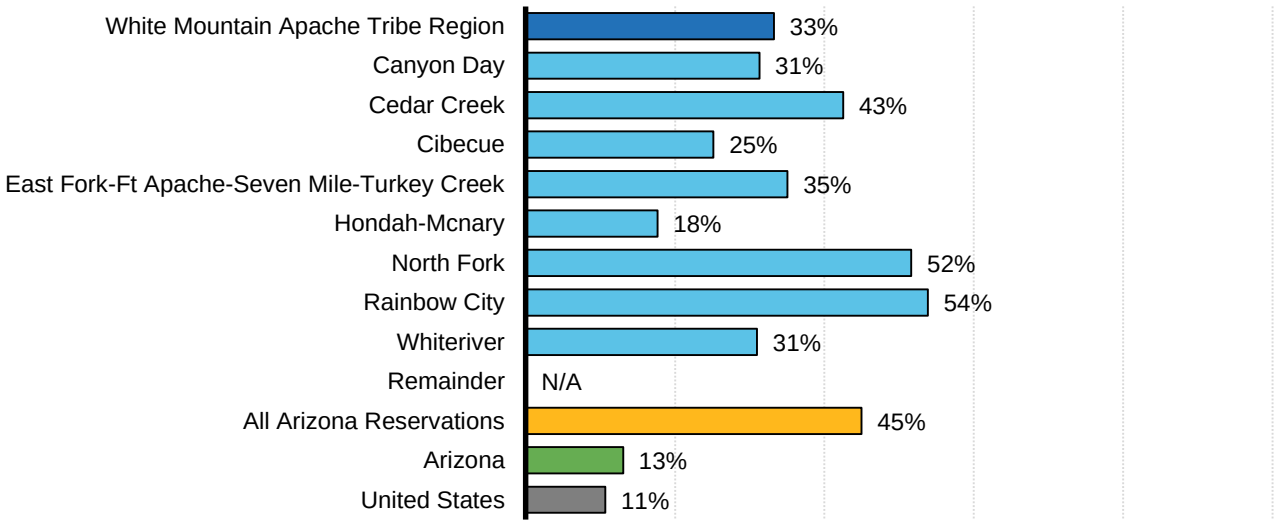
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B05009, B09001, & B17001

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

According to the American Community Survey, a third of young children in the White Mountain Apache Tribe region live in their grandparent's household (Figure 11). This is much smaller than the proportion across all Arizona reservations (45%). In Rainbow City and North Fork, however, more than half of children ages birth to 5 live in their grandparent's household (54% and 52%, respectively). It is important to note that these households may be multigenerational—i.e., the grandparent is considered the head-of-house, but the child's parent(s) may also live there.

Extended families that involve multiple generations and relatives along both vertical and horizontal lines are an important characteristic of many American Indian families. The strengths associated with this open family structure, including mutual help and respect, can provide members of these families with a network of support that can be very valuable when dealing with socio-economic hardships.[42] There may have been additional benefits and challenges associated with multigenerational households during the COVID-19 pandemic. Key informants indicated that in many families, grandparents provided needed caregiving and remote learning support for their grandchildren, especially when the parents(s) were employed. However, grandparents in multigenerational households are also at heightened risk of COVID-19 infection, especially those living with essential workers.[43, 44]

Figure 11. Proportion of children ages birth to 5 living in a grandparent's household, 2015-2019 ACS



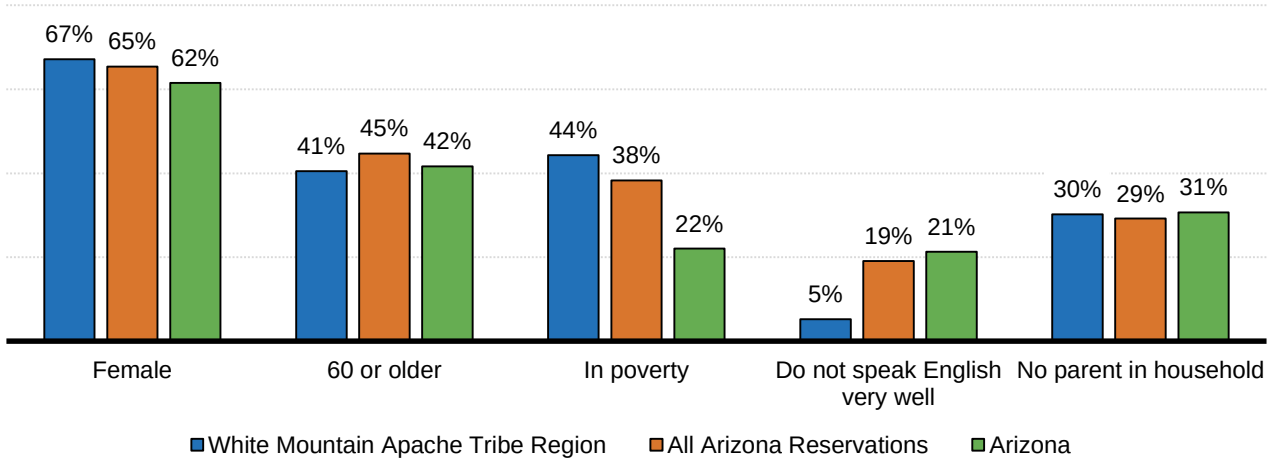
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B10001 & B27001

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. Due to sample size limitations, reliable estimates for the Remainder of the region are not available.

In the 2020-21 White Mountain Apache Tribe Head Start Community Assessment, 6% of respondents indicated that they were a grandparent caring for their grandchild. According to the American Community Survey, almost 500 grandparents in the White Mountain Apache Tribe Region are estimated to be responsible for 1 or more grandchildren living in their household. Understanding the circumstances of grandparents caring for 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. Of the grandparents raising their grandchildren in the White Mountain Apache Tribe Region, 41% are 60 years old or older, 44% are living in poverty, and 5% do not speak English very well (**Error! Reference source not found.**). In 30% of these households, the child's parents are not present. The poverty rate for grandparents raising grandchildren is higher in the region (44%) than across all Arizona reservations (38%), especially in the communities of Cibecue (70%), Honda McNary (67%), and Cedar Creek (60%) (Figure 13). However, the rate of responsible grandparents with limited English use is much lower than across all Arizona reservations (5% compared with 19%). This might enable grandparents responsible for the care of their grandchildren to engage more in health and child care services as well as important school interactions. Grandparents often encounter multiple barriers when accessing public assistance as caregivers, and they face unique psychological and physical stressors. [45,46,47,48] 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.[49]

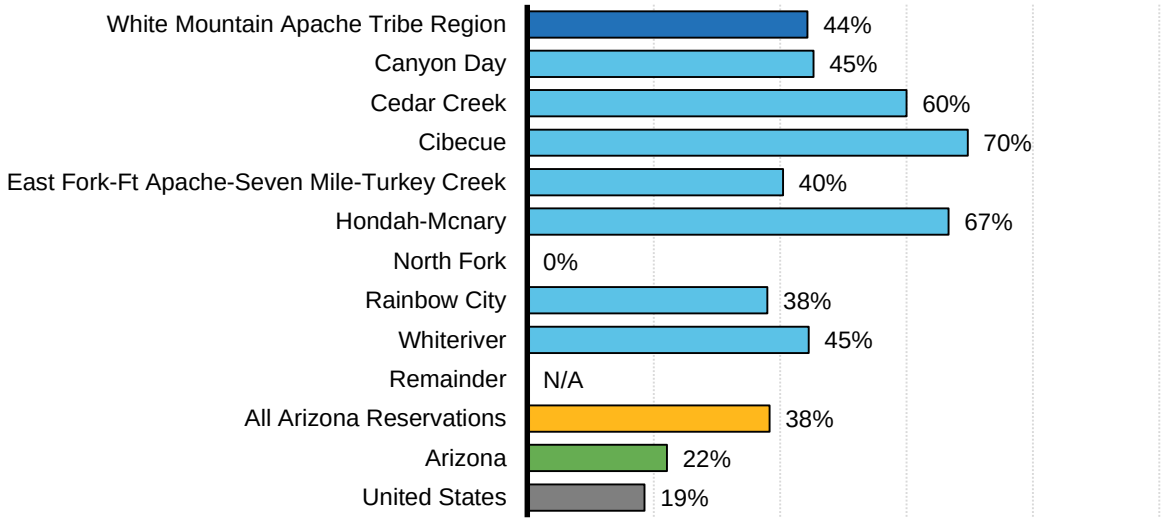
Figure 12. Selected characteristics of grandparents who are responsible for one or more grandchildren under 18 in their households, 2015-2019 ACS



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.

Figure 13. Percent of grandparents who are responsible for their grandchildren ages birth to 17 and have an income below the poverty level, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Tables B10051 & 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* can be found in Appendix 1 at the end 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.[50] Poverty can affect the way children grow and develop, even including changes to their brains.[51,52] 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.[53,54,55,56,57,58,59] They are also more likely to remain poor later in life, passing along these challenges to future generations.[60,61] 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.[62,63,64,65]

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.[66] 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.[67]

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"[68] 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%).[69] Safety-net programs aim to minimize the impacts of poverty on child and family well-being.[70,71,72] These programs include:

- The Supplemental Nutrition Assistance Program (SNAP; also referred to as "nutrition assistance" and "food stamps"),[iii]
- The Special Supplemental Nutrition Program for Women, Infants and Children (WIC),[iv]
- The National School Lunch Program[v] and Summer Food Service Program,[vi]

[iii] *For more information see: https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program*

[iv] *For more information see: https://www.fns.usda.gov/wic*

[v] *For more information see: https://www.fns.usda.gov/nslp*

[vi] *For more information see: https://www.fns.usda.gov/sfsp/summer-food-service-program*

- Temporary Assistance for Needy Families (TANF),[vii]
- KidsCare (the state children's health insurance program),[viii]
- Tribal food distribution programs,
- Tribal child care assistance programs, such as the Tribal Child Care and Development Fund, and
- Tribal housing programs, such as White Mountain Apache Housing Authority.

Other factors related to economic stability include employment and housing.[73] Unemployment (and underemployment[ix]) 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.[74,75] Similarly, housing instability can harm the physical, social-emotional and cognitive development of young children.[76] High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness.[77,78] The funds required to pay high housing costs can leave inadequate budgets for other necessities, such as food and utilities.[79]

What the Data Tell Us

Income and Poverty

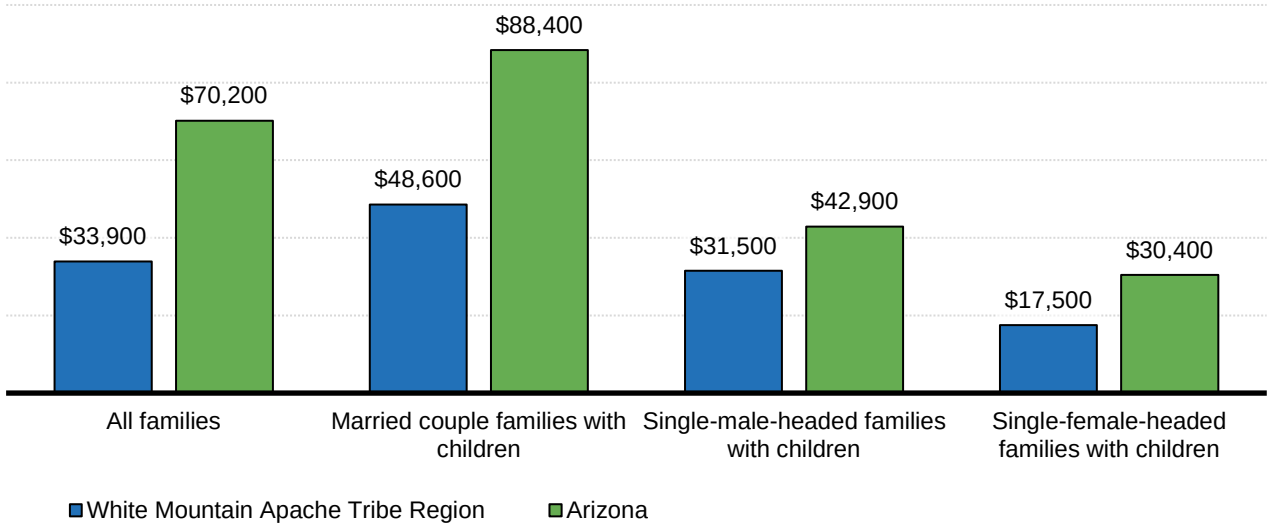
The median family income for the White Mountain Apache Tribe Region is estimated to be $33,900 (Figure 14), which means that half of the region's families have incomes less and the other half have incomes greater than that amount. This includes all households of at least two people, whether or not they have children, and compares with a median income of $70,200 across all Arizona families. For families with a married couple and at least 1 child, the median income ($48,600) is higher than that of all families, likely because many such families are dual-income. The 2021 self-sufficiency standards for a two-parent family with an infant and a preschooler in Navajo County ($61,571), Apache County ($61,571) and Gila County ($63,629) [80] suggest that families in the region may face more difficulties affording services outside of the regional boundaries and require support to meet all of their families' needs. Median incomes are lower for single-headed households at $31,500 for unmarried men and $17,500 for unmarried women.

[vii] *For more information see: https://www.acf.hhs.gov/ofa/programs/tanf*

[viii] *For more information see: https://www.azahcccs.gov/Members/GetCovered/Categories/KidsCare.html*

[ix] *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

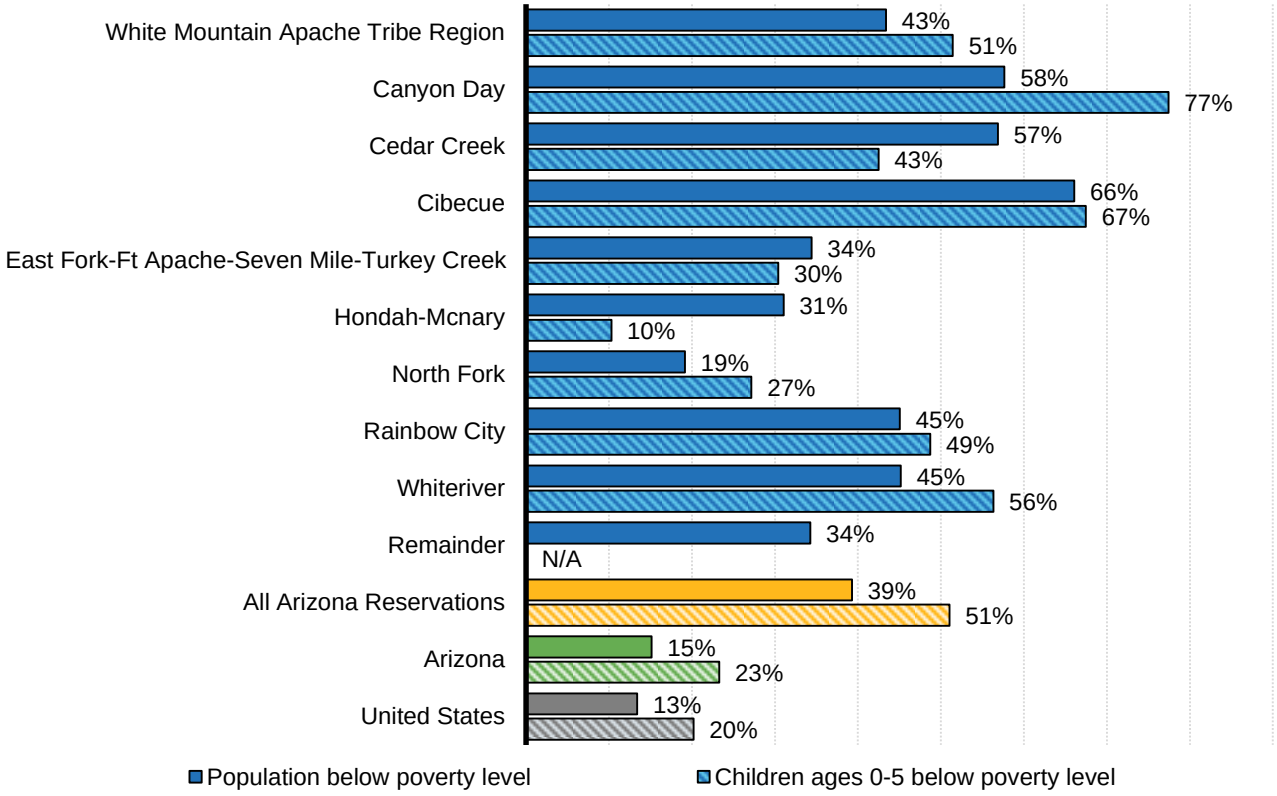


Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B19126

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.

In the White Mountain Apache Tribe region, the rate of poverty in the population is estimated to be 43%, or about 2 out of every 5 persons (Figure 15). Among young children, the rate is higher with over half of children under the age of 6 (51%) living in families with incomes below the poverty level. This amounts to an estimated 925 children living in poverty. The highest rates of child poverty are seen in Canyon Day at 77%, which is much higher than the overall population below the poverty level (58%), and Cibecue at 67%. The lowest rates of young children living in poverty are in Hondah-McNary (10%), which is much lower than the overall population below the poverty level in the area (31%).

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



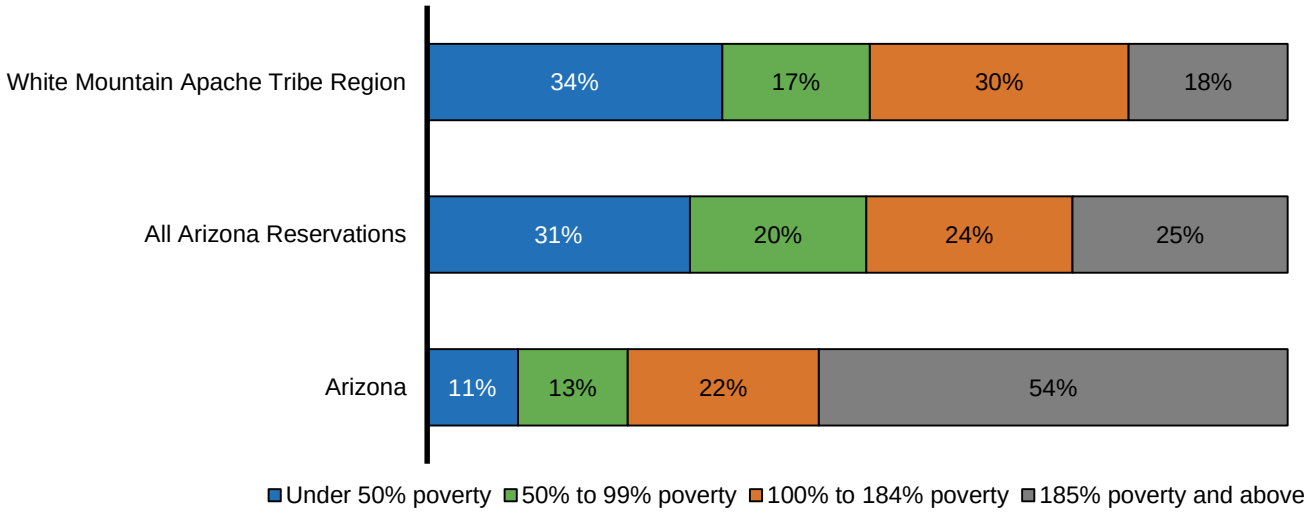
Source: U.S. Census Bureau. (2020). American Community Survey five-year estimates 2015-2019, Table B17001

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. Due to sample size limitations, an estimate for young child poverty rates are not available for the Remainder of the region.

The 185% of poverty level threshold is commonly used for safety net benefits such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and free or reduced-price school meals. More than 4 out of every 5 young children in the region (82%) are estimated to live in households with incomes under 185% of the poverty level (

Figure 16), totaling 1,487 children ages birth to 5 according to ACS estimates. This is above the percentage seen across reservations in Arizona (75%), and far exceeds the rate in the state (46%). In the Whiteriver and Canyon Day areas, almost all young children are living below 185% of the poverty level (95% and 93%, respectively) (Figure 17).

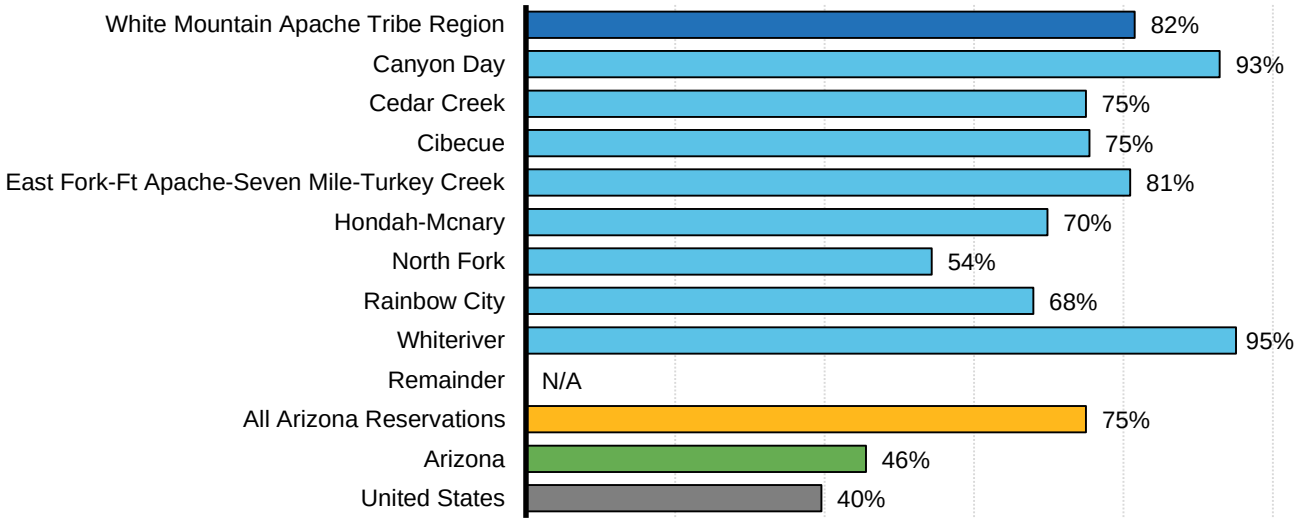
Figure 16. Children ages birth to 5 living at selected poverty thresholds, 2015-2019 ACS



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.

Figure 17. Children ages birth to 5 living below 185% of the poverty threshold, 2015-2019 ACS



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

Note: In 2019, the 185% threshold for a family of two adults and two children was $47,963; for a single parent with one child, it was $32,600.

The poverty and income data presented above represent a 5-year window of ACS data collection (2015-2019) prior to the COVID-19 pandemic beginning in 2020. The 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.[81] Data from the 2020-21 White Mountain Apache Tribe Head Start Community Assessment may reflect some impacts of the pandemic on household income; about 16% of parents and caregivers surveyed reported having no household income; 20% reported having an income of $1,000 or less per month; and 18% reported having an income between $1,000 and $1,500. This means that more than half of Head Start families surveyed lived on an annual income of less than $18,000 per year.

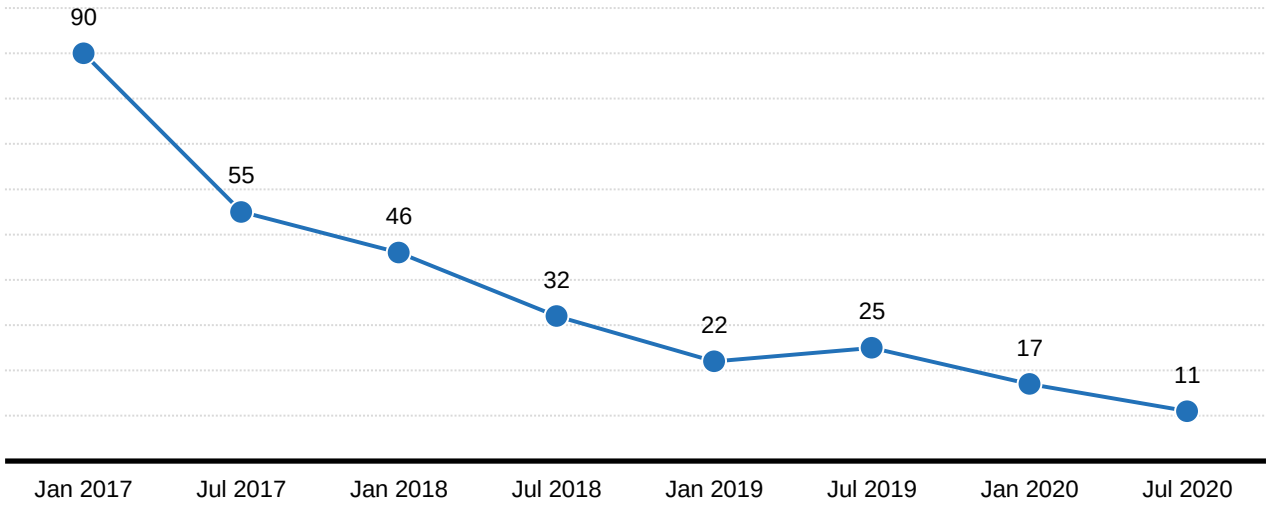
White Mountain Apache Tribal TANF Program

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, the U.S. Department of Health and Human Services, Administration for Children and Families (ACF), which is the federal agency in charge of overseeing the

TANF program, gives federally recognized tribes the option to administer their own TANF program. Tribes must submit a 3-year Tribal TANF plan to ACF for review and approval. Approved Tribal TANF programs then receive a portion of the state TANF block grant funding from the state where the tribes are located.[41] Tribal TANF programs have more flexibility to design their programs to meet TANF requirement compared to state programs. These programs are allowed to extend the program's 60-month time limit on receipt of TANF cash assistance on reservation with high unemployment rates. They also may set their own work participation rates, work hour requirements, and definitions of allowable work activities, and determine their own types of support to provide clients. This flexibility allows programs to find creative ways to define allowable work activities that reflect both economic reality and tribal cultural values, such as including engagement in cultural activities in self-sufficiency plans.[42] Currently 6 tribes in Arizona manage their own Tribal TANF programs, including the White Mountain Apache Tribe, which has operated its Tribal TANF Program since 1997.

The number of young children supported by the White Mountain Apache Tribe TANF program has steadily declined in recent years. The number of children ages birth to 5 years who received Tribal TANF benefits fell from 90 children in January 2017 to 11 children in July 2020, a 79% decrease (Figure 18). This means that about 6% of children in 2017 and less than 1% of children in 2020 received Tribal TANF (based on the number of young children in the region reported by the 2015-2019 American Communities Survey) (Table 6). Confirming this trend, 0 parents and caretakers of children reported participating in TANF in the 2020-21 White Mountain Apache Tribe Head Start Community Assessment.

Figure 18. Children ages birth to 5 receiving White Mountain Apache Tribal TANF



Source: White Mountain Apache Tribal TANF Program (2021) [TANF Dataset]. Unpublished data received by request.

Table 6. Children ages birth to 5 receiving White Mountain Apache Tribal TANF

	Jan 2017	July 2017	Jan 2018	July 2018	Jan 2019	July 2019	Jan 2020	July 2020
Number of children ages 0-5	90	55	46	32	22	25	17	11
Estimated percent of children ages 0-5	4%	3%	2%	2%	1%	1%	1%	1%

Source: White Mountain Apache Tribal TANF Program (2021) [TANF Dataset]. Unpublished data received by request.

Key informants offered insight about why the decrease has been more dramatic in the White Mountain Apache Tribe TANF program. First, enrollment has been declining across all Tribal TANF programs in the state because of a shift in eligibility requirements; in the White Mountain Apache Tribe, this included a drug testing policy implemented in 2018. Local enrollment in TANF dropped further due to families transitioning to 1 of 2 other programs funded through Apache Behavioral Health Services (ABHS), Working 2 Wellness and EVOLVD Living with Purpose. Working 2 Wellness is an employment program through the Rainbow Treatment Center that provides ongoing substance abuse support services and pays the salary of participants working for Tribal, Federal, and private companies.[82] EVOLVD Living with Purpose is a community wellness program that supports ABHS clients in obtaining their GED and other vocational skills training. Key informants verified that both programs were able to continue paying or providing a stipend to participants throughout the pandemic even if they were not able to work or attend classes. Income and stipends paid to participants in Working 2 Wellness and EVOLVD Living with Purpose count as income for families, and these earnings often place them over the income eligibility thresholds for TANF. This is an example of the "benefits cliff," where a low-income family may suddenly become ineligible for public supports due to a boost in earnings—either through a raise, working additional hours, or other means—that is often not enough to make up the difference in the family budget due to the loss of government support. [83] However, TANF is able to quickly approve applications, so it sometimes acts as an interim program while families are waiting to be approved and start receiving benefits from Working 2 Wellness or EVOLVD Living with Purpose.

White Mountain Apache Tribal TANF has made programmatic changes in response to the pandemic and declining enrollment. The program increased the monthly benefit rate by 30% in 2019 based on increased cost of living and 40% in March 2021 due to increased need during the pandemic. The program is also interested in changing the eligibility requirements in order to serve families who are in need of support despite being over the income maximum, and it is engaging in an education campaign about TANF benefits aimed at the public, Tribal leadership and departments, and other organizations that can refer families. According to data provided by the White Mountain Apache Tribal TANF program, as of [add date of the interview, month and year only] only 15 White Mountain Apache households were eligible for TANF despite greater evident need in the region.

Food Insecurity

Many families struggle with consistent access to "enough food for an active, healthy life," a problem known as food insecurity.[84] 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[85] and being overweight or obese.[86] Arizona families with young children are particularly vulnerable to being persistently food insecure and becoming food insecure during the pandemic. 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.[87] Furthermore, food insecurity tends to be worse for people of color; nationally, Native Americans are 3 times as likely (23.5%) to be food insecure as non-Hispanic White individuals (8.1%).[88]

To help reduce food insecurity, there are a variety of federally-funded programs including the Food Distribution Program on Indian Reservations (FDPIR),[89] Supplemental Nutrition Assistance Program (SNAP),[90] the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC),[91] the National School Lunch Program,[92] the School Breakfast Program,[93] the Summer Food Service Program,[94] and the Child and Adult Care Food Program (CACFP).[95] These programs are outlined in the sections below. Additionally, there are 4 food assistance sites in the White Mountain Apache Tribe Region funded through the federal Temporary Emergency Food Assistance Program (TEFAP) and Commodity Food Supplemental Program (CFSP). Persons receiving SNAP or with household incomes under 185% of the poverty level are automatically eligible.[96] These locations are White Mountain Catholic Charities in Whiteriver, Fort Apache Food Pantry, Canyon Day Assembly of God Food Pantry, and Cibecue Mobile Pantry.

Food Distribution on Indian Reservations (FDPIR)

Through FDPIR, families meeting eligibility requirements based on income and household size can receive a monthly package of USDA foods from an Indian Tribal Organization (ITO) or state agency.[89] The White Mountain Apache Tribe Food Distribution distributes FDPIR boxes in the White Mountain Apache Tribe Region. Families choosing not to participate in FDPIR may enroll in SNAP and receive monthly benefits to purchase food at participating retailers.

Supplemental Nutrition Assistance Program (SNAP)

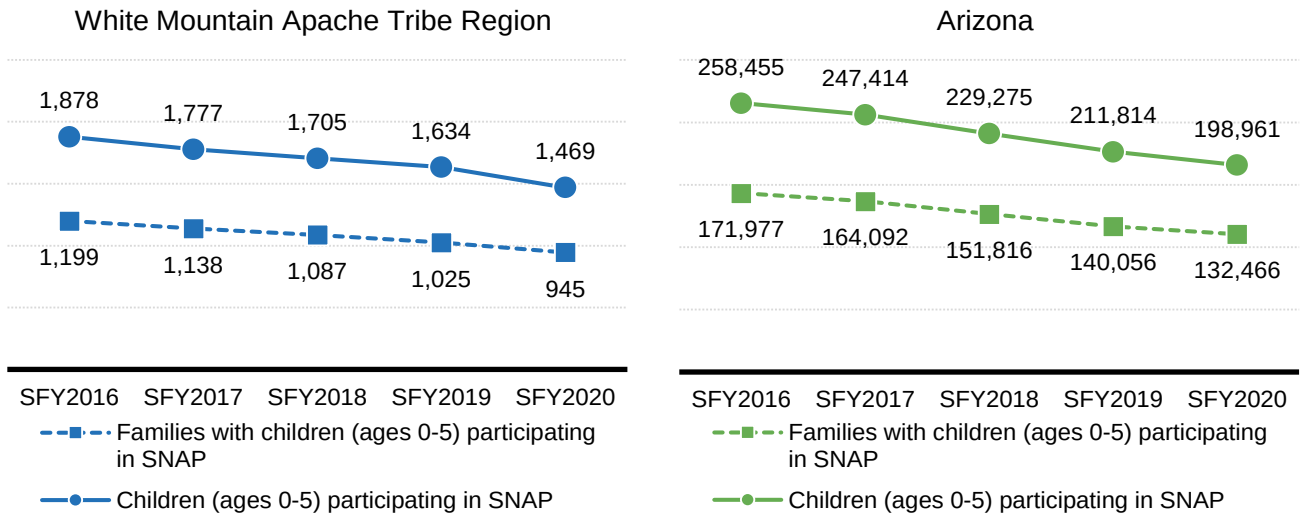
Administered by the Arizona Department of Economic Security and also referred to as "Nutrition Assistance" and "food stamps," SNAP has been shown to help reduce hunger and improve access to healthier food.[97] SNAP benefits support working families whose incomes simply do not provide for all their needs. For low-income working families, the additional funds available to access food from SNAP can help make a meaningful difference. For example, for a 3-person family with 1 person who earns a minimum wage, SNAP benefits can boost take-home income by 10-20%.[98] However, even among those accessing SNAP benefits, nearly half of households in poverty still struggle with food security.[99]

SNAP is designed to combat food insecurity. In the years prior to the pandemic, the proportion of families with young children who participate in SNAP has steadily declined across the state, likely reflecting continuing economic recovery after the Great Recession.[100] In the White Mountain Apache Tribe Region, the proportion of families who receive SNAP benefits has also declined between 2016 and 2020 (Figure 19). However, nearly 3 out of 4 children ages birth to 5 still receive SNAP benefits (Figure 20), underscoring how important this support is for childhood food security in the region. Fewer parent and caregiver respondents to the 2020-21 White Mountain Apache Tribe Head Start Community Assessment indicated that they received SNAP benefits (46%).

During the pandemic, changes were made to SNAP program administration to better meet the needs of families in a time of crisis.[101] 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.[102,103] WIC also adjusted administrative guidelines, and participants were allotted extra monthly funds to use on fruits and vegetables.[104,105] These waivers and emergency allotments can be extended while the state is under a COVID-19 emergency declaration and were still in effect as of this report being written (October 2021). Beginning October 2021, the USDA also instituted a roughly 27% increase in SNAP benefits, the largest permanent increase in the program's history.[106]

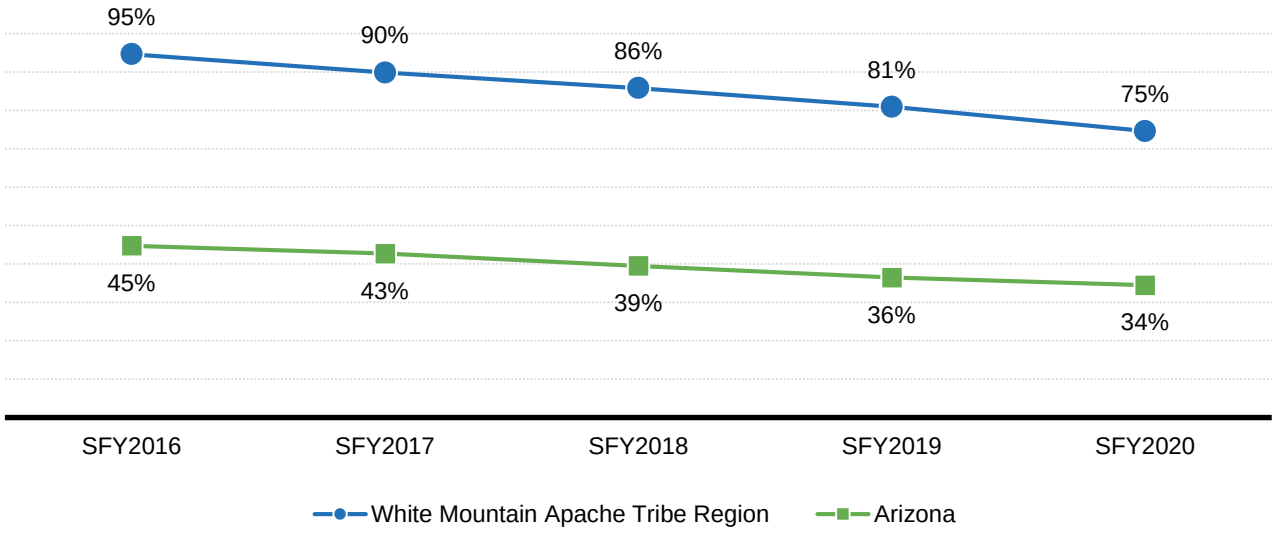
Despite these changes, in a survey of SNAP users in Arizona, nearly half (46%) of respondents found their benefits insufficient to meet their family's needs, due to barriers such as issues paying for online groceries and not being able to use a full month's benefit due to COVID-19 related shopping difficulties, such as stores running out of food items. Individuals with fewer financial resources are less able to stock up on necessities in order to be supplied for a quarantine, and formula stocking shortages were a particular concern for families with young children.[107,108]

Figure 19. Number of children ages birth to 5 and households 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.

Figure 20. Estimated percent of children ages birth to 5 participating in SNAP, state fiscal years 2016 to 2020



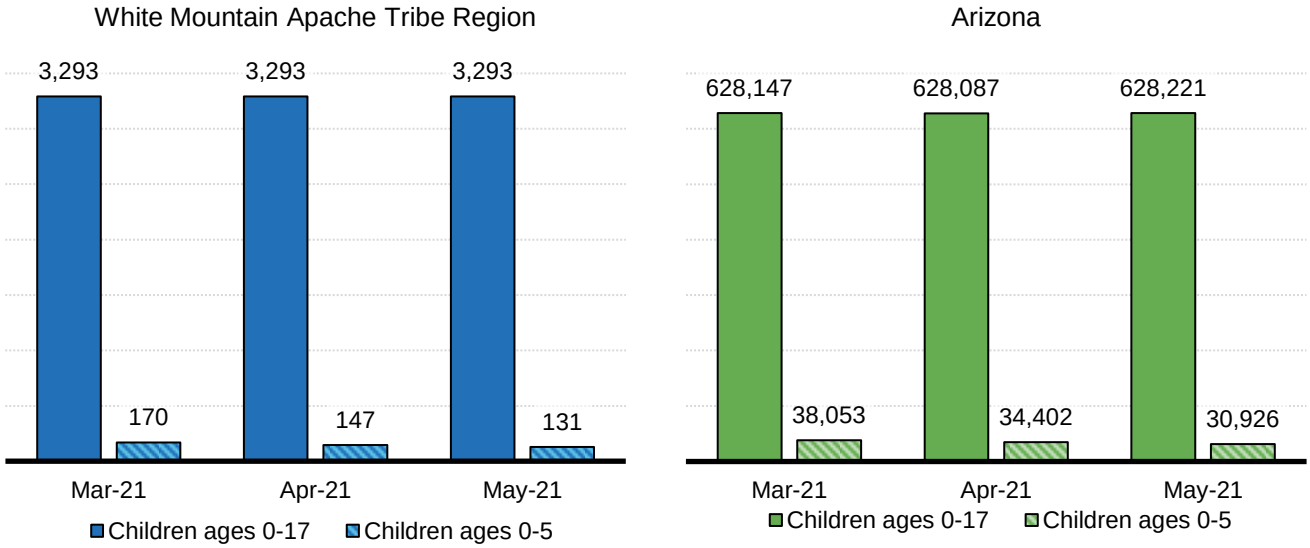
Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P14 & P20.

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 child care settings. Eligible families included those participating in SNAP with a child age 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.

In March 2021, 3,293 children ages birth to 17 in the White Mountain Apache Tribe Region received P-EBT, but very few of these were children ages birth to 5 (Figure 21). Compared to the number of young children receiving SNAP in 2020 (n=1,469), only about 10% of eligible young children received P-EBT in April 2021 (n=147). This is even less than the proportion statewide; about 38,000, or less than a third, of the 132,000 young children enrolled in SNAP in Arizona received P-EBT. Enrollment was only automatic in families with a school-age child, which may have limited the participation of families without a school-age child.

Figure 21. 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)

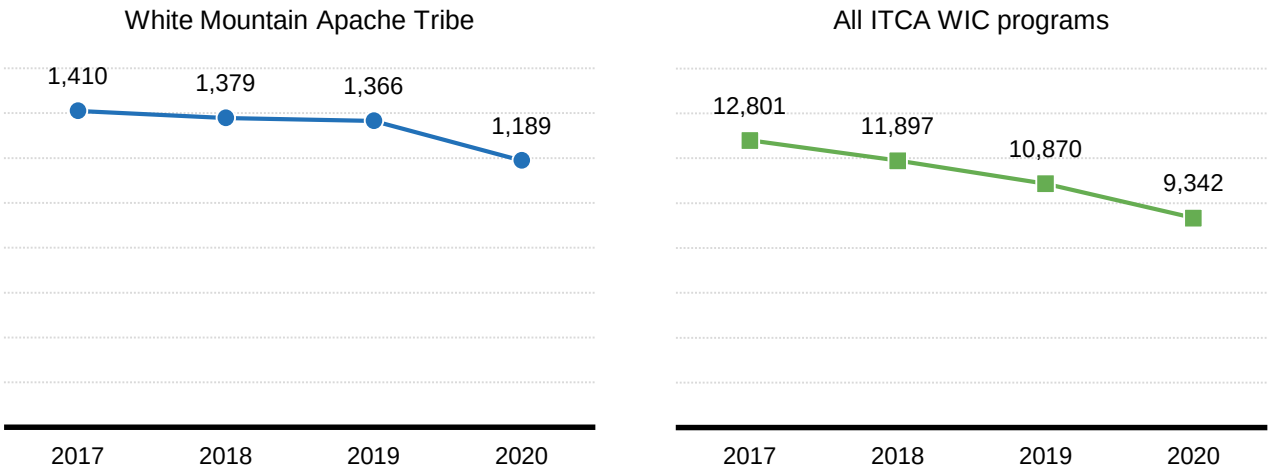
The WIC program is administered in the state of Arizona by the Arizona Department of Health Services (ADHS) as well as the Inter Tribal Council of Arizona (ITCA) for 21 tribal nations in the state, including the White Mountain Apache Tribe. WIC serves pregnant, postpartum, and breastfeeding women, as 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. 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.[109]

The White Mountain Apache Tribe WIC program is located in Whiteriver. In 2020, 1,491 individuals were enrolled, including 302 women, 333 infants and 856 children ages 1 to 5 (

Table 7). Over the past four years, the number of infants and children enrolled in the White Mountain Apache Tribe WIC program fell from 1,410 in 2017 to 1,189 in 2020 (

Figure 22). During this time period, enrollment also steadily declined across all ITCA WIC programs. In the 2020-21 White Mountain Apache Tribe Head Start Community Assessment, 59% of parents and caregivers indicated that either they or their child participated in WIC.

Figure 22. Children (ages 0-4) enrolled in the White Mountain Apache Tribe WIC program, 2017 to 2020



Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

WIC participation rates in the region, meaning the percent of women, infants and children enrolled in the program who actively received benefits during the calendar year, were higher in the White Mountain

Apache Tribe WIC program than across all ITCA WIC programs (95% and 92%, respectively) (Table 8). Participation rates were highest among infants (98%), followed by children ages 1 to 4 (95%) and women (91%).

Table 7. Enrollment in the White Mountain Apache Tribe WIC program, 2020

	Women enrolled	Infants enrolled	Children enrolled	Total enrolled
White Mountain Apache Tribe	**302**	**333**	**856**	**1,491**
All ITCA WIC programs	2,865	3,095	6,247	12,207

Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Table 8. Participation rates in the White Mountain Apache Tribe WIC program, 2020

	Women Participating (2020)	Infants Participating (2020)	Children Participating (2020)	Total Participating (2020)
White Mountain Apache Tribe	**91%**	**98%**	**95%**	**95%**
All ITCA WIC programs	91%	96%	90%	92%

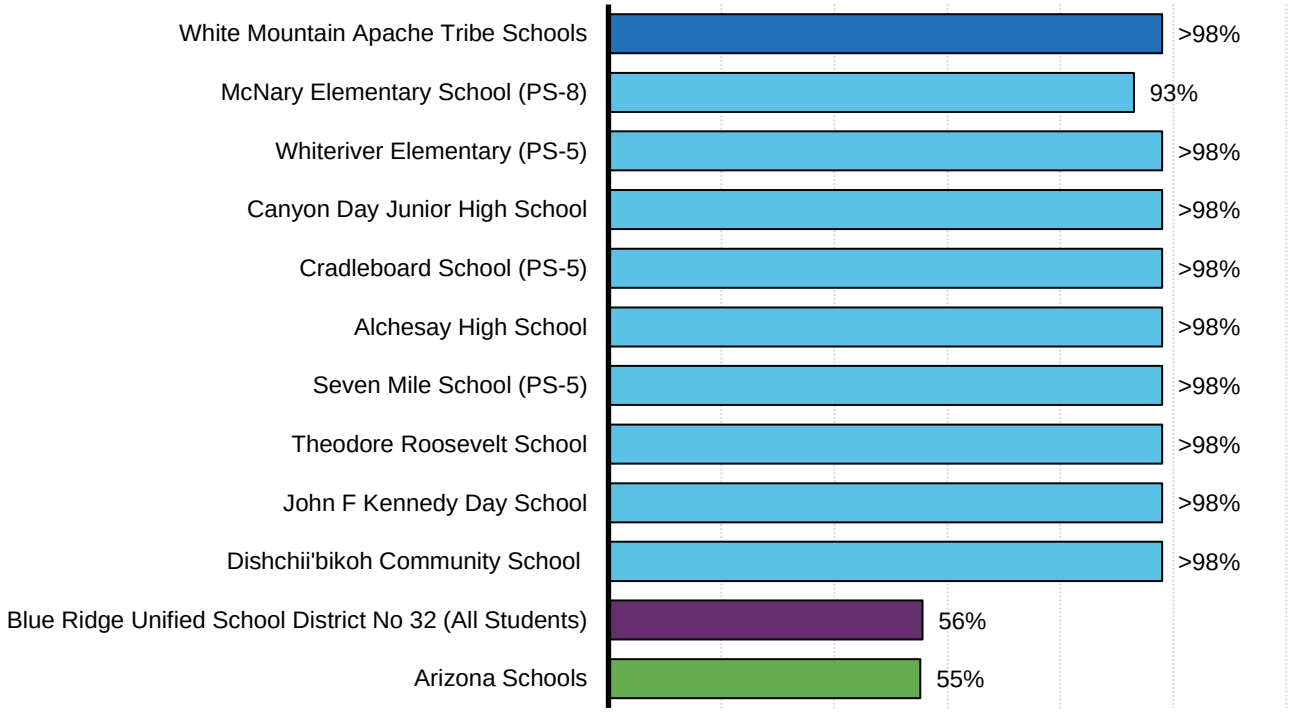
Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

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

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 below 130% of the federal poverty level for free lunch, and 185% of the federal poverty level for reduced-price lunch. Nearly all students (>98%) who attend school in the White Mountain Apache Tribe Region were eligible for free or reduced-price lunch in the 2019-20 school year (Figure 23). This greatly exceeded eligibility rates in nearby Blue Ridge Unified School District (56%) and schools statewide (55%), where just over half of students qualify for free or reduced-price lunch.

Figure 23. 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

White Mountain Apache Tribe schools served close to 800,000 meals per school year through the NSLP in 2017-18 and 2018-19 (Table 9). When the COVID-19 pandemic began, district and Bureau of Indian Education (BIE) schools in the White Mountain Apache Tribe Region closed and transitioned to remote learning. Due to this transition, the number of meals served through NSLP dropped in 2019-20 as White Mountain Apache Tribe schools pivoted to new meal delivery modalities in response.

Table 9. Meals served through the National School Lunch Program, 2017-18 to 2019-20

	2017-18	2018-19	2019-20
White Mountain Apache Tribe schools	787,589	798,693	462,902
McNary Elementary School (K-8)	30,441	31,232	25,085
Whiteriver Elementary (PS-5)	136,635	121,441	58,336
Canyon Day Junior High School	110,171	116,846	51,981
Cradleboard School (K-5)	88,971	85,387	43,435
Alchesay High School	92,670	89,898	42,579
Seven Mile School (K-5)	141,006	131,545	70,543
Theodore Roosevelt School	2,987	32,547	22,824
John F Kennedy Day School	64,521	63,993	52,130
Dishchii'bikoh Community School	120,187	125,804	95,989
Arizona schools	158,853,206	159,748,325	118,871,645

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

Also funded by the USDA, the Summer Food Service Program (SFSP)[x] works to keep all children birth to 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, schools with sites like parks, libraries, community centers and apartment complexes in high-need areas to distribute food.[110] The number of meals served in district and BIE schools in the White Mountain Apache Tribe Region through the SFSP had been declining prior to the pandemic, from 20,221 in the summer of 2018 to 15,965 in the summer of 2019.

In March 2020 in response to school closures, the USDA issues waivers allowing year-round operation of the Summer Food Service Program (SFSP) to serve meals to children of all ages engaging in remote learning. Due to differences in program requirements between NSLP and SFSP, using the SFSP mechanism allowed regional schools to offer breakfasts and lunches to all children ages birth to 18 in the Community and to receive more reimbursement funds for every meal served. White Mountain Apache Tribe schools served over 200,000 meals to families in the 2019-20 school year (Table 10). Many of these meals (73,594) were able to be transported to families via Whiteriver USD bus routes, which helped to overcome possible transportation barriers to accessing these meals. Notably, Theodore

[x] For more information see: https://www.azed.gov/hns/sfsp

Roosevelt BIE School had not participated in SFSP prior to the pandemic but was able to roll out both school-based SFSP and a bus route to meet this emerging need. McNary Elementary School also participated in SFSP for the first time during the pandemic.

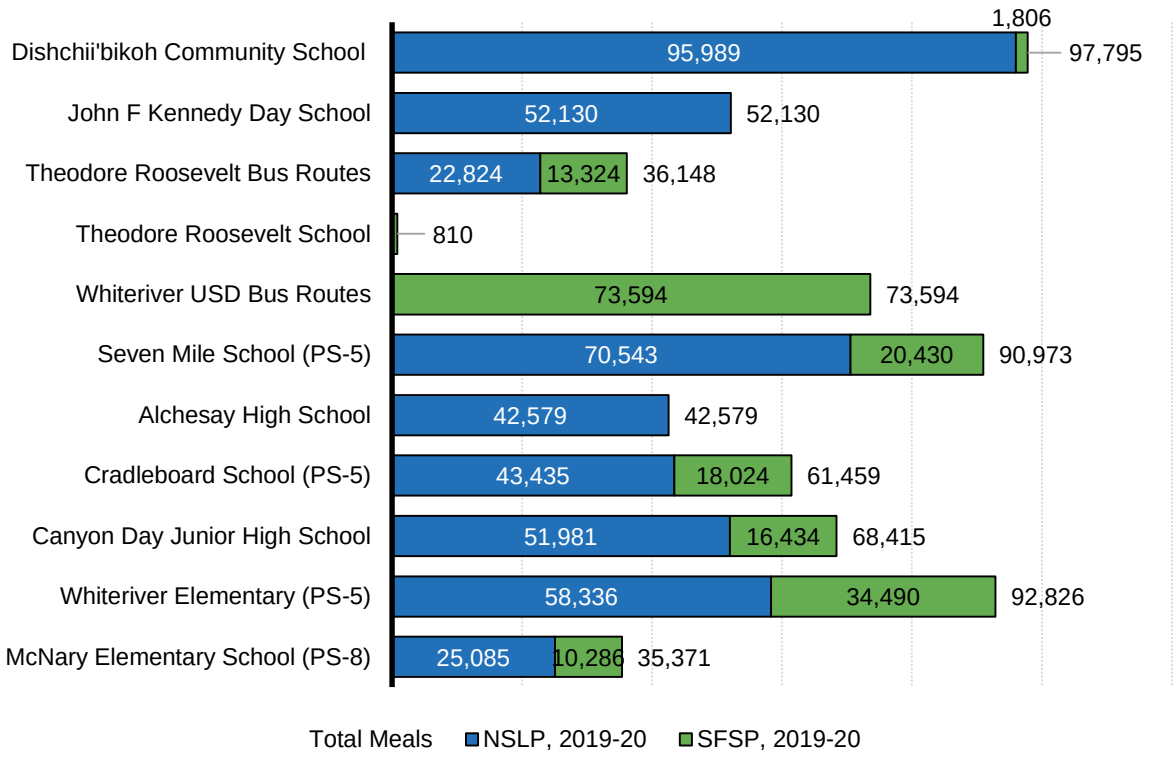
Table 10. Meals served through the Summer Food Service Program, 2017-18 to 2019-20

	2017-18	2018-19	2019-20
White Mountain Apache Tribe schools	20,221	15,964	209,628
McNary Elementary School (K-8)	0	0	10,286
Whiteriver Elementary (PS-5)	7,172	2,765	34,490
Canyon Day Junior High School	1,102	1,111	16,434
Cradleboard School (K-5)	3,115	1,938	18,024
Alchesay High School	0	2,706	0
Seven Mile School (K-5)	2,457	2,376	20,430
Whiteriver USD bus routes	N/A	N/A	73,594
Theodore Roosevelt School	0	0	810
Theodore Roosevelt bus routes	N/A	N/A	13,324
John F Kennedy Day School	N/A	N/A	N/A
Dishchii'bikoh Community School	6,375	5,068	1,806
Arizona schools	3,094,894	3,024,277	42,592,349

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

Note: N/A indicates that a program did not participate in the Summer Food Service Program in a given year or did not exist at the time.

Figure 24. Meals served through the National School Lunch Program (NSLP) and the Summer Food Service Program (SFSP), 2019-20



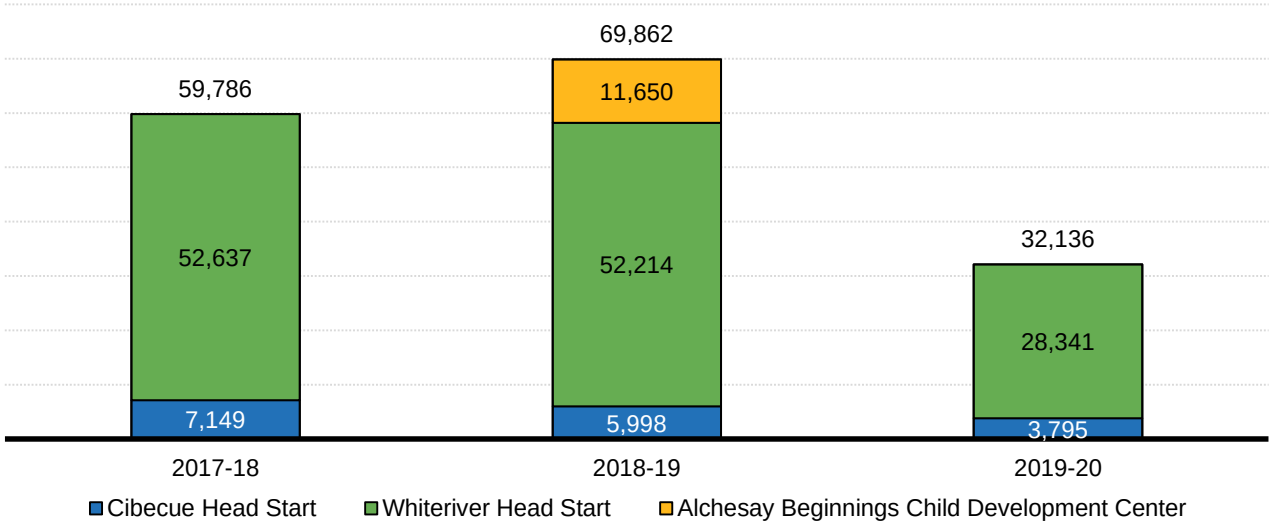
Source: Arizona Department of Education (2021). [Health & Nutrition dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Administered by the Arizona Department of Education and funded by the United States Department of Agriculture (USDA), the Child and Adult Care Food Program (CACFP) [111] 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. In the White Mountain Apache Tribe Region, the Cibecue and Whiteriver Head Start programs and Alchesay Beginnings Child Development Center all participated in CACFP between 2017 and 2020 (Figure 25). The number of meals served through CACFP varied across these school years. Alchesay Beginnings Child Development Center served 11,650 meals during the 2018-19 school year but did not participate in the program in either 2017-18 or 2019-20. The number of meals served at Cibecue Head Start declined across the 3 school years, and only about half as many meals were served through the program in 2019-20 as other school years at Whiteriver Head Start (28,341 compared with over 52,000).

Like the Summer Food Service Program (SFSP) meals mentioned above, Head Start program bus drivers were able to deliver meals directly to families once the pandemic began. Staff spent time and effort ensuring that foods adhered to the CACFP guidelines, were transported in a safe manner (e.g.,

procuring ice chests to keep milk cartons cool), and met parental satisfaction. In surveys distributed by the program, about 75% of parents were satisfied with the sack lunches provided, but many requested more hot meals and items like sliced apples. Staff noted that many of the foods within CACFP packaging guidelines ended up having more sugar than desired for a balanced meal.

Figure 25. Meals served through the Child and Adult Care Feeding Program (CACFP), 2017-18 to 2019-20



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

Local Food Sovereignty

Beyond federal nutrition assistance program, there are many local efforts to build food sovereignty and restore traditional food ways in the community. The White Mountain Apache Tribe has a Childhood Food Security Committee, which recently distributed a community survey and held community meetings to examine causes of and solutions to child hunger in the Tribe. The committee is currently involved in strategic planning to address identified needs.

Ndee Bikiyaa (the People's Farm), a project of the White Mountain Apache Tribe Hydrology and Water Resources since 2009.[112] Its mission is to "restore personal and cultural health among the White Mountain Apache through agriculture." The Farm is located southwest of Whiteriver near Fort Apache and encompasses more than 120 acres of hay fields, a 2-acre garden, a community educational center, 2 hoop houses, and a greenhouse. Ndee Bikiyaa also supports the construction of school gardens, conducts community gardening and cultural workshops, and grows and sells certified organic crops at the White

Mountain Apache Farmers Market. The program also identifies as a mentorship organization and offers paid apprentice positions.

Rainbow Treatment Center (RTC) has a Nutritional Recovery department which "teaches recovery concepts and techniques through experiential learning, indigenous foods, culinary arts, agriculture and professional development programming." Café Gozhóó, which opened in Whiteriver in 2021, operates under this Nutritional Recovery mission and employs community members who are in recovery from substance use disorders through the Working 2 Wellness and RTC Scholarship Programs. Produce is purchased locally from Ndee Bikiyaa, and trainees learn both traditional Apache food-ways and modern culinary techniques. The café is an important source of healthy, traditional foods, cultural connection and healing for the Whiteriver community.

When asked about what would help improve nutrition in their family, respondents to the 2020-21 White Mountain Apache Tribe Head Start Community Assessment reported that assistance with family menu planning (38); reviews of healthy and unhealthy foods and instruction in how to read labels (32); examples of physical activity to help families burn more calories (32); and hands-on cooking classes (30) would be most helpful.

Employment

Enterprises of the White Mountain Apache Tribe include the Hon-Dah Resort, Casino and Conference Center, the White Mountain Apache Timber Company (WMATCO), and Sunrise Ski Resort. Hon-Dah, located outside Pinetop, Arizona, offers lodging, accommodations for 120 RVs, entertainment, and meeting space. WMATCO manages the tribe's timber resources and provides a number of services, including automotive repair, welding, road work, heavy equipment rentals, scaling services, boiler work, electrical services, and transportation services, which provide employment and job training opportunities for residents of the community. White Mountain Apache Tribe was awarded $3,300,000 in Coronavirus Aid Relief and Economic Security (CARES) Act funding to upgrade its sawmill, which is expected to sustain 124 jobs, create 55 new jobs, and generate $30,000,000 for WMATCO.[113] Sunrise Park Resort is the largest ski resort in Arizona and offers a number of recreation activities, including skiing and snowboarding, tubing, and a zip line. The White Mountain Apache Tribe Community Development Corp. (CDC) owns and manages cabins for vacation rents at Hawley Lake. The White Mountain Apache Tribe Game and Fish Department sells hunting permits, fishing licenses, and camping and rafting permits.

According to American Community Survey 2016-2020 estimates, most people in the workforce in the White Mountain Apache Tribe region are employed by the government (64%), followed by private wage and salary workers (34%) and self-employed (2%). The top industries are educational services, health care/ social assistance (41%); entertainment, recreation, accommodation, food services and arts (18%); public administration (14%); retail (9%); finance/ insurance and real estate/ rental and leasing (5%); and construction (3%). The largest portion of workers are in management, business, science and arts occupations (32%), followed by service occupations (30%); sales and office occupations (16%);

production and transportation occupations (11%); and natural resources, construction and maintenance occupations (10%).

Unemployment

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.[114] Unemployment can also put families at greater risk for stress, family conflict, and homelessness. [115] 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 but could not find suitable work and so have stopped looking for employment.[116] 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.

The American Community Survey estimates that the average unemployment rate for the White Mountain Apache Tribe Region from 2015 to 2019 was 26% (Table 11). This exceeds both the unemployment rate across all Arizona reservations (17%) and Arizona overall (6%). Unemployment was highest in the Rainbow City and Whiteriver areas (34%). The labor force participation rate in the region is the same as across all Arizona reservations (45%). This means that just under half of working-age teens and adults are working or actively looking work, while the other half are not (which includes students, retirees, stay-at-home parents, and others). 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.[117]

Table 11. 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
White Mountain Apache Tribe Region	**10,346**	**26%**	**45%**	**34%**	**12%**	**55%**
Canyon Day	855	20%	45%	36%	9%	55%
Cedar Creek	325	18%	59%	49%	11%	41%
Cibecue	1,184	23%	40%	30%	9%	60%
East Fork-Ft Apache-Seven Mile-Turkey Creek	1,625	24%	48%	37%	11%	52%
Hondah-McNary	1,182	17%	54%	45%	9%	46%
North Fork	1,328	21%	44%	35%	9%	56%
Rainbow City	756	34%	31%	21%	11%	69%
Whiteriver	2,870	34%	45%	30%	15%	55%
Remainder of the Region	221	41%	50%	29%	21%	50%
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%

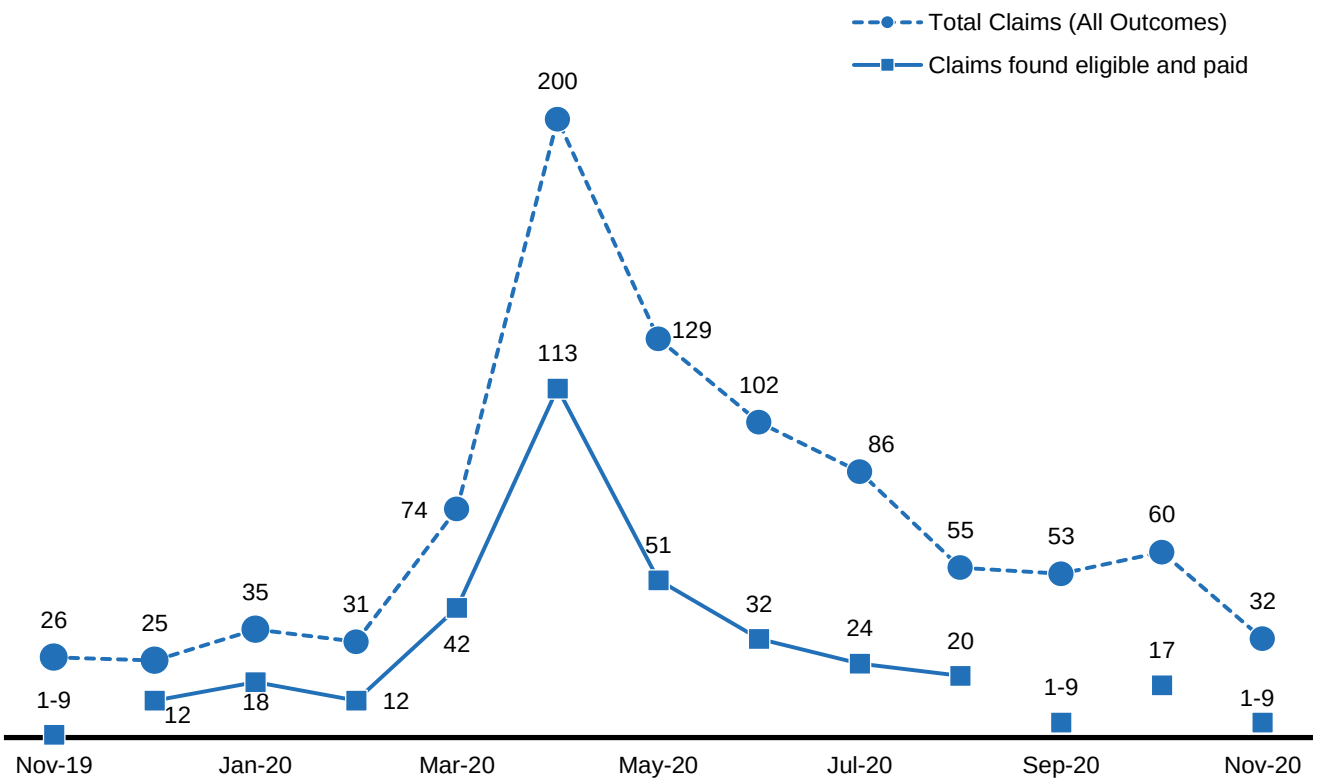
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B23025

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.

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.[118] In March 2020, the Pandemic Unemployment Assistance (PUA) 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 Emergency Unemployment Assistance (PEUC) program extended benefits for those who had already used the 26 weeks of benefits usually allowed in Arizona.[119] 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.[120]

The demand for these programs in the White Mountain Apache Tribe Region is highlighted in Figure 26. The number of unemployment claims jumped substantially, from fewer than 30 in any given month prior to March 2020, to a high of 200 in April 2020. Claims remained elevated above pre-pandemic levels through October 2020. Notably, even as claims surged during the pandemic, there is a consistent and wide gap between the number of claims filed and the number of claims found eligible and paid. In March and April 2020, a higher proportion of claims were found valid and paid (57%), but a higher proportion of claims were denied by the summer, with only 28% of claims paid in July 2020. This suggests there may be widespread economic challenges in families with lost incomes who requested but did not receive unemployment benefits.

Figure 26. Monthly unemployment claims in the White Mountain Apache Tribe Region, Nov 2019 to Nov 2020



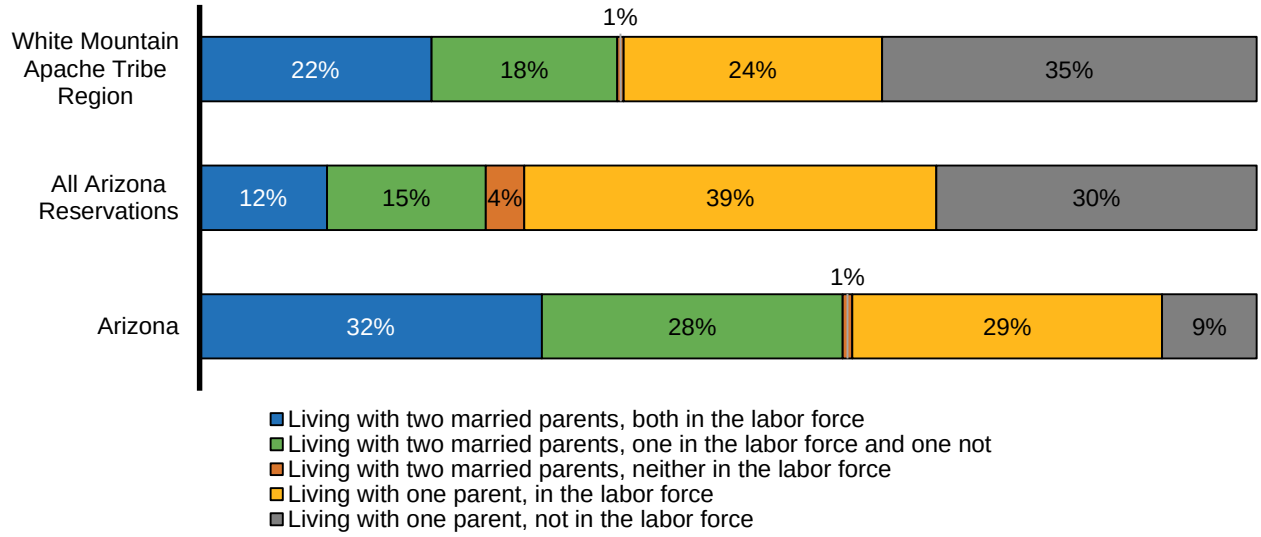
Source: Arizona Commerce Authority (2021), Office of Economic Opportunity, Local Area Unemployment Survey (LAUS)

For parents of young children, employment decisions may be influenced by the availability and affordability of child care. About half (46%) of children birth to 5 in the White Mountain Apache Tribe Region, or about 770 children in total, live in households where all present parents are in the workforce

(that is, are employed or actively seeking paying work) (Figure 27). This includes children in households with a single parent who is in the labor force (24%) and two-parent households where both parents work (22%). In other words, a high portion of households with young children likely require some form of child care. The Cedar Creek (100%) and Hondah-McNary (70%) areas have the highest portions of children living in households where the parent(s) are in the workforce (Table 12). The need for child care to support working parents is also evident in 2020-21 White Mountain Apache Tribe Head Start Community Assessment data, which showed that most respondents (93%) were in the labor force. A majority of these parents were employed either full-time (48%) or part-time/temporarily/seasonally (19%). About a quarter were unemployed (26%), 5% had never worked, and 2% had been laid off. Key informants noted that working parents in the region often rely on extended family networks and friends for care when they cannot access childcare slots. For working families, early care and education center closures during the pandemic created a new challenge, and many grandparents and other family and friends stepped in to help manage remote learning.

Over a third of young children in the region live with a single parent who is not in the labor force (35%), and smaller portions live with 2 parents 1 of whom is not in the labor force (18%) or both of whom are not in the labor force (1%) (Figure 27). Larger portions of young children have at least 1 parent at home in the Rainbow City (100%), Canyon Day (76%), and Whiteriver (61%) areas (Table 12). According to the U.S. Census Bureau's Household Pulse survey, during the pandemic, about 1 in 5 non-working adults in households with children reported that their main reason for not working was because of children not in school or child care. For the majority (16 of 27 weeks) of the survey, caring for children not in school or daycare was the top reason given why non-retired adults were not working in Arizona. This suggests that access to child care is essential for parents and other caregivers in Arizona to access employment opportunities. The pandemic only reinforced the importance of supports for parental mental health and wellbeing in order to also support the wellbeing of their young children. While families in the region felt these hardships, key informants also indicated that many families appreciated the increased time at home together—parents were able to watch their children grow up on a daily basis and take on new roles with them through remote learning activities.

Figure 27. Parents of children ages birth to 5 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 stepparents but not cohabitating partners. The five percentages in each row should sum to 100% but may not because of rounding. Please note that due to the way the ACS asks about family relationships, children living with two unmarried, cohabitating parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Table 12. 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
White Mountain Apache Tribe Region	**1,673**	**22%**	**18%**	**1%**	**24%**	**35%**
Canyon Day	310	14%	11%	3%	10%	62%
Cedar Creek	70	100%	0%	0%	0%	0%
Cibecue	290	21%	24%	0%	36%	20%
East Fork-Ft Apache-Seven Mile-Turkey Creek	180	28%	17%	0%	33%	22%
Hondah-McNary	136	39%	9%	0%	31%	21%
North Fork	172	16%	7%	0%	26%	51%
Rainbow City	63	0%	40%	0%	0%	60%
Whiteriver	432	15%	26%	0%	25%	35%
Remainder of the Region	N/A	N/A	N/A	N/A	N/A	N/A
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 stepparents but not cohabitating partners. 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.

Housing Affordability and Stability

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.[121] Data from the 2020-21 White Mountain Apache Tribe Head Start Community Assessment suggest that many see a need to improve housing in the region. Out of a list of 5 social services, 35% of parents and caregivers indicated that housing improvement should be prioritized.

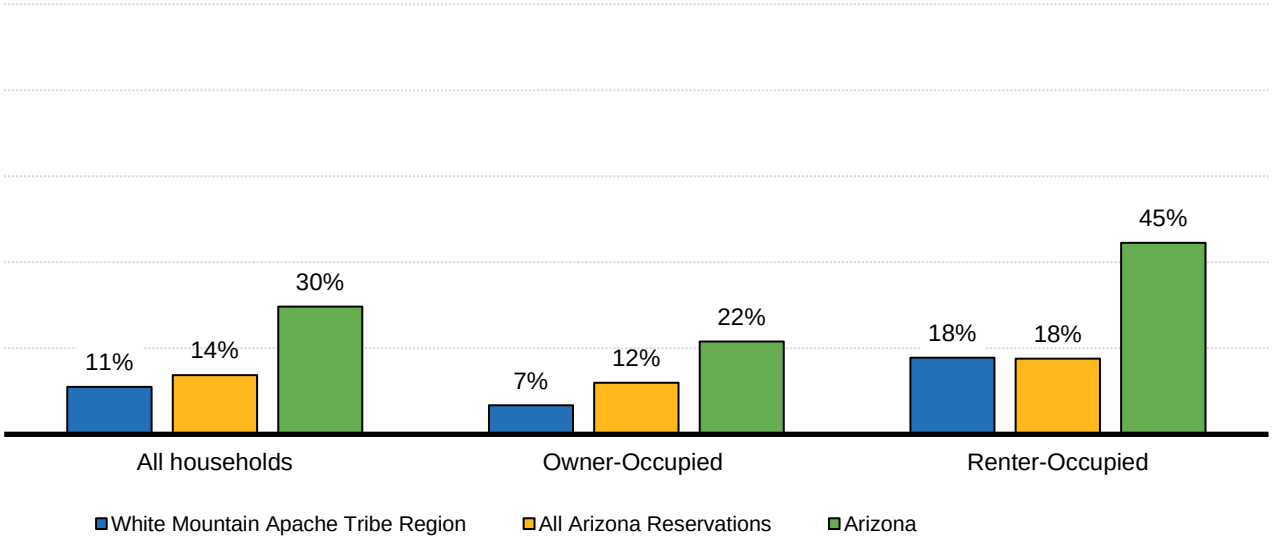
Traditionally, housing is considered affordable if it costs less than 30% of a family's annual income.[122] Arizona is perceived to have a relatively low cost of living compared to many areas of the U.S., but still about one-third of households spend more than 30% of their income on housing. Spending this amount

on housing leaves less available for food, utilities, early education programs and other supports that help young children thrive. Additionally, high housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness.[123,124]

The White Mountain Apache Housing Authority (WMAHA) was authorized by the Native American Housing Assistance and Self-Determination Act of 1996 as the tribally-designated housing entity. Its mission is to "promote and develop affordable quality housing opportunities in a safe and healthy environment; promote and establish homeownership opportunities; operate the housing program in an efficient and effective manner; improve and strengthen the relationship with residents; and promote partnership with the community and private sector for private mortgage capital financing to maximize opportunities for all tribal members."[125] Tribal housing authorities such as WMAHA have been able to make housing affordable for community members through low-cost rentals and rental assistance, as well as support homeownership through rent-to-own programs and mortgage assistance.

The American Community Survey estimates that there are 2,103 owner-occupied housing units in the White Mountain Apache Tribe Region, meaning that about 60% of households own their homes. This is slightly lower than the portion of homeowning households on all Arizona reservations (68%) and across the state as a whole (64%). Only 7% of these homeowners spend 30% or more of their annual income on housing, which is lower than across all Arizona reservations (12%), and much lower than across the state (22%) (Figure 28). Slightly more renters in the region are housing cost-burdened (18%), which is consistent with all Arizona reservations. In contrast to the American Community Survey estimates, 2020-21 White Mountain Apache Tribe Head Start Community Assessment results indicate that 58% of parents and caregivers rent their own home and only 15% own their own home. As of 2019, the WMAHA had over 1,200 low-income housing units, indicating that most households who rent in the region (1,348 total households) live in these units. However, the WMAHA still had a waiting list of 1,800 community members.[126]

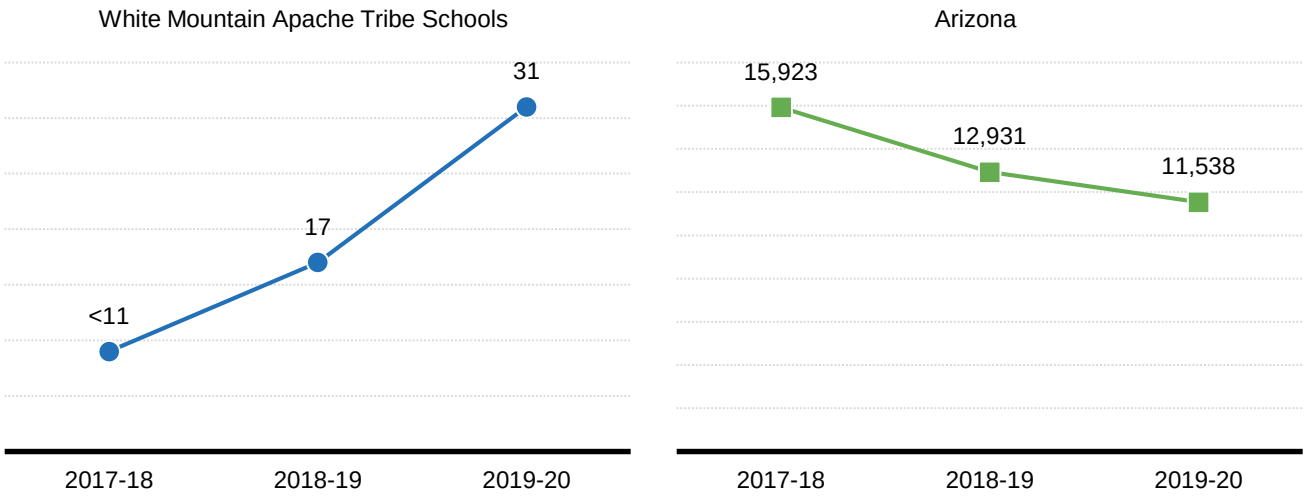
Figure 28. Percent of households with housing costs of 30 percent or more of household income by home ownership status, 2015-2019 ACS



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

Because of the long waitlist for housing and general economic hardship, households in the region may live "doubled up," where related or unrelated families share the same home. In fact one-quarter of parent and caregiver respondents to the 2020-21 White Mountain Apache Tribe Head Start Community Assessment indicated that they stay with family members or friends, and another 2% marked that they were homeless. The McKinney-Vento Act provides funding and supports to ensure that children and youth who are unhoused have access to education. Under the McKinney-Vento Act, children are counted 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.[127] Under this definition, the number of children experiencing homelessness who are enrolled in schools in the region increased from 10 or fewer in the 2017-18 school year to 31 in 2019-20 (Figure 29). The increase from 2018-19 to 2019-20 could be due to rising parental unemployment at the beginning of the COVID-19 pandemic.

Figure 29. Students experiencing homelessness (McKinney-Vento definition) enrolled in public and charter schools, 2017-18 to 2019-20



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

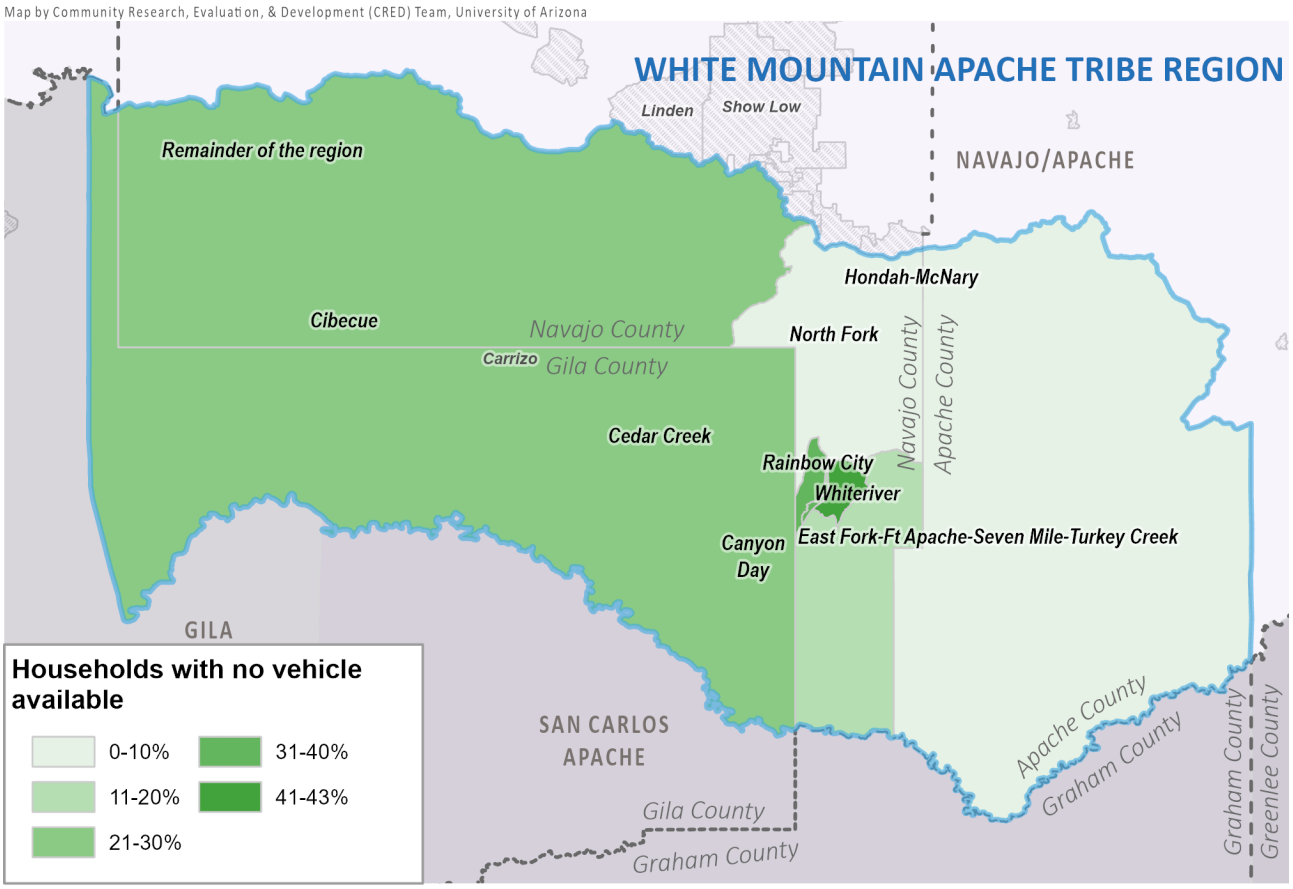
Tribal housing authorities are consistently underfunded by the federal government relative to community needs, and the WMAHA has taken important steps to bridge this gap. A housing needs assessment was initiated in 2019, which involved a household survey and community meetings in remote areas of the reservation.[128] The Tribe was able to replace the Census data traditionally used in the Indian Housing Block Grant (IHBG) program's formula with the locally-collected data, resulting in substantially increased funding. Assessment results also helped inform how many rental and homeownership units should be constructed in Hondah's new Apache Pines development. Additionally, in FY2020, the U.S. Department of Housing and Urban Development (HUD) awarded the Tribe $5,000,000 in competitive funding to support housing rehabilitation, the construction of 20 new homes, and other infrastructure needs.[129] A large part of this funding was used to build 8 transitional housing units for COVID-19 patients.[130] This emergency housing is especially vital in multi-generational and "doubled-up" households where it is difficult to quarantine sick family members. The Tribe also received CARES Act funding to support their Low-Income Home Energy Assistance Program (LIHEAP).

Transportation

Transportation remains a major challenge in the region. Figure 30 shows a map of households in the region by block group that do not have access to a vehicle, with higher percentages seen in Rainbow City and Whiteriver. About three-quarters (72%) of respondents to the 2020-21 White Mountain Apache Tribe Head Start Community Assessment reported owning a car or planning to buy one; 28% reported relying on friends and family for transportation, while 11% walked, hitchhiked, or rode a bike. Key

informants in the region identified transportation as a major barrier to accessing child care as well as families participating in classes or workshops. Availability of transportation was also identified as a reason why families might miss medical appointments or follow-up care. Beyond lack of access to a vehicle, the cost of gas and the low availability of service stations in the region can also be a challenge for low-income families.

Figure 30. Map of Households with No Vehicles Available by Block Group, 2015-2019 ACS



Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B25044

Local services are aware of, and responsive to, residents' transportation needs. White Mountain Apache Tribe Head Start and Dischii'bikoh Preschool both provide bus service for enrolled children. Other services including Child Find, Apache Behavioral Health Services and John F Kennedy Family and Child Education (FACE) program provide in-home options or conduct outreach through home visits. Non-emergency transport is available through the Indian Health Service for medical appointments. However, this service can be difficult for families to utilize when they have multiple children because transport is only provided to the patient and the patient's parent or guardian, not the entire family. Informants also noted that the Fort Apache Connection Transit was not running for periods during the pandemic, which made it even harder for caregivers to get to the grocery store, work, or other in-person

services such as food and essential item pick-up sites. While regional transportation solutions will require a broad effort on the part of multiple regional stakeholders, programs seeking to reach and serve families with young children need to remain cognizant of the challenges in this area and, where possible, design programs and outreach strategies that minimize the need for families to travel long distances.

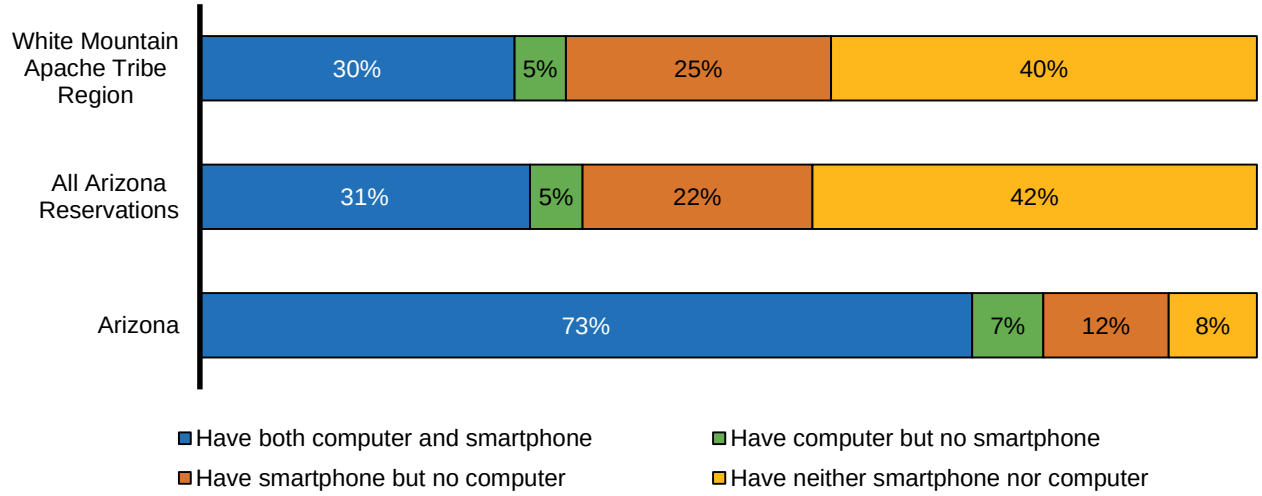
Information Access Through Computers and Internet

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, as well as access to telehealth and other remote social services. 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.[131] The term "digital divide" refers to disparities in communication and information technologies,[132] and the lack of sustained access to information and communication technologies in low-income communities is associated with economic and social inequality.[133] Low-income households may experience regular disruptions to this increasingly important service when they can't pay bills, repair or update equipment or access public locations that may offer connectivity (e.g., computers at local libraries).[134] 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.[135, 136,137]

American households 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.[138] According to the 2015-19 American Community Survey, less than one-third of households (30%) in the White Mountain Apache Tribe Region have both a computer and a smartphone in their home. An estimated 5% have a computer but no smartphone, 25% have a smartphone but no computer, and the remaining 40% have neither (Figure 30). Rates of computer and smartphone access in the region are similar to what is seen across all Arizona reservations. Looking at individuals rather than households, 2 out of 5 (40%) White Mountain Apache Tribe Region residents have access to both a computer and internet connection (

Figure 31). About equal portions of residents are estimated to have a computer without internet (29%) or have no computer (30%).

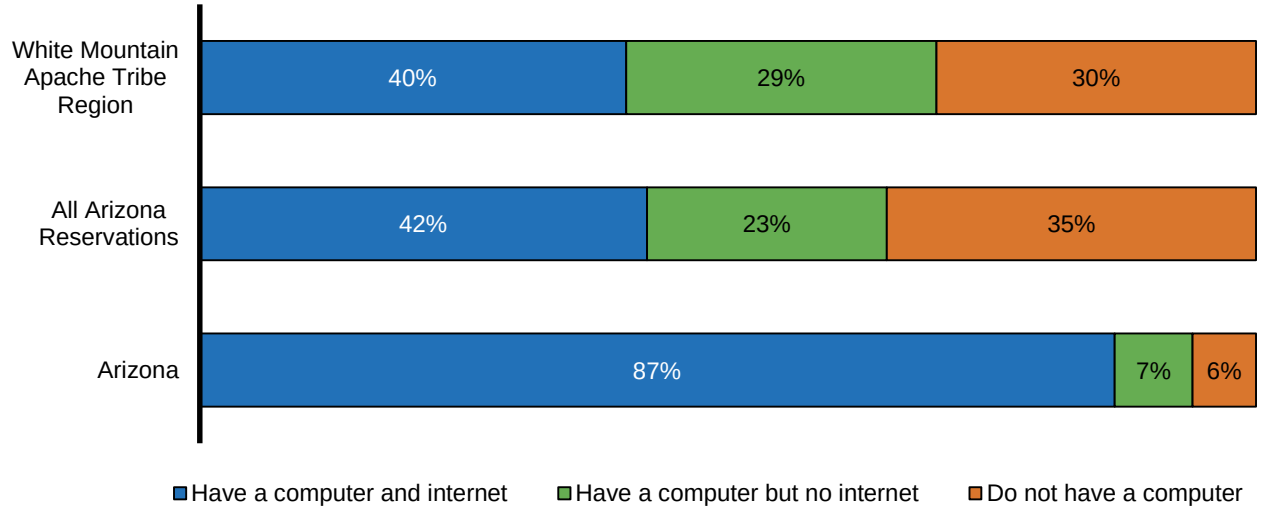
Figure 30. Households with and without computers and smartphones, 2015-2019 ACS



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.

Figure 31. Persons of all ages in households with and without computers and internet connectivity, 2015-2019 ACS



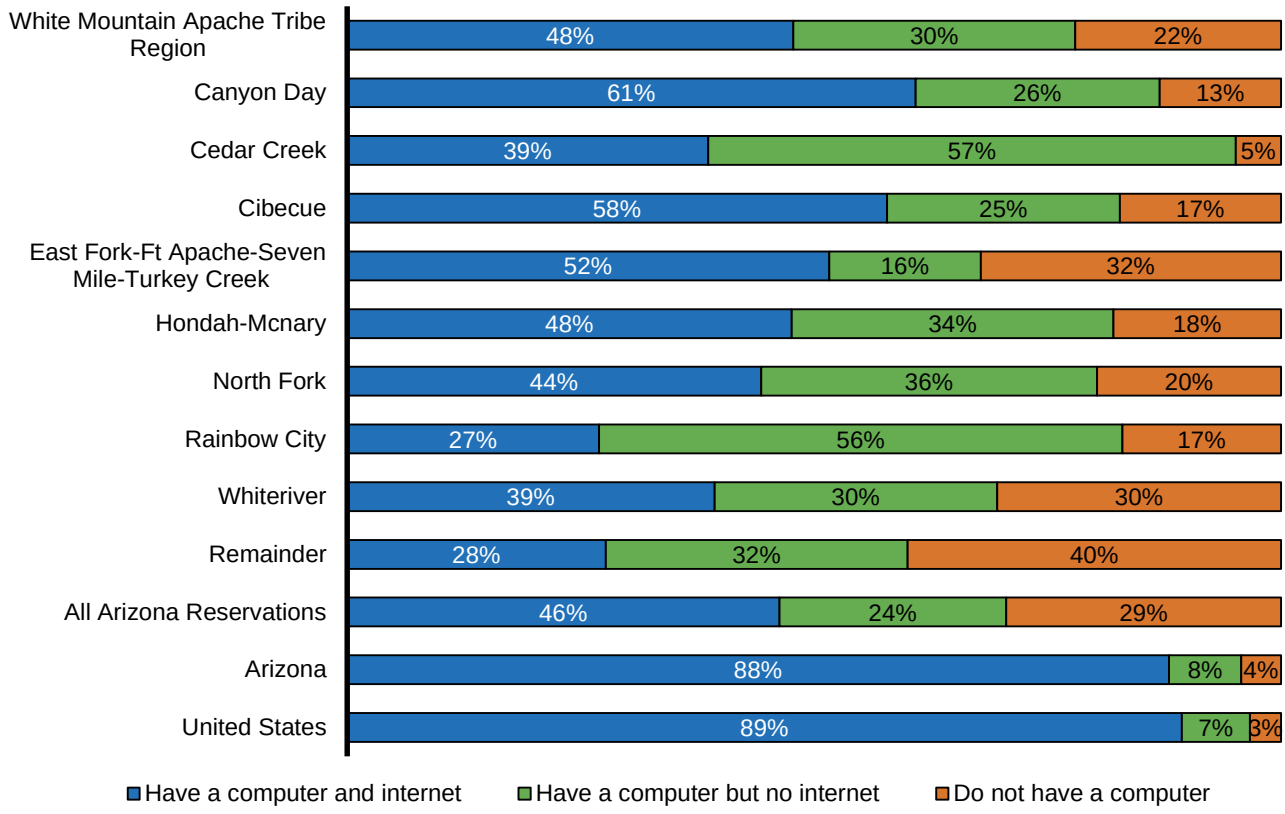
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B28005

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

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 connect socially with teachers and peers. Among children birth to 17, rates of computer and internet access at home were slightly higher than for all residents, with almost half of children living in households with both a computer and internet access (48%) (Figure 32). Children in some areas of the region, such as in Cibecue (27%), Whiteriver (39%), and the remainder of the region (28%), had lower rates of access to both a computer and internet. Computer and internet access for children living in reservations across Arizona (46%) is estimated to be much lower than Arizona as a whole (88%), meaning that these children were less poised to adapt to remote learning than many of their peers across the state.

According to key informants, limited broadband connection has been an issue across the reservation, especially in remote areas. For example, the White Mountain Apache Tribe Head Start program relied on weekly curriculum packets rather than virtual learning during the COVID-19 pandemic because the Cibecue and McNary locations had limited connection, and many families were lacking either internet access or devices. In addition to the challenges experienced by the early education system, Apache Behavioral Health Services also lost contact with many clients who could not access video or telephone services. One silver-lining to the pandemic is the allocation of CARES Act and American Rescue Plan dollars for expanding rural and Tribal broadband access, which may begin to shrink the digital divide.[139][140] Informants noted that, as of July 2021, broadband was finally being installed in more remote areas of the reservation. White Mountain Apache Tribe schools were also able to use funding to provide Wi-Fi hotspots and tablets or Chromebook laptops to their students that needed them for remote learning. However, hotspots were also limited by low cellular signal in certain areas.

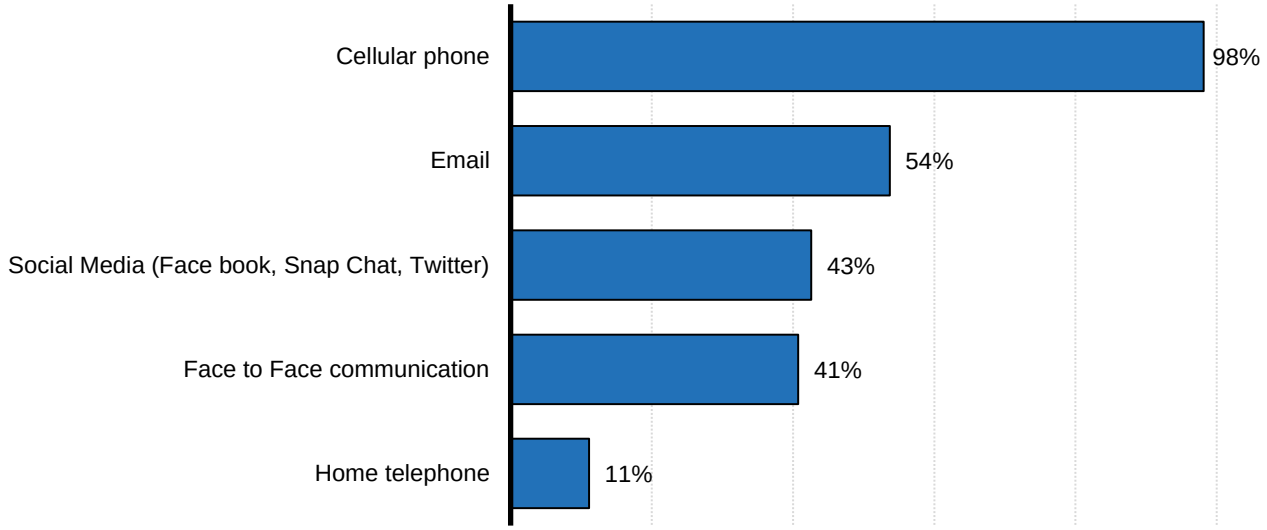
Figure 32. Children ages birth to 17 in households with and without computers and internet connectivity, by subregion, 2015-2019 ACS



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

Key informants noted that, during the pandemic, local programs had to be creative and proactive to stay connected with families with diverse communication needs. Programs advertise using fliers, local radio station announcements, tabling at community events and, increasingly, posting information online or on social media. The 2020-21 White Mountain Apache Tribe Head Start Community Assessment asked about forms of communication preferred by parents and caregivers (Figure 33). Almost all indicated cellular phone (98%), while half or fewer selected email (54%), social media (43%), face-to-face communication (41%), and home telephone (11%). Head Start staff indicated they have to use multiple modes of communication in order to guarantee information gets to parents, including phone calls or texts, notes included in learning packets, and even face-to-face interactions with staff traveling the bus routes.

Figure 33. Positive responses to question on forms of communication used, Head Start Community Assessment, 2020-21



Source: White Mountain Apache Tribe Head Start (2021). [Community Assessment dataset]. Unpublished tribal data received by request.

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.[141] 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.[142,143] 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. [144,145] 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.[146] Participation in high-quality early education has been linked to better school performance in elementary and high school.[147] Reading skills in 3rd 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 3rd grade are more likely to graduate high school and attend college.[148] 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

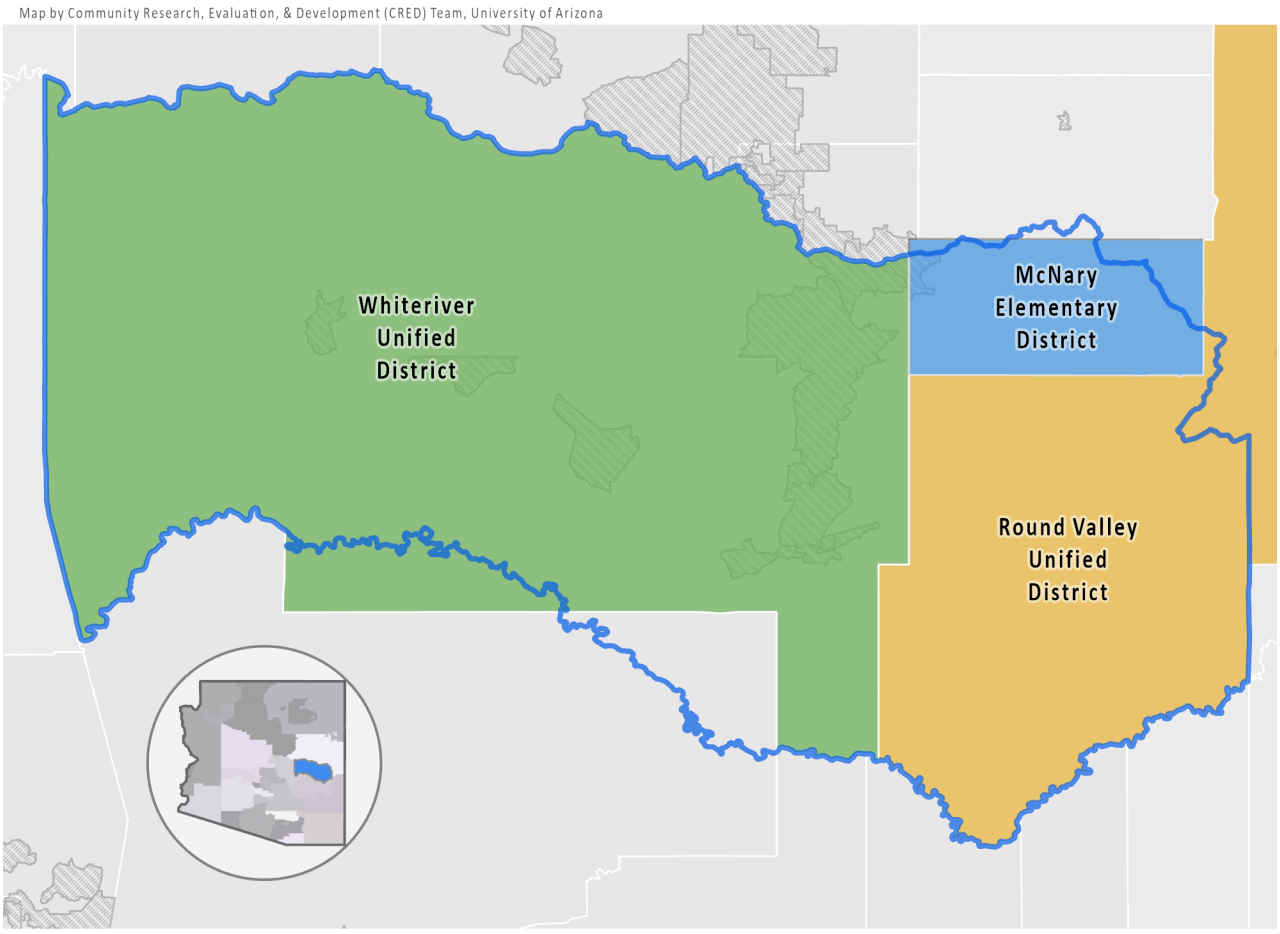
School Attendance and Absenteeism

There are 6 public schools in 2 school districts in the White Mountain Apache Tribe Region. In the Whiteriver Unified School District, Whiteriver Elementary, Seven Mile School and Cradleboard School serve students in preschool through 5th grade; Whiteriver Elementary additionally has a special education preschool program. Canyon Day Junior High School serves students in 6th through 8th grade, and Alchesay High School enrolls high school students. McNary Elementary School in the McNary Elementary District enrolls students in kindergarten through 8th grade. Some children living in the region may attend public schools in the Blue Ridge Unified School District, which is located north of the reservation. Figure 34 shows a map of school districts in the region, and district enrollment in preschool through 3rd grade is described in Table 13.

In addition to public schools, students may enroll in Dishchii'bikoh Community (Cibecue Community) School, Theodore Roosevelt School, or John F. Kennedy Day School, which are operated by the Bureau

of Indian Education. Cibecue Community School is a preschool-12 Title I grant school that focuses on preserving Apache language and culture. Theodore Roosevelt School is a boarding school that also serves local students in 3rd through 8th grade, and John F. Kennedy Day School enrolls students in kindergarten through 8th grade. There is a private religious school in the region, East Fork Lutheran School, which serves students in kindergarten through 8th grade.

Figure 34. School Districts in the White Mountain Apache Tribe 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 13. Students enrolled in preschool through 3rd grade, 2019-20 school year

Geography	Preschool	Kindergarten	1st Grade	2nd Grade	3rd Grade
White Mountain Apache Tribe schools	12	209	218	208	216
McNary Elementary School (K-8)	0	13	<11	<11	14
Whiteriver Elementary (PS-5)	12	65	64	77	69
Cradleboard School (K-5)	0	48	61	41	47
Seven Mile School (K-5)	0	83	83	83	86
Blue Ridge Unified School District No 32 (American Indian students)	<11	<11	19	<11	19
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

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, and it affects even the youngest children, with more than 10% of U.S. kindergarteners and first graders considered chronically absent.[149] 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.[150] Chronic absenteeism also negatively impacts the development of key social-emotional skills, including self-management, self-efficacy, and social awareness.[151] Consistent school attendance is particularly important for children from economically disadvantaged backgrounds, the group of children most at risk for chronic absenteeism.[152,153]

Table 14 shows percentages of chronic absenteeism for district elementary schools in the region. In the 2018-19 school year, rates of chronic absences in the schools in the White Mountain Apache Tribe Region (29%) were slightly higher than rates in surrounding Apache (25%), Gila (28%), and Navajo (21%) Counties. However, rates of absence varied by school; Whiteriver Elementary had a smaller portion of students with chronic absences (17%) more similar to rates across Arizona schools (13%), while the percent of students with chronic absences was 13% higher in Seven Mile School (42%) than in the region as a whole. Identifying and addressing the reasons behind chronic absenteeism is important to ameliorate later effects on educational achievement and graduation rates. Decreases from the 2018-19 (29%) to the 2019-20 (17%) school year are most likely because of data reporting complications during the COVID-19 pandemic.[154] According to the 2020-21 White Mountain Apache Tribe Head Start Community Assessment, almost all parents and caregivers believe that attending school every day is important (96%), and that school attendance is an issue in the community (87%).

When White Mountain Apache Tribe schools closed due to the pandemic in March 2020, administrators, teachers and staff immediately began working on how to support students academically from afar. As mentioned in the ***Error! Reference source not found.*** section, public schools in the White Mountain Apache Tribe Region were able to purchase tablets or Chromebooks and WiFi hotspots for students to ensure that students had devices and internet access at home. However, both broadband and cellular service are limited in more remote parts of the region, so many children still experienced barriers to participating in remote schooling. Key informants noted that private schools did not have access to the same funding, and families had to figure out and pay for devices and internet themselves.

Key informants also described students' differing experiences with the transition to remote learning. Most children greatly missed the social interaction with their peers and teachers. Some parents and caregivers were able to work with their children to keep them well-engaged in school, but others, especially grandparents, had difficulty navigating the technology needed to engage with online learning. Some families were going through highly traumatic events, such as severe illness and loss of loved ones to COVID-19, and in this context connecting to school activities was not a high priority. Key informants emphasized that it will take time and support for students to recover unfinished learning.

Table 14. Kindergarten through 3rd grade chronic absence rates, 2018-19 and 2019-20

	Total K-3 students enrolled (2018-19)	Number of K-3 students with chronic absences (2018-19)	Chronic absence rate for K-3 students (2018-19)	Total K-3 students enrolled (2019-20)	Number of K-3 students with chronic absences (2019-20)	Chronic absence rate for K-3 students (2019-20)
White Mountain Apache Tribe schools	851	249	29%	851	144	17%
McNary Elementary School (K-8)	15	44	34%	DS	DS	11%
Whiteriver Elementary (PS-5)	45	267	17%	28	275	10%
Cradleboard School (K-5)	43	196	22%	31	197	16%
Seven Mile School (K-5)	146	344	42%	80	335	24%
Blue Ridge Unified School District No 32 (all K-3 students)	108	527	20%	27	487	6%
Apache County schools	2,989	882	25%	2,886	469	16%
Gila County schools	2,280	633	28%	2,270	381	17%
Navajo County schools	5,026	1,052	21%	4,897	538	11%
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

Achievement on Standardized Testing

A child's 3rd grade reading skills have been identified as a critical indicator of future academic success.[155] Students who are at or above grade level reading in 3rd grade are more likely to go on to graduate high school and attend college.[156] The link between poor reading skills and risk of dropping out of high school is even stronger for children living in poverty. More than a quarter (26%) of children who were living in poverty and not reading proficiently in 3rd grade did not finish high school. This is more than 6 times the high school dropout rate of proficient readers.[157]

In March 2020, the Bureau of Indian Education (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.[158] Previously, BIE schools across the country used a variety of standardized assessments; Arizona's BIE funded schools had used the same assessment administered at public schools under the Arizona Department of Education. Starting in school year 2020-21, BIE approved Pearson as the vendor for the new unified assessment for English Language Arts (ELA) and Mathematics in grades 3-8 and 11.[159] Future Needs and Assets Reports for the region are expected to present data from the new Pearson ELA and Math tests.

In 2010, the Arizona legislature, recognizing the importance of early identification and targeted intervention for struggling readers, enacted legislation called *Move on When Reading*. This law states that a student shall not be promoted to fourth grade if their standardized testing reading score falls far below the third-grade level, as established by the State Board of Education.[160] As of 2019, the statewide assessment tool for English language arts (ELA), including reading and writing, is Arizona's Statewide Achievement Assessment for English Language Arts and Math (AzM2).[xi,161,162] In March 2020, Arizona cancelled statewide AzM2 testing and other statewide assessments for the 2019-20 school year.[163] 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 11% of White Mountain Apache Tribe 3rd grade students achieved passing scores on the 3rd grade ELA assessment (Table 15), which is a decrease from the 2015-16 school year (15%) (Figure 35). ELA passing rates were highest at Cradleboard School (20%) and lowest at McNary Elementary School (<2%) and Seven Mile School (4%) (Figure 36). More than 3 out of 4 White Mountain Apache Tribe Region 3rd graders scored minimally proficient on the ELA test (79%), a portion of whom are at risk for retention in 3rd grade based on Arizona's Move on When Reading law. Conversely, students showed improvement in math scores, with the percent of students passing increasing from 15% in 2015-16 to 24% in 2018-19 (

Figure 37). Similar to the ELA assessment, more 3rd graders at Cradleboard School (35%) and fewer at McNary Elementary School (8%) passed the math assessment (Figure 38).

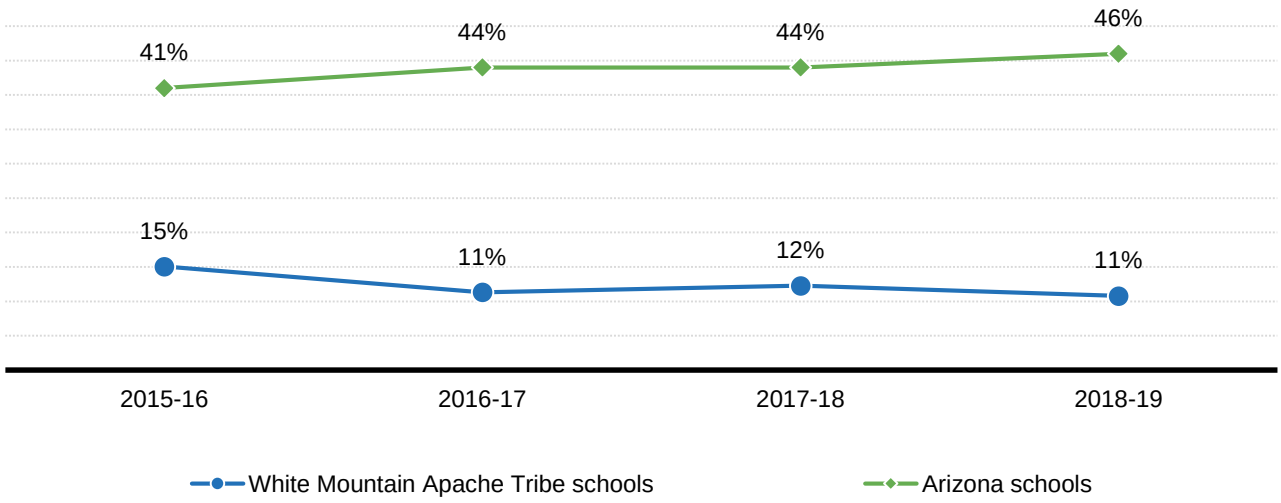
[xi] *AzMERIT was renamed to AzM2 during the 2019-2020 school year. In 2022, AzM2 will be replaced by AASA (Arizona's Academic Standards Assessment).*

Table 15. AzMERIT assessment results: 3rd grade English Language Arts, 2018-19

	Number of students tested	Falls far below	Approaches	Meets	Exceeds	Passing
White Mountain Apache Tribe schools	DS	79%	10%	8%	3%	11%
McNary Elementary School (K-8)	DS	>98%	<2%	<2%	<2%	<2%
Whiteriver Elementary (PS-5)	DS	69%	15%	12%	4%	16%
Cradleboard School (K-5)	DS	70%	10%	12%	8%	20%
Seven Mile School (K-5)	DS	88%	8%	4%	<2%	4%
Blue Ridge Unified School District No 32 (American Indian students)	DS	59%	10%	14%	17%	31%
Arizona Schools (American Indian students)	3,497	66%	13%	18%	4%	22%
Arizona schools	82,653	40%	14%	32%	14%	46%

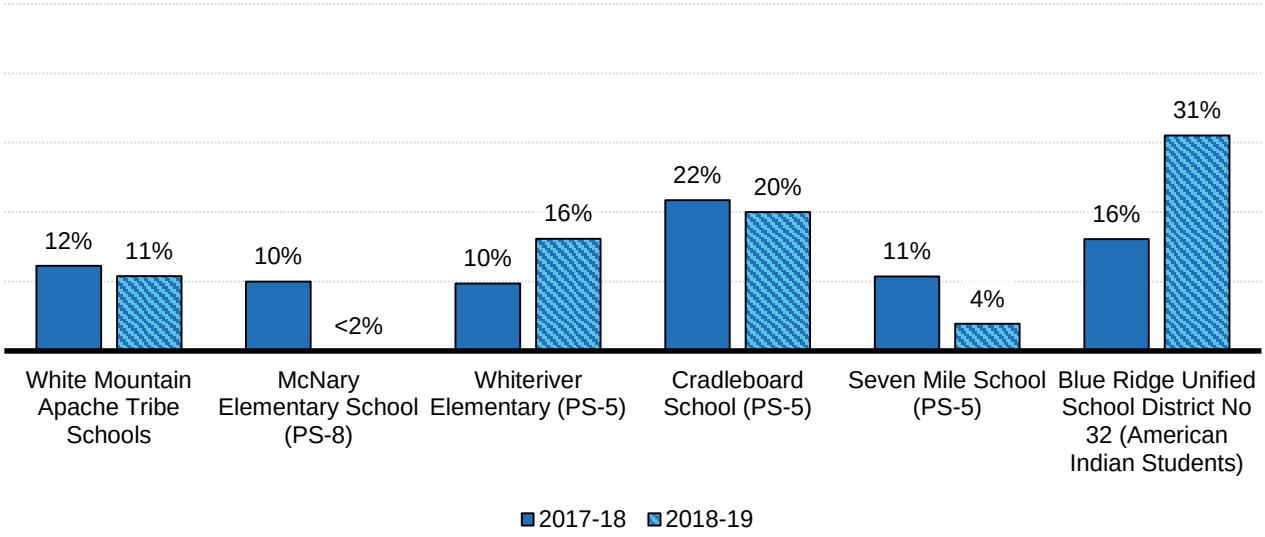
Source: Arizona Department of Education (2021). [AzMERIT dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Figure 35. AzMERIT assessment results: 3rd grade English Language Arts, 2015-16 to 2018-19



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

Figure 36. AzMERIT assessment results: 3rd grade English Language Arts, 2017-18 and 2018-19



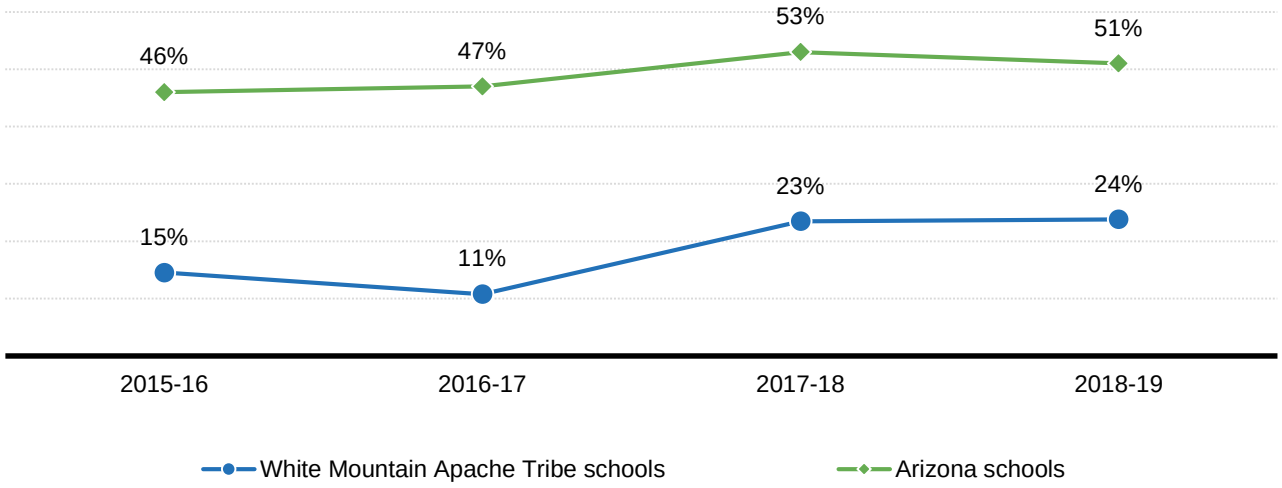
Source: Arizona Department of Education (2021). [AzMERIT dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Table 16. AzMERIT assessment results: 3rd grade Math, 2018-19

	Number of students tested	Falls far below	Approaches	Meets	Exceeds	Passing
White Mountain Apache Tribe schools	231	44%	32%	19%	5%	24%
McNary Elementary School (K-8)	DS	67%	25%	8%	<2%	8%
Whiteriver Elementary (PS-5)	DS	47%	35%	12%	6%	18%
Cradleboard School (K-5)	DS	37%	29%	24%	10%	35%
Seven Mile School (K-5)	DS	43%	32%	22%	3%	25%
Blue Ridge Unified School District No 32 (American Indian students)	DS	48%	31%	17%	3%	21%
Arizona Schools (American Indian students)	3,525	42%	31%	21%	5%	27%
Arizona schools	83,042	23%	26%	33%	18%	51%

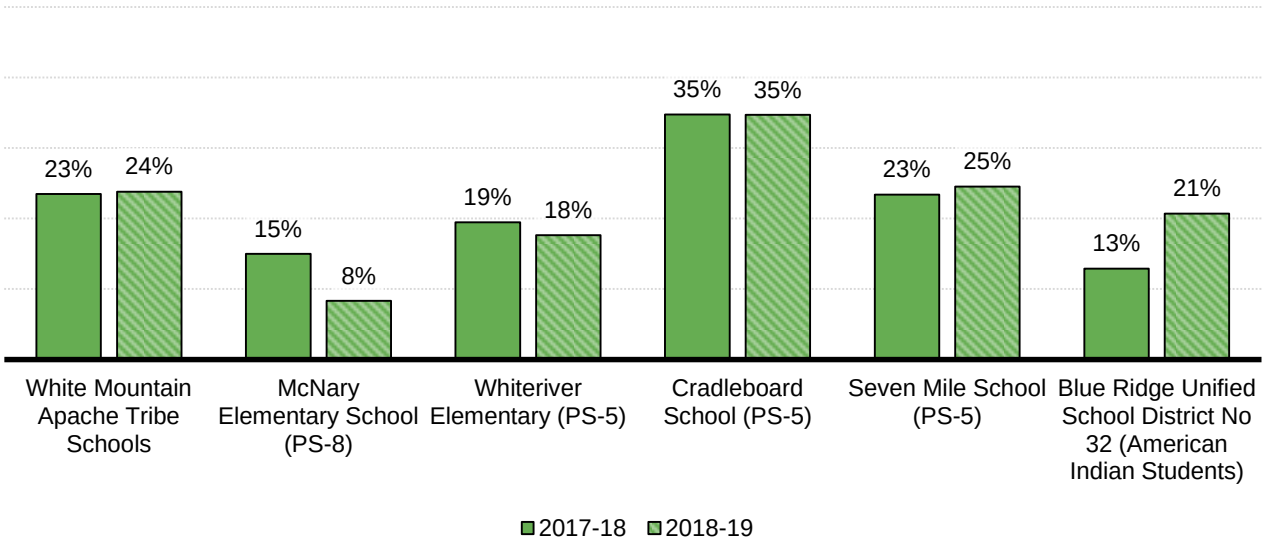
Source: Arizona Department of Education (2021). [AzMERIT dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Figure 37. 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

Figure 38. AzMERIT assessment results: 3rd grade Math, 2017-18 and 2018-19



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

Students attending BIE schools had low passing rates on ELA (6%) and math (4%) assessments. More students at John F. Kennedy Day School passed the ELA (14%) and math (9%) assessments than at other BIE schools regionally (Table 17 and Table 18). Student performance in the White Mountain Apache Tribe Region, and statewide, suggests that there is much work to be done to support early literacy and strengthen scholastic achievement. Going forward, students will need wraparound academic and social supports to recover unfinished learning following more than a year of remote learning.

Table 17. Reading/Language Arts assessment results for White Mountain Apache Tribe BIE Schools, 2018-19

	Number of students tested	Falls far below	Approaches	Meets	Exceeds	Passing
Dishchii'bikoh Community School	334	84%	11%	4%	0%	4%
John F. Kennedy Day School	138	63%	23%	13%	1%	14%
Theodore Roosevelt School	122	89%	7%	4%	0%	4%

Source: Bureau of Indian Education (2021). [SY18-19 SEA and LEA Report Cards]. Retrieved from https://www.bie.edu/sites/default/files/inline-files/SY18-19%20SEA%20and%20LEA%20Report%20Cards%20%282%29.pdf. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Table 18. Math assessment results for White Mountain Apache Tribe BIE Schools, 2018-19

	Number of students tested	Falls far below	Approaches	Meets	Exceeds	Passing
Dishchii'bikoh Community School	357	87%	12%	1%	0%	1%
John F. Kennedy Day School	137	66%	26%	9%	0%	9%
Theodore Roosevelt School	128	88%	6%	4%	2%	6%

Source: Bureau of Indian Education (2021). [SY18-19 SEA and LEA Report Cards]. Retrieved from https://www.bie.edu/sites/default/files/inline-files/SY18-19%20SEA%20and%20LEA%20Report%20Cards%20%282%29.pdf. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

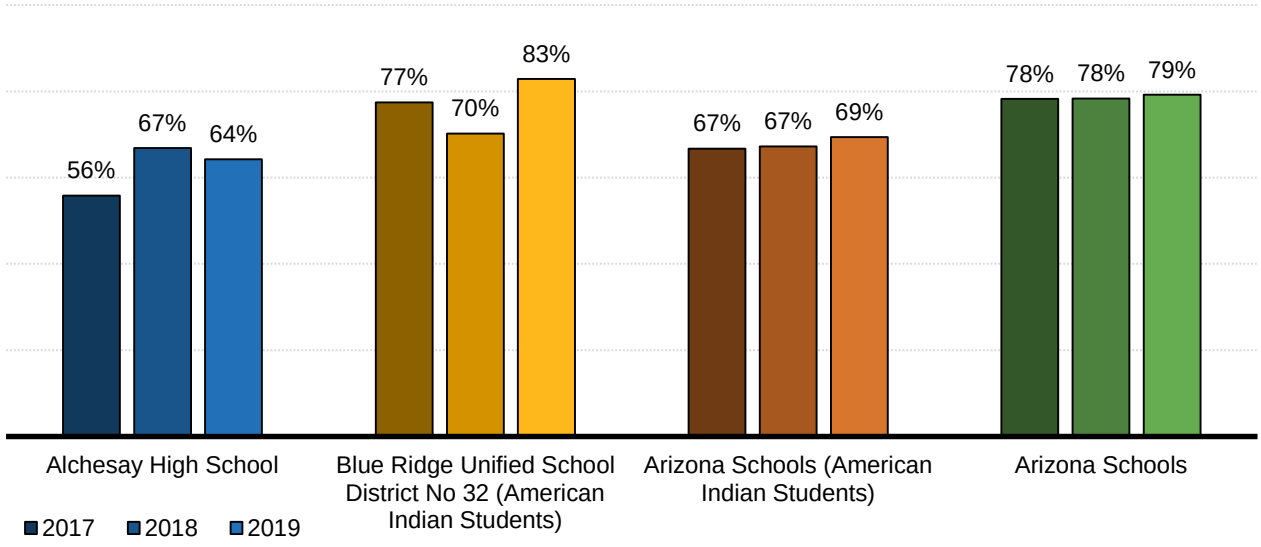
Graduation Rates and Adult Educational Attainment

Understanding current high school graduation and dropout rates within the state 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.[164,165] 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.[166] Adults with lower educational attainment also tended to experience more economic challenges during the pandemic; adults with less than a high school diploma experienced more than twice the unemployment rate of adults with a bachelor's degree or higher.[167]

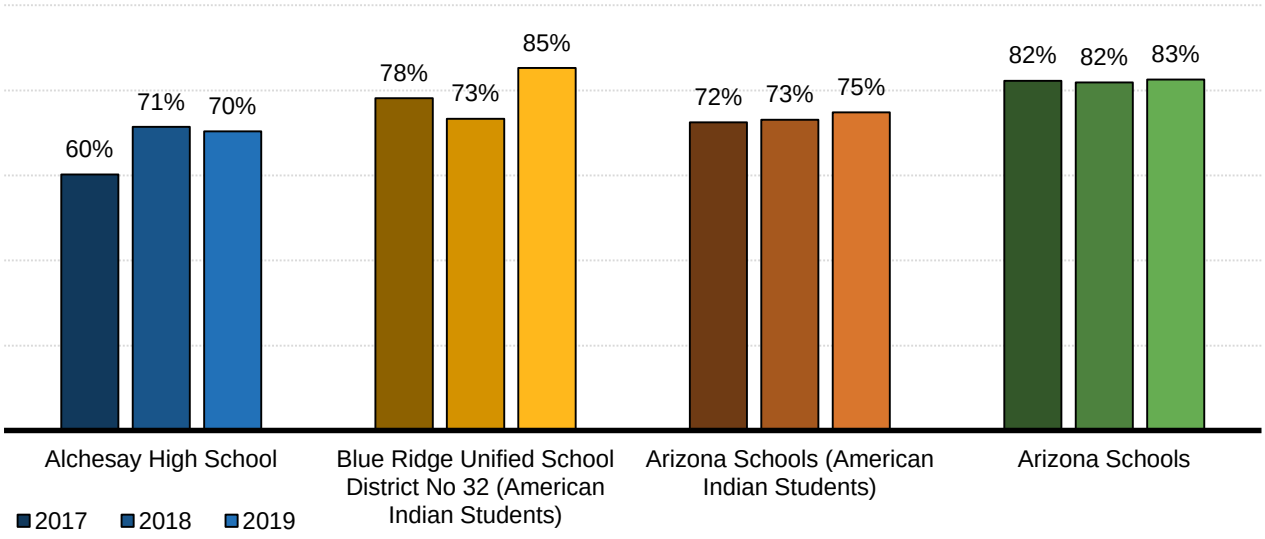
Alchesay High School is the only public high school under the Arizona Department of Education in the White Mountain Apache Tribe Region. Dishchii'bikoh Community School, located in Cibecue and operated by BIE, also serves high school students in the region; however data from this school were not available to include in this report. In 2019, about 2 out of 3 high school seniors at Alchesay High School graduated on time (64%), which is similar to the 4-year graduation rate for American Indian students across Arizona schools (69%) (Figure 39). Four-year graduation rates were higher for American Indian students attending Blue Ridge Unified District, just north of the White Mountain Apache Tribe Region, than for all Arizona students (83% and 79%, respectively). Data from the 2019-20 school year may not necessarily be reflective of the learning conditions for students, as many schools relaxed grading, attendance, and graduation requirements due to the onset of the pandemic.

Figure 39. Trends in four-year graduation rates, 2017 to 2019



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

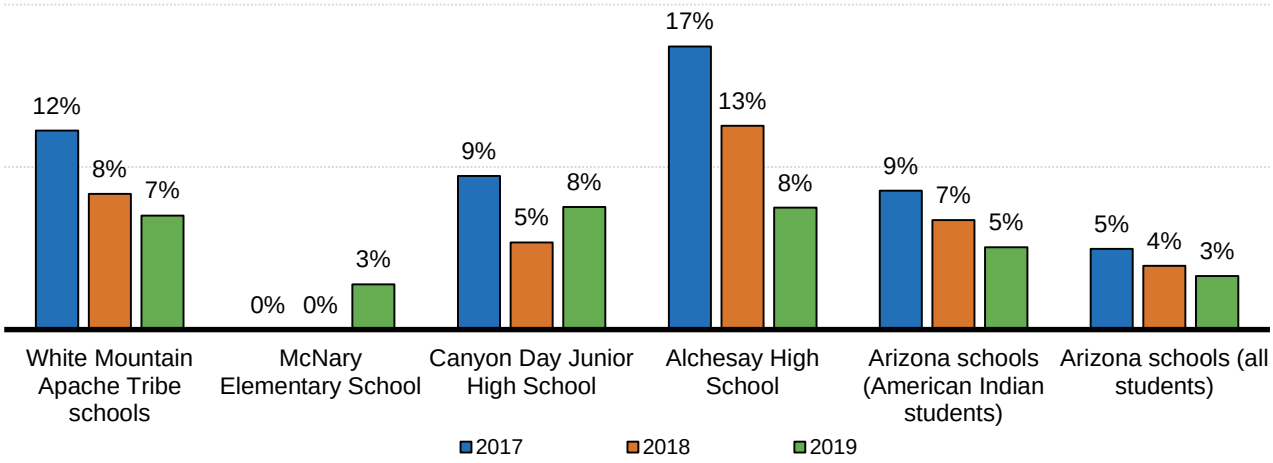
Figure 40. Trends in five-year graduation rates, 2017 to 2019



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

From 2017 to 2019, the high school drop-out rate at Alchesay High School decreased by more than half, from 17% to 7%. The drop-out rate across White Mountain Apache Tribe Region schools similarly decreased from 12% to 7% but remained between 1 and 3 percentage points above the rate for American Indian students statewide (Figure 41). Conversely, between 2018 and 2019, drop-out rates increased by 3 percentage points at both McNary Elementary School and Canyon Day Junior High School.

Figure 41. Trends in 7th to 12th grade drop-out rates, 2017 to 2019

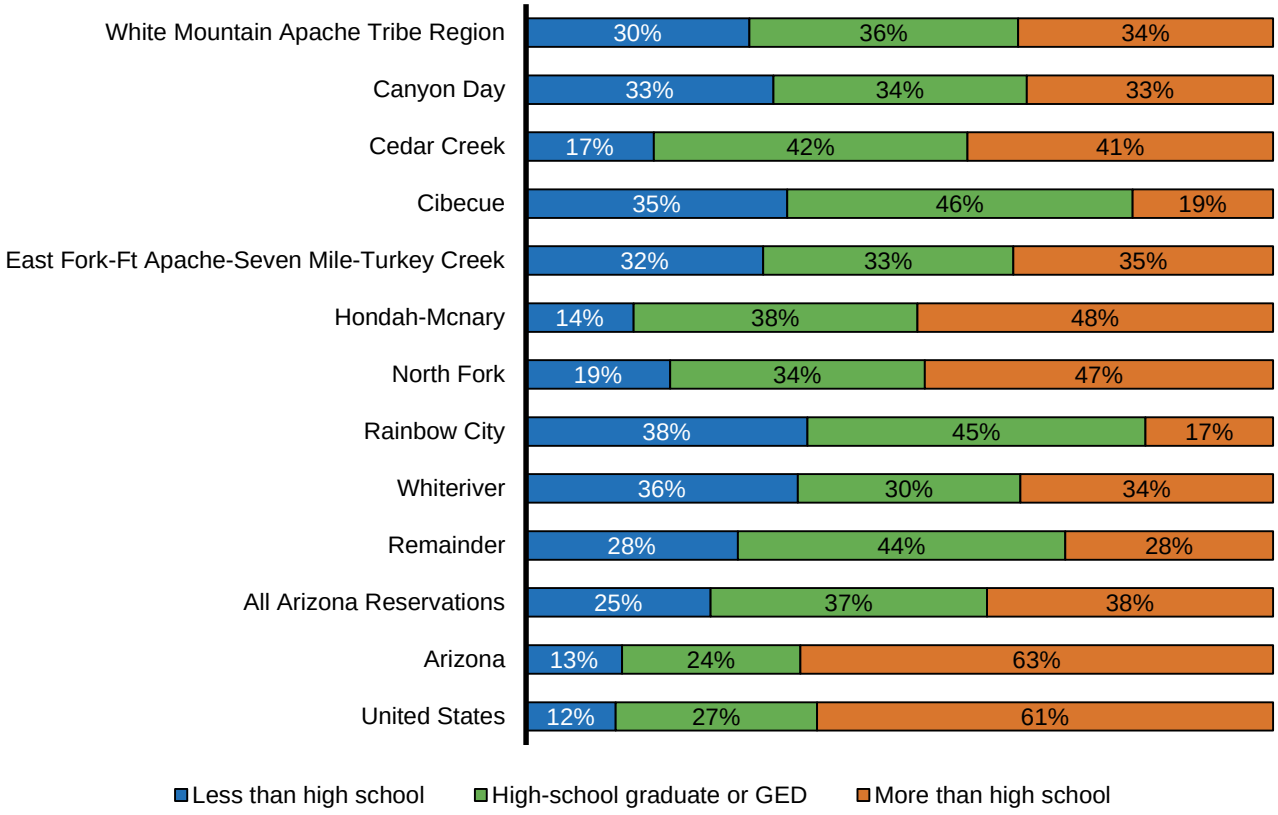


Source: Arizona Department of Education (2021). [Dropout dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Note: For middle school-age students, dropout rates may indicate students lost to follow-up rather than students dropping out of school.

According to the American Community Survey, educational attainment for adults aged 25 and older in the White Mountain Apache Tribes Region is similar to that of adults in all Arizona reservations (Figure 42). Over a third of adults have at least some college or professional education or a bachelor's or advanced degree in the region (34%) and in all Arizona reservations (38%). Another third of adults have a high school diploma or GED (36%), and just under a third have less than a high school education (30%). These rates of educational attainment are lower than that seen in the county or the state. However, educational attainment varies by community. Nearly half of adults in the Hondah-McNary (48%) and North Fork (47%) areas have at least some college education. In Cibecue and Rainbow City, the proportion of adults without a high school diploma or GED decreased from about half in 2010-2014 to just over a third in 2015-2019. Among parents and caregivers surveyed in the 2016-2017 Head Start Community Assessment, 15% reported completing less than high school, 46% reported having a high school diploma or GED, 24% reported completing some college, and 15% had a college degree.

Figure 42. Level of education for the adult population (ages 25 and older)



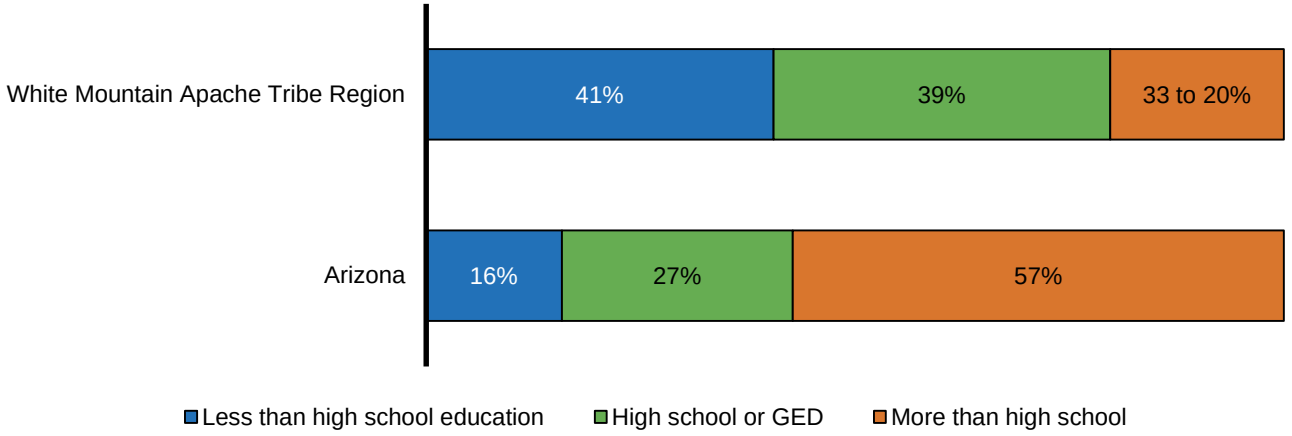
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B15002

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

Mothers of babies born in 2019 had lower levels of education than the overall adult population in the White Mountain Apache Tribe Region, with 41% having less than a high school education (Figure 43). Parental educational attainment has been shown to influence child educational outcomes.[168] Education is also a key mechanism for upward mobility; parents with higher educational levels typically secure higher incomes to support their families.[169] Higher maternal education, in particular, is linked to both cognitive and socio-emotional development as well as general health in young children.[170] The White Mountain Apache Tribe Region is therefore particularly poised to 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.[171,172] Providing resources and programming to support parental and youth education can help grow the human capital of both. [173,174] Within the White Mountain Apache Tribe Region, the Family and Child Education (FACE) program at John F. Kennedy Day School in Cedar Creek and the THRIVE:

Birth to Five program through Apache Behavioral Health Services (ABHS) are examples of two-generation programs offering education for young children and their caretakers. This program is Discussed in more detail in the *Early Care and Education* section.

Figure 43. Level of education for the mothers of babies born in 2019



Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data.
Note: Mothers of twins are counted twice in this figure.

Additional data tables related to

Educational Indicators 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. [175,176] 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;[177] those disparities that persist until kindergarten tend to predict later academic problems.[178]

Quality early care and education can positively influence children's overall development.[179,180] This is particularly true for children in poverty.[181] 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.[182] 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.[183, 184] Children with special health care needs may particularly benefits from high quality teacher-child interactions in classrooms,[185,186] as they are more likely to experience more adverse childhood experiences than typically developing children,[187] and are at an increased risk for maltreatment and neglect.[188,189]

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.[190] Investment in programs for young children leads to increased education and employment, reduced crime and better overall health.[191,192] 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.[193]

What the Data Tell Us

Early Care and Education Enrollment

Child care and early education in the White Mountain Apache Tribe Region are available through a variety of modalities. Alchesay Beginnings Child Development Center (also known as ABC Day Care) and Chaghache Day Care provide center-based care. Preschool classes are offered at Dischii'bikoh Community School and at Whiteriver Elementary School through Whiteriver Unified School District. The Family and Child Education (FACE) program at John F. Kennedy Day School provides early

learning education and support for young children and their families. White Mountain Apache Head Start enrolls 4-year-olds at 3 centers across the region.

All early childhood centers in the White Mountain Apache Tribe region continue to be enrolled in Quality First, Arizona's Quality Rating and Improvement System (QRIS) 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. The Quality First program notes that 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.[194] 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 (NAEYC).[195] Providers that meet these quality standards can receive higher reimbursement for serving children receiving child care subsidies from DES,[196] however Chaghache Day Care is the only center in the region currently accepting these subsidies.

Changes to Early Care and Education due to the COVID-19 Pandemic

The pandemic made child care even less accessible for many families nation-wide. Many child care centers and homes closed in the early days of the pandemic due to concerns about safety of children, staff and families.[197,198] 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.[199] Even if child care centers remained opened during the pandemic, they had to shoulder additional costs and challenges related to cleaning, staffing changes, and low enrollments among others.[200, 201, 202]

For many providers, relief funds provided through the *CARES Act*, *Coronavirus Response and Relief Supplemental Appropriations Act* and *American Rescue Plan* have been critical for reducing costs incurred during the pandemic.[203] The relief bills passed by Congress during the pandemic have allocated significant funds for child care providers, with $1.2 billion allocated for Arizona for the next 3 years.[204] The White Mountain Apache Tribe received $12,822,261 in Child Care and Development Block Grant (CCDBG) funding, and Head Start received $598,822. Early care and education centers in the White Mountain Apache Tribe Region had access to some additional supports through their enrollment in Quality First. Quality First health consultants helped provide health and safety guidance to child care providers.[205]

The following sections describe how each of the early care and education centers in the region operates under normal circumstances as well as how services may have been adapted starting in March 2020 due to the COVID-19 pandemic.

Alchesay Beginnings Child Development Center (ABC Day Care)

Alchesay Beginnings Child Development Center has the capacity to serve 102 children ages 2 weeks to 5 years of age, with an additional capacity of 20 for after school care of children ages 4 to 12. Depending on attendance and availability, drop-in child care services are also available for a fee. Services are available Monday through Friday from 7:00 a.m. to 5:30 p.m, costing $25 for infants and toddlers, $22 for preschoolers, and $20 for after school care. The Center is housed at Alchesay High School in Whiteriver and considers the Whiteriver Unified School District calendar. To be eligible for services, parents or caregivers must be employed, in school, or in training. The center has 4 classrooms, 1 that can enroll up to 16 infants, 2 that can enroll up to 43 toddlers total, and 1 that can enroll up to 27 preschool students. Alchesay Beginnings Child Development Center does not provide transportation for students except for special field trips. The Center currently holds a 2-star "Progressing Star" rating from Quality First, meaning that the program is '"approaching quality standards."

Alchesay Beginnings Child Development Center is a unique program in that it functions as a hands-on learning opportunity for high school students at Alchesay High School. As part of a 'grow your own' approach to increasing the child care labor force, students at Alchesay High School have the opportunity to enroll in early child development classes and receive on-the-job training as staff at Alchesay Beginnings Child Development Center. The program has 4 levels, beginning with a 9-week introduction to careers and education followed by classroom-based training in early childhood development. As juniors and seniors, students can take up to 27 dual-enrollment credits through Northland Pioneer College. These students spend a minimum of 3 hours per week at Alchesay Beginnings Child Development Center. Students who decide to pursue their CDA credential can take an additional course that takes place entirely in the classrooms at the Center to prepare for the observation component of the CDA credential. All Northland Pioneer College coursework fees are waived for the students, and there are funds available to help students afford the CDA assessment fee. According to staff at the center, 245 students participated in the early childhood component of the program in the 2019-2020 school year. Alchesay Beginnings Child Development Center also holds regular staff trainings and invites other programs to participate in these professional development opportunities.

During the pandemic, both Alchesay Beginnings Child Development Center and Chaghache Day Care were able to remain open and serve children whose parent(s) or guardian(s) were classified as essential workers in the region. This was a major asset that allowed these families to maintain child care.

Table 19. Capacity and enrollment in Alchesay Beginnings Child Development Center, 2020 (pre-pandemic)

	Number of classrooms	Ages	Capacity	Enrolled	Cost
Infants	1	2 weeks to 12 months	16	16	$25
Toddlers	2	1 to 2 years	47	47	$25
Preschool	1	3 to 5 years	39	39	$22
Total	4	2 weeks to 5 years	102	102	-

Source: Alchesay Beginnings Child Development Center (2021). [Attendance data]. Unpublished tribal data received by request.

Note: Alchesay Beginnings Child Development Center also serves children ages 4-12 years in afterschool care. The center operates M-F year-round.

Chaghache Day Care

Located in Whiteriver, Chaghache Day Care has the capacity to enroll 90 children ages 6 months to 12 years of age. The center operates Monday to Friday from 6:45 a.m. to 5:30 p.m. and has 4 classrooms, 1 each for infants (6-22 months, $18 daily), toddlers (22-36 months, $16 daily), preschoolers (ages 3-4, $14 daily), and pre-K (ages 4-5, $14 daily). Including the children enrolled in after school services, Chaghache Day Care had 93 total children enrolled and a waiting list of 60. In the past, Chaghache Day Care administered a home-based provider program in the region; however, there have been no formal or regulated home-based providers in the region since 2011. Chaghache Day Care also holds a 2-star "Progressing Star" rating from Quality First and remained open during the pandemic for children whose parent(s) or guardian(s) were classified as essential workers.

Table 20. Capacity and enrollment in Chaghache Day Care, 2021

	Ages	Number of classrooms	Capacity	Cost of full-time care
Infants	6 to 22 months	1	12	$18
Toddlers	22 to 36 months	1	20	$16
Preschool	3 to 4	1	25	$14
Pre-K	4 to 5	1	21	$14
Before/After School	6 to 12 years	1	30	$14
Total	6 months to 12 years	5	108	

Source: Chaghache Day Care (2021). [Attendance data]. Unpublished tribal data received by request.

Note: Chaghache Day Care operates M-F year-round, from 6:45 a.m. to 5:15 p.m. There were 60 children on the waitlist in 2021.

White Mountain Apache Tribe Head Start

The largest provider of early care and education in the region is the White Mountain Apache Tribe Head Start, which enrolls 4-year-old children at its 3 centers in Whiteriver, Cibecue, and McNary. In order to enroll in the program, families must meet income eligibility requirements, and Head Start is one of the few programs in the region that is free for low-income families. The program operates from 8:30 a.m. to 2:30 p.m., which is an increase from the previous 5-hours of operation per day. All 3 Head Start centers participate in Quality First. The Whiteriver Head Start Center currently has a 4-star "Quality Plus" rating, the McNary Center has a 3-star "Quality" rating, and the Cibecue Center has a 2-star "Progressing Star" rating.

White Mountain Apache Tribe Head Start has funded enrollment for 252 children. Due to the pandemic, Head Start only enrolled between 150 and 160 children for the 2020-21 school year. However, key informants noted that Head Start was not operating at capacity even before the pandemic. Key informants felt that some parents were not aware of the benefits of early childhood education, and that this issue affected enrollment across all programs in the region. Tribal Council was planning a media campaign including language and cultural references targeted to local families, but the campaign was put on hold when the pandemic began.

According to the 2020-21 White Mountain Apache Tribe Head Start Community Assessment, 98% of parent and caregiver respondents reported that they were satisfied with Head Start services, and 90% felt Head Start has an impact on the community. Three out of 4 respondents indicated that they would like to see Head Start expand services to include 3-year-olds. In the past, there were plans to start an Early Head Start program, but those plans are currently on hold. Key informants indicated that funding is available for the program, but that the lack of a building or funding to build one that meets all of the

requirements for an Early Head Start Program is currently a barrier to creating a new program. Relatedly, 32% of respondents indicated that new buildings are needed for all Head Start locations, and an additional 16% indicated that the buildings need repairs or maintenance; key informants mentioned that 1 building was significantly affected by flooding.

In March 2020, White Mountain Apache Tribe Head Start transitioned to remote operations. Because of poor internet access in the community, instructors prepared weekly packets utilizing creative curricula. These were either delivered to families by bus along with Child and Adult Care Food Program (CACFP) meals, or parents could pick them up. Based on feedback from a survey the program distributed, they began focusing on posting instructional videos on Facebook including information about the developmental benefits of these activities. Instructors even held a virtual pumpkin patch field trip with an associated lesson posted on Facebook.

The Head Start program performs developmental screenings and periodic observational assessments. Teachers were resourceful and took observational notes from the bus or asked parents who had devices and either cellular or internet connection to send in videos. When the number of COVID-19 cases declined, Head Start was able to bring most new families in on a staggered schedule to complete initial screenings. The program was able to work with Indian Health Services (IHS) to get alternative screening scores for the children who were unable to be seen in person within the first 45 days of school. The program has decided to switch over to a questionnaire-based screener that can be sent home with families in order to remain flexible into the future.

All 3 early care and education programs in the region have professional development requirements. Key informants indicated that more trainings were offered online because of the pandemic, which opened up more options than had been available before due to the remoteness of the community. While there are still some challenges including poor internet connection at the Cibecue and McNary locations, Head Start staff were excited about these additional learning opportunities.

Table 21. White Mountain Apache Tribe Head Start Enrollment, 2018-19

	Funded enrollment	Cumulative enrollment
White Mountain Apache Tribe Head Start	252	258

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

Table 22. Staff credentials for White Mountain Apache Tribe Head Start, 2018-19

	Total staff	Child Development Associate (CDA) credential	AA in Early Childhood Education or related field	BA in Early Childhood Education or related field	Advanced degree in Early Childhood Education
Classroom teachers	14	8	5	1	0
Assistant teachers	14	4	1	0	0

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

Dischii'bikoh Preschool

Dischii'bikoh Community School was awarded a 3-year start-up grant through First Things First to start a preschool program in 2017, opening for enrollment in 2018. The program is now funded through Quality First scholarships, so it remains free to families. Enrollment is only open to 4-year-olds in the Cibecue area because transportation is limited. Key informants posited that, with increased funding, the program would be able to expand facilities, hire more staff, and reach more young children who could benefit from preschool services. There has not yet been a waitlist for the preschool, and the program was under-enrolled during the 2020-21 school year (Table 23). Staff indicated that sometimes families wait to see if they secure a spot in Cibecue Head Start before enrolling in Dischii'bikoh Preschool. The 2 programs have discussed setting up a Head Start facility on the Cibecue School campus, which could help diversify funding and bring more staff. There is already strong collaboration between the Head Start and Dischii'bikoh School to facilitate the transition to kindergarten. Staff notice that children in the preschool program are well-prepared for kindergarten, since they are familiar with the structure of the school day, have already begun Apache language immersion, and have participated in cultural events with the rest of the school.

The Dischii'bikoh Preschool program focuses on social emotional learning; life skills such as hygiene, eating, and manners; Apache language integration; and lots of imaginative play. Dischii'bikoh School transitioned to remote learning during the pandemic. As discussed in the *Information Access Through Computers and Internet* section, the school was able to leverage grant funding to install satellite internet and provide hotspots and Chromebooks to every student. The preschool program offered virtual learning sessions and Apache language immersion through online offer in-person preschool at half-time for the last 9 weeks of the 2020-21 school year but continued to be prepared to transition back to virtual if cases rose.

Table 23. Capacity and enrollment in Dishchii'bikoh Preschool, 2020-21

	Ages	Number of classrooms	Capacity	Enrolled
Preschool	4 years	1	20	15

Source: Dishchii'bikoh Preschool (2021). [Attendance data]. Unpublished tribal data received by request.

Note: Dishchii'bikoh Preschool operates Monday through Thursday, from 8:30 a.m. to 1:30 p.m. There were no children on the waitlist in 2020-21.

Whiteriver Unified School District Preschool Program

Whiteriver Unified School District provides extensive services for children with special developmental and health care needs. The Whiteriver Elementary Early Childhood Education program has 2 special education classrooms. The preschool program served 18 children with special needs in 2019-20 and 14 children with special needs in 2020-21. See the *Developmental Screenings and Services for Children with Special Developmental and Health Needs* section for more information about services available through Whiteriver Unified School District.

Table 24. Enrollment in Whiteriver Unified School District Preschool Program, 2019-20 and 2020-21

	Number of classrooms	2019-2020	2020-2021
Preschool Special Education	2	18	14

Source: Whiteriver Unified School District (2021). [Attendance data]. Unpublished tribal data received by request.

Family and Child Education (FACE) Program

Family and Child Education (FACE) was initiated in 1990 and has been implemented in 65 Bureau of Indian Education (BIE) schools. The program is designed "to support parents/primary caregivers in their role as their child's first and most influential teacher; to increase family literacy; to strengthen family-school-community connections; to promote the early identification and services to children with special needs; to increase parent participation in their child's learning; to support and celebrate the unique cultural and linguistic diversity of each American Indian community served by the program, and to promote lifelong learning."[206]

The FACE program has operated at John F. Kennedy Day School in Cedar Creek since the 2005-06 school year. The program has both center-based and home-based components. The home-based component includes visits and screenings by parent educators for families with children ages birth to 3. Parent educators meet with families weekly or biweekly for 1-2 hours depending on the age of the child or children in the home. In the 2020-21 school year there were a total of 23 children participating in the home-based component of the program, 19 of whom were age 2 or younger.

The FACE center-based component includes an early childhood education program for children ages 3 to 5, adult education for the children's parents, and Parent and Child Time (PACT). All children must have an adult come to class with them each day, preferably an immediate family member, to participate in adult education and PACT. The center-based program operates from 8:00 am to 2:00 pm, Monday through Thursday during the school year. Breakfast and lunch are served to all participants, and transportation is provided to and from the program. Fourteen 3- to 5-year-olds were enrolled in center-based program in the 2020-21 school year.

During the pandemic, both the home-based and center-based programs operated remotely through the 2020-21 school year. Educators in the home-based program kept in touch with families by text message, phone meetings, and occasionally video meetings. Staff were also able to deliver age-appropriate activity packets in person to some families. The center-based preschool teacher also created weekly activity packets for the 14 3-to-5-year-olds who were enrolled. These packets included a parent instructional handout to cover the adult education lessons. The teacher was able to connect virtually with the child and parent for 15-20 minutes each week to see them together, make sure that parents were tracking their hours, and answer questions about the materials.

Center staff noted that enrollment was low in 2020-21 due to the pandemic and the necessary changes to programming. Demand increased again in the 2021-22 school year, resulting in a wait list of 6 children and their caregivers. The FACE program is also operating in a new space that is smaller than the previous classrooms; with social distancing regulations, they have had to cap enrollment at 8 children and 6 adults.

Table 25. John F Kennedy Day School FACE Program, 2015 to 2019

Program year	Adult participants receiving center-based services	Child participants (3-5) receiving center-based services	Adult participants receiving home-based services	Child participants (0-2) receiving home-based services	Unduplicated adult participants receiving any services	Unduplicated child participants (0-5) receiving any services	Total unduplicated participants
PY2015	26	23	16	15	41	37	78
PY2016	29	20	23	29	50	49	99
PY2017	25	21	17	19	40	40	80
PY2018	18	16	18	22	35	37	72
PY2019	13	12	40	45	50	54	104

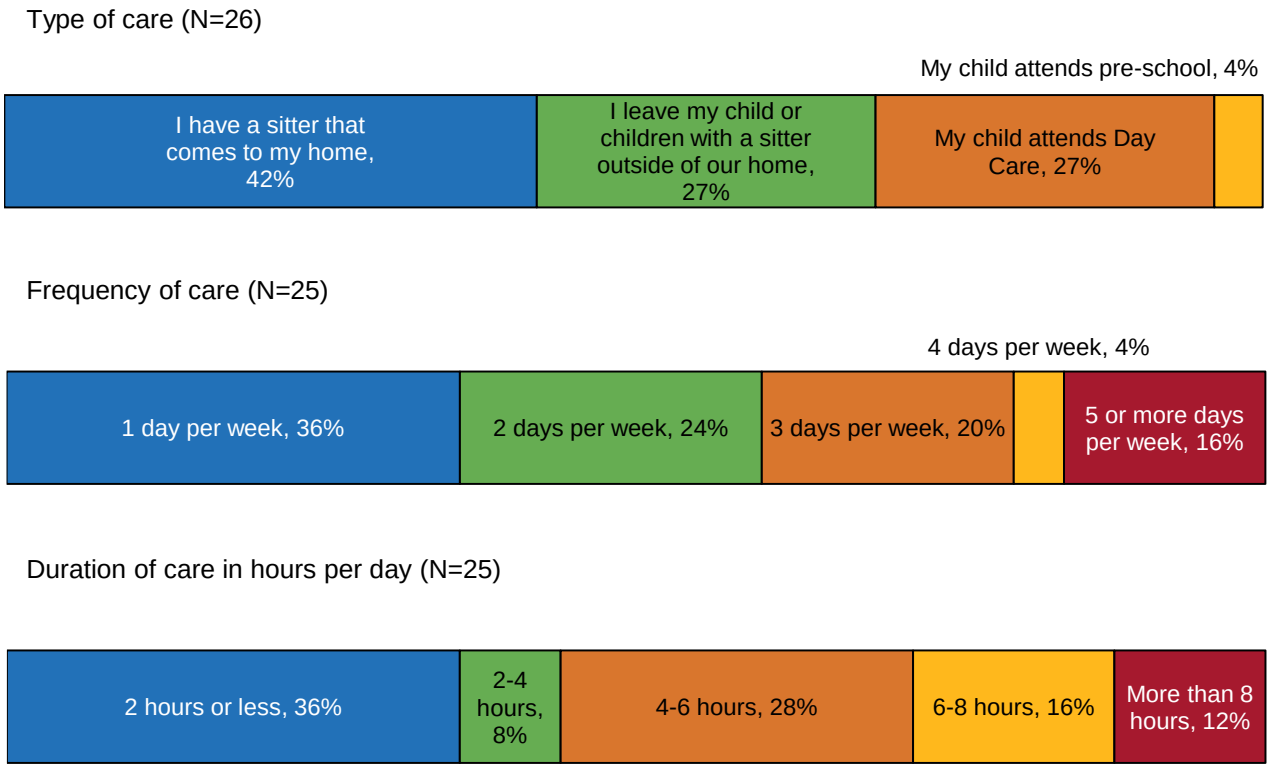
Source: Research & Training Associates, Inc. (2020). BIE Family and child education program, 2015-2019 reports. U.S. Department of the Interior Bureau of Indian Affairs, Bureau of Indian Education.

Informal Care

Beyond formal early care and education providers, many parents in the region rely on informal care arrangements. In the 2020-21 White Mountain Apache Tribe Head Start Community Assessment, 26 parents and caregivers indicated that they use forms of child care other than Head Start. More than 2 out of 3 said they use informal care including a sitter that comes to their home (42%) or a sitter outside of their home (27%), and the remainder said their child attends day care (27%) or pre-school (4%). Most parents and caregivers reported using these other child care arrangements 1 day (36%), 2 days (24%), or 3 days (20%) a week, but the remaining 20% used these arrangement for 4 or more days a week (Figure 44). Forty-four percent of respondents said that, when they used alternative child care arrangements, they used them between 0 and 4 hours, another 44% used them for 4 to 8 hours, and 12% used them for more than 8 hours per day.

Key informants echoed that many parents in the region rely on family and friends for child care, especially when schools and child care centers closed during the COVID-19 pandemic. Given that families in the region may often use informal child care arrangements or at-home sitters, training and support for these providers could bolster early learning in the region. Through the Family, Friends, and Neighbors strategy, the White Mountain Apache Tribe Regional Partnership Council funded the Arizona Association for Supportive Child Care to implement a kith and kin caregivers program in the region beginning in SFY 2021, with programmatic adjustments due to the pandemic.

Figure 44. Type, frequency, and duration of care for families that use day care, before & after care, or other child care, Head Start Community Assessment 2020-21



Source: White Mountain Apache Tribe Head Start (2021). [Community Assessment dataset]. Unpublished tribal data received by request.

Early Care and Education Capacity

Altogether, early care and education providers in the White Mountain Apache Tribe Region have the capacity to serve about 500 young children. However, the total number of children enrolled in programs (Table 26) is likely an overestimate of unique children, since some are known to be dual-enrolled (i.e., Head Start or preschool in the morning, child care in the afternoon). Most of this capacity is for the preschool age group, particularly 4-year-olds. White Mountain Apache Head Start alone has the capacity to serve 79% of the estimated 321 4-year-olds according to the 2010 Census. Combined with other providers, there is capacity to serve all 4-year-olds in the region. However, opportunities for formal early care and education for children ages 3 and younger are much more limited. Across all providers in the region, there is capacity to serve less than 50 of the region's 333 infants (about 15%) and less than 100 of the 713 toddlers (about 14%), according to the 2010 Census population estimates.

Table 26. Early care and education capacity and enrollment

	Infants enrolled	Infant capacity	Toddlers enrolled	Toddler capacity	Preschool enrolled	Preschool capacity	Total enrolled	Total capacity
Alchesay Beginnings Child Development Center (2019-20 school year)	16	16	47	47	39	39	102	102
Chaghache Day Care (August 2021)	12	12	20	20	46	46	78	78
White Mountain Apache Head Start (2018-19 school year)	N/A	N/A	N/A	N/A	258	252	258	252
Dishchii'bikoh Preschool (2020-21 school year)	N/A	N/A	N/A	N/A	15	20	15	20
Whiteriver Elementary School Preschool Program (2020-21 school year)	N/A	N/A	N/A	N/A	14	N/A	14	N/A
John F Kennedy Day School FACE Program (2020-21 school year)	<10	N/A	15	N/A	14	N/A	37	N/A
Total	DS	N/A	82	N/A	386	N/A	504	N/A

Source: Alchesay Beginnings Child Development Center (2021). [Attendance data]. Unpublished tribal data received by request. Chaghache Day Care (2021). [Attendance data]. Unpublished tribal data received by request. Dishchii'bikoh Preschool (2021). [Attendance data]. Unpublished tribal data received by request. John F Kennedy Day School FACE Program, 2020-21 FACE Enrollment Data. Unpublished tribal data received by request. Office of Head Start (2020). 2019 Program Information Report. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/data/pir

Note: Whiteriver Elementary School Preschool Program only serves preschoolers with special needs.

The Center for American Progress estimates that 48% of Arizonans live in a "child care desert," defined as an area where there are at least 3 times as many children as there are child care slots, meaning that the absence of accessible, affordable child care may be a barrier to employment.[207] Even more low-income (59%) and rural families (67%) live in a child care desert, making them disproportionately impacted by barriers to child care and therefore barriers to employment.[208] The child care shortage is a clear issue in the White Mountain Apache Tribe Region, where there are 4 times as many total young children as there are children with early care and education slots (Table 27). Broken into age groups, this difference is especially pronounced for infants under 1-year-old (9.3) and toddlers (8.7). Thus, while it appears that there is sufficient preschool capacity in the region, there are scarce opportunities for infant and toddler early care and education. Key informants compared obtaining a child care slot with winning the lottery, and many noted that parents who were working during the pandemic had an extremely difficult time finding appropriate care for their young children.

Table 27. Comparison of total children enrolled in early care and education program in 2020-21 to 2010 Census population estimates

	Total Enrolled	Census 2010 Population	Ratio of population to enrolled slots
Children (ages 0-5)	504	2,003	4.0
Infants (<1)	36	333	9.3
Toddlers (1-2)	82	713	8.7
Preschoolers (3-5)	386	957	2.5

Source: Alchesay Beginnings Child Development Center (2021). [Attendance data]. Unpublished tribal data received by request. Chaghache Day Care (2021). [Attendance data]. Unpublished tribal data received by request. Dishchii'bikoh Preschool (2021). [Attendance data]. Unpublished tribal data received by request. John F Kennedy Day School FACE Program, 2020-21 FACE Enrollment Data. Unpublished tribal data received by request. Office of Head Start (2020). 2019 Program Information Report. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/data/pir; U.S. Census Bureau (2012). 2010 Decennial Census, Table P14.

Cost of Care

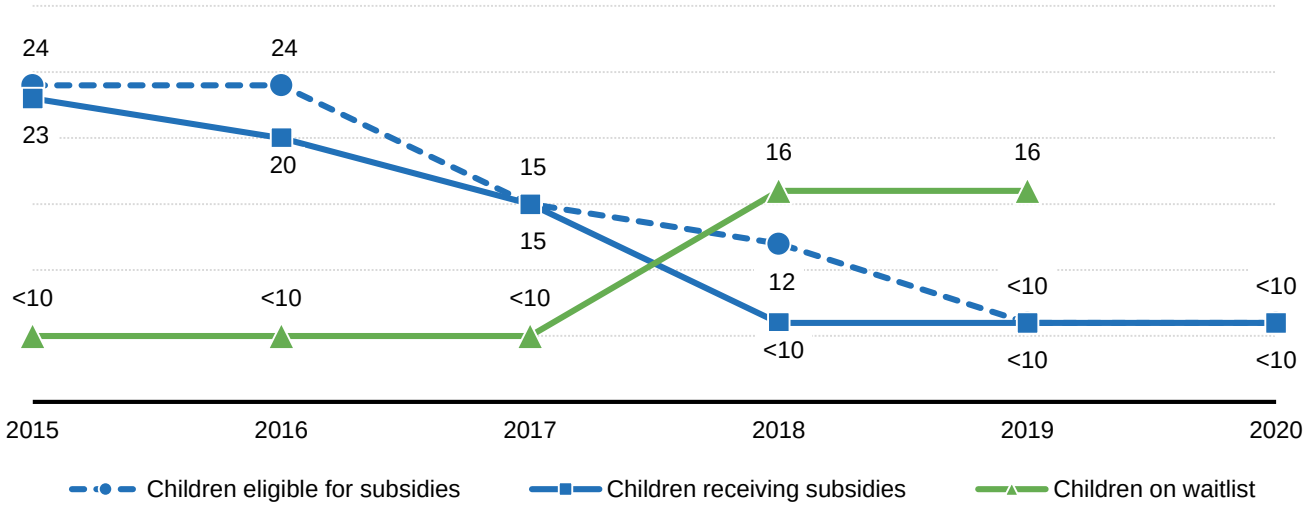
Participation in the White Mountain Apache Head Start program is cost-free for all children enrolled. Similarly, children with special needs enrolled in Whiteriver Elementary School receive services at no cost to their families. Services at Chaghache Day Care cost between $14 and $18 per child daily, and families pay between $20 and $25 per child at Alchesay Beginnings Child Development Center. The Department of Health and Human Services defines child care cost burden as more than 10% of a family's income.[209] As a proportion of the median family income in the region, families in the White Mountain Apache Tribe Region are paying more than 10% on child care (11-12% at Chaghache and 16-18% at Alchesay Beginnings Child Development Center, depending on the child's age). However, children attending Quality First centers in the region may receive scholarships to cover the cost of care. In 2020, 62 infants, toddlers, and preschoolers received scholarships funded by the White Mountain Apache Tribe Regional Partnership Council.[210]

Child care subsidies provided by government agencies can help to offset families' child care costs, reducing financial barriers to accessing child care and ensuring parents can remain employed and provide for their family's needs.[211] In addition to the child care subsidies provided by the tribal CCDF fund through Chaghache Day Care, a small number of families in the White Mountain Apache Tribe Region receive subsidies from DES. The number of children receiving subsidies decreased from 23 in 2015 to fewer than 10 in 2018 through 2020 (

Figure 45). The decrease coincides with when Alchesay Beginnings Child Development Center stopped accepting DES subsidies in 2017 and also a decline in the number of children found eligible for subsidies. Conversely, the number of children on the waiting list for DES child care subsidies increased from fewer than 10 to 16 in 2018. In June 2019, for the first time since the Great Recession, the Arizona

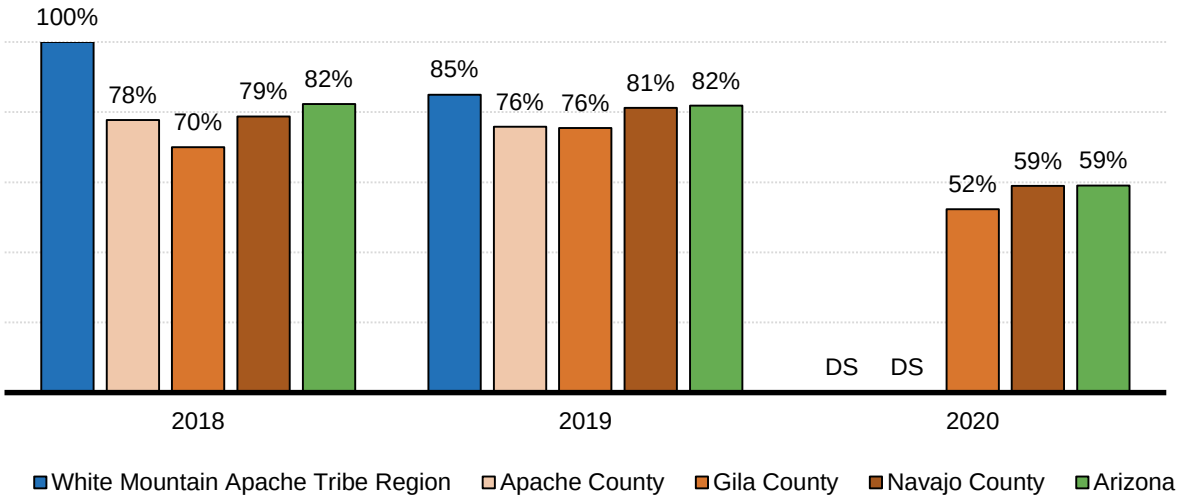
Department of Economic Security's (DES) child care subsidy waiting list was suspended, meaning all children who qualify for subsidies are able to receive them, assuming that they are able to access a provider.[212] This was due to $56 million in additional federal funds from the Child Care and Development Fund (CCDF) that was authorized by the Arizona State Legislature. The funding increase has also allowed DES to increase provider reimbursement rates, which may make it easier for families to use their child care subsidies.[213] A higher portion of children involved with the Arizona Department of Child Safety (DCS) who were eligible for child care subsidies in 2018 and 2019 received this support (100% and 85%) compared with Arizona as a whole (82%) (Figure 46).

Figure 45. Numbers of children eligible for subsidies, receiving subsidies, or waitlisted, 2015 to 2020



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

Figure 46. Percent of eligible DCS children (ages 0 to 5) receiving DES subsidies, 2018 to 2020



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

Young Children with Special Needs

The availability of early learning opportunities and services for young children with special needs is an ongoing concern across the state, particularly in more geographically remote and tribal communities. The U.S. Department of Health and Human Services defines children with special health care needs as "those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally."[214] 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.[215, 216] In Arizona, services available to families with children with special needs include those provided through the Arizona Early Intervention Program (AzEIP),[217] the Division of Developmental Disabilities (DDD),[218] and the Early Childhood Special Education Program through Arizona Department of Education.[219]

The Arizona Early Intervention Program (AzEIP)[xii] is an interagency system of services and supports for families of young children (birth to 3) with disabilities or developmental delays in Arizona. The AzEIP provider in the White Mountain Apache Tribe Region is Northland Therapy Services, located in Show Low. While 131 children were referred in 2018, 106 were referred in 2019 and only 58 were referred in 2020 (Figure 47). During this same period, the number of children served each year by Northland Therapy Services decreased from 30 in 2018 to 22 in 2020. Statewide, AzEIP saw a record number of

[xii] For more information on AzEIP, visit https://www.azdes.gov/azeip/

referrals in 2019, which decreased in 2020 due to delays in routine pediatric care as well as school and early care closures.[220] AzEIP also transitioned to remote services, which was challenging for both service providers and families. Technology was a barrier to families receiving early intervention services, and the form of services often transitioned to more of a family-coaching approach rather than direct interaction with the child.[221] Regionally, the drop-off in referrals in 2020 likely reflects these pandemic-related disruptions, though the decline is steeper than what is seen across Arizona.[222]

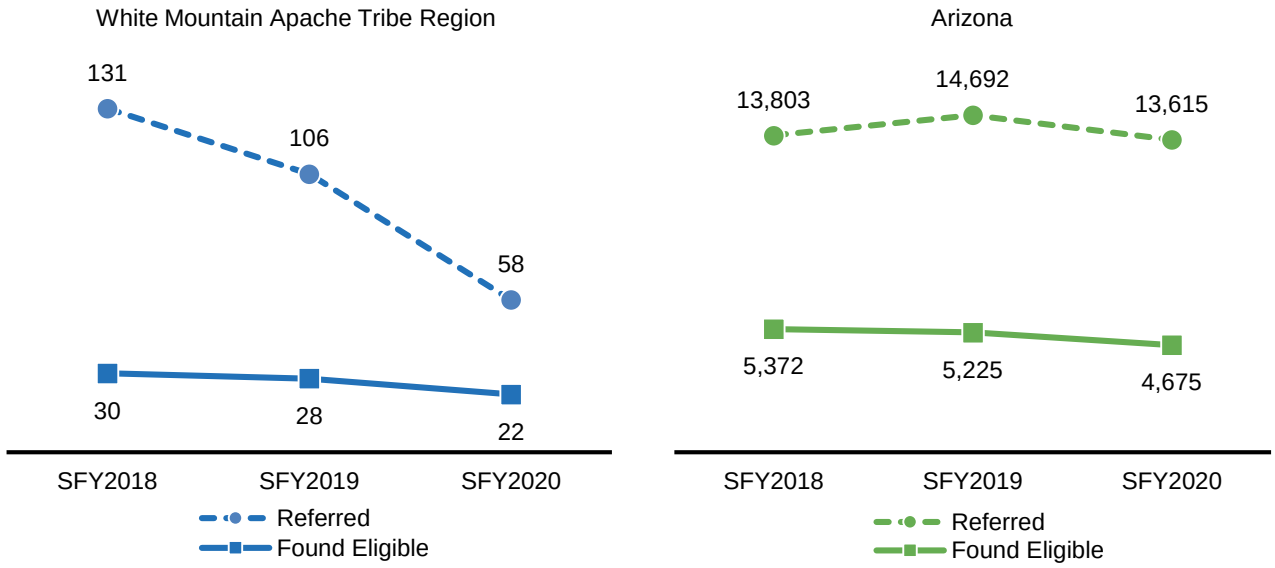
AzEIP may refer families to the Division of Developmental Disabilities (DDD) [xiii] if the child has or is at risk for developing a qualifying disability, including cerebral palsy, epilepsy, autism spectrum disorder or an intellectual or cognitive disability.[xiv] DDD can provide services to individuals through adulthood. Qualifying children may receive services from both AzEIP and DDD. In the White Mountain Apache Tribe Region, the number of children receiving services from DDD ranged from 26 to fewer than 10 between 2017 and 2020 (Figure 48).

A 2008 study using nationally representative data estimates that approximately 13% of children ages 0-2 in the U.S. have developmental delays and could benefit from early intervention services, but only about 3% of children actually receive services.[223] Given the population of young children in the White Mountain Apache Tribe Region (based on 2010 Census population estimates), this research would suggest that about 136 children in the region could benefit from early intervention services. This is consistent with the number of referrals to AzEIP in 2018, though the number of young children actually receiving services through either AzEIP or DDD was much lower. The state of Arizona has some of the strictest eligibility requirements for early intervention services of any state in the U.S and has been among the bottom 5 states in terms of young children receiving early intervention services.[224, 225] Providing early intervention services for young children has been shown to reduce the need for special education services later in childhood,[226] so assuring that children have access to timely and adequate screening and intervention services from birth to 5 can be key for helping children to be ready for kindergarten and reducing educational costs.

[xiii] For more information on DDD, visit https://des.az.gov/services/disabilities/developmental-disabilities

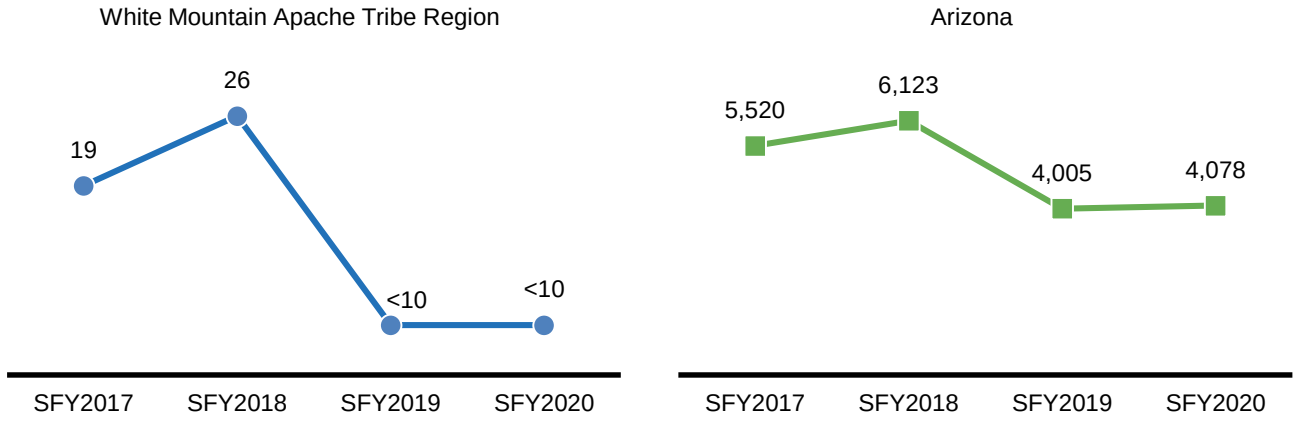
[xiv] For more information on the Division of Developmental Disabilities (DDD) eligibility see https://des.az.gov/services/disabilities/developmental-disabilities/determine-eligibility

Figure 47. Children referred to and found eligible for AzEIP, federal fiscal years 2018 to 2020



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

Figure 48. Children (ages 0-5) receiving services from DDD, state fiscal years 2017 to 2020



Source: Arizona Department of Economic Security (2021). [Division of Developmental Disabilities dataset]. Unpublished data.

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

physicians, parent referrals, school districts and screenings at community events. White Mountain Apache Tribe Child Find also performs a yearly door-to-door surveys, during which staff do home visits and inform parents of screening dates. Screenings take place once a month in Whiteriver and once every 2 months in Cibecue and include developmental, auditory, vision, and motor screenings. Transportation is provided to the screenings for parents and children. Data from the White Mountain Apache Tribe Child Find program show that, between 2018 and 2019, over 250 children ages 3 to 5 were identified as having disabilities, and all identified children received services through tribal Child Find (

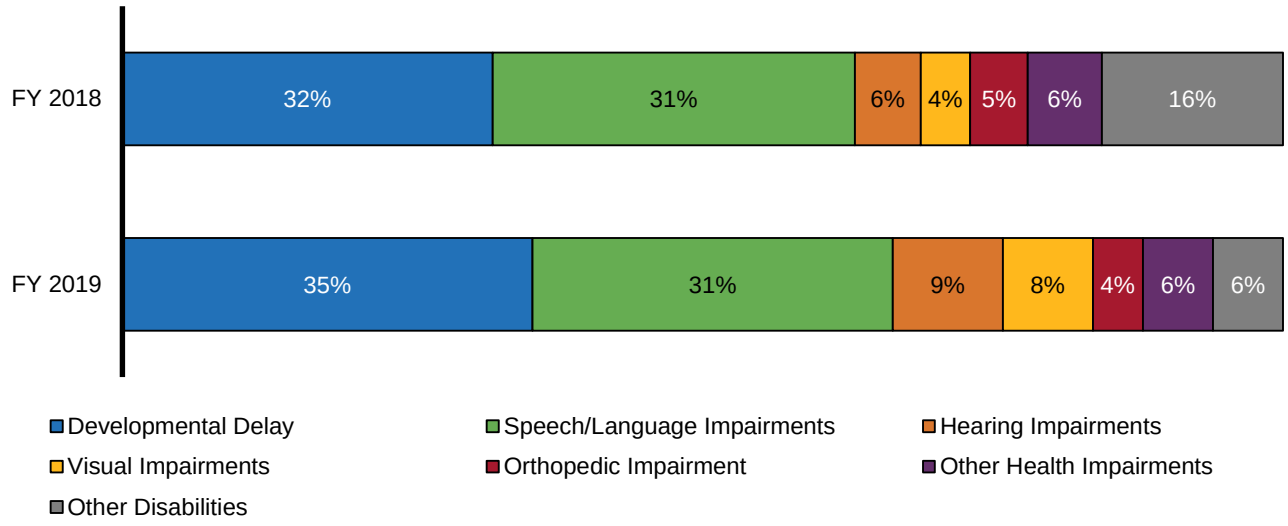
Table 28). The largest proportion of children had developmental delays, followed by speech/language impairments, hearing impairments, visual impairments, orthopedic impairments, other health impairments and other disabilities (Figure 49). Notably, the number of 4- and 5-year-olds identified by Child Find declined from FY2018 to FY2019.

Table 28. Children ages 3-5 with disabilities identified by Child Find, FY2018 and FY2019

	FY 2018	FY 2019
Ages 3-5	141	116
Age 3	25	26
Age 4	74	60
Age 5	42	30

Source: White Mountain Apache Tribe Child Find (2021). [Child Find data]. Unpublished tribal data received by request.

Figure 49. Children ages 3-5 with disabilities identified by Child Find by disability type, FY2018 and FY2019



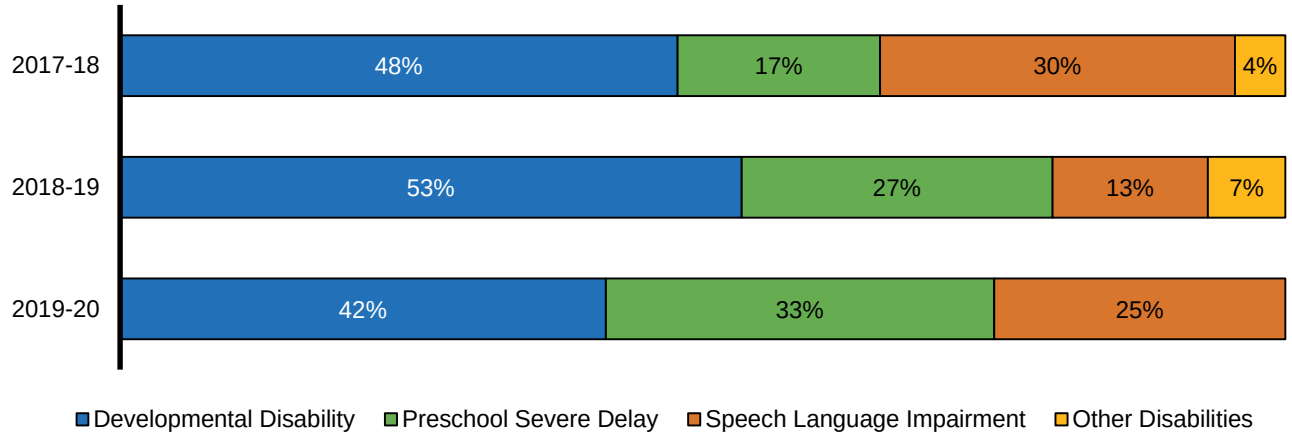
Source: White Mountain Apache Tribe Child Find (2021). [Child Find data]. Unpublished tribal data received by request.

Note: Other disabilities include intellectual disability, emotional disturbance, multiple disabilities (FY2018 only), autism, and traumatic brain injury

Each Arizona school district is mandated to participate in Child Find and provide preschool services to children with special needs either though their own schools or through agreements with other programs. In the White Mountain Apache Tribe Region, children identified through Child Find may be referred to AzEIP if they are under 3 or receive services through Whiteriver Unified School District. Children can be supported through both AzEIP and tribal Child Find at the same time; families of children enrolled in AzEIP do not receive home visits or developmental special instruction, but they can receive parent education services and transportation to medical appointments.

Whiteriver Unified School District provides extensive services for children with special developmental and health care needs. Children ages 3 to 5 may receive services in a variety of settings, including home-based services for children in kith and kin care, services at the child care centers in the region, dual-enrollment at Head Start and the Whiteriver Elementary Early Childhood Education (ECE) program, and through the ECE Program alone. The Whiteriver Elementary ECE program has 2 special education classrooms. The district also employs a physical therapist, speech pathologist, sign language interpreter, and a contracted occupational therapist who participate in the monthly Child Find screening events. There were 18 preschool-age children enrolled in special education at Whiteriver Elementary School during the 2019-20 school year, and 14 were enrolled during the 2020-21 school year (Table 26). Of these children, most had a developmental or preschool severe delay, followed by speech or language impairment (Figure 50).

Figure 50. Preschoolers with a disability enrolled in White Mountain Apache Tribe schools by primary disability, 2017-18 to 2019-20



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

The district refers children to White Mountain Apache Tribe Child Find, AzEIP, and Head Start and has dual enrollment Memoranda of Understanding (MOUs) with Head Start, FACE, and Child Find. This means that children can attend Head Start or the FACE program in the morning and be bussed to Whiteriver Elementary in the afternoon to receive specialized services. The district also provides 2 special needs teachers to work specifically with children in the morning according to the goals in their Individualized Education Plans (IEPs). In the 2019-20 school year, there were 19 children with IEPs enrolled at Head Start (

Table 29). Besides the monthly screenings put on by White Mountain Apache Tribe Child Find and the school district, Head Start conducts a yearly screening and service event for all children coming into Head Start. In 2019-20, 8% of children screened required follow-up evaluation (Table 30).

Table 29. Children with disabilities enrolled in the White Mountain Apache Tribe Head Start, FY2019

	Children (ages 3-4) enrolled in Head Start	Children with an IEP	Children with developmental delay	Children with speech or language impairment
White Mountain Apache Tribe Head Start	258	19	63%	37%

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

Table 30. Screenings for children enrolled in White Mountain Apache Tribe Head Start, FY2019

	Children (ages 3-4) newly enrolled in Head Start	Received developmental, sensory, and behavioral screening within 45 days	Required follow-up assessment or evaluation
White Mountain Apache Tribe Head Start	258	100%	8%

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

White Mountain Apache Tribe Child Find undertakes a large number of outreach efforts in the community, maintaining a presence at health screenings, WIC, Rainbow Treatment Center, the local grocery store, and beyond. Staff hold monthly parent trainings in Cibecue and Whiteriver with incentives for parents where they invite Community Health Representatives to come train parents on nutrition and health. Whiteriver School District also publicizes special needs services through the local newspaper, the radio station, and flyers as well as community presentations. Service providers in the region noted that children and their families are being reached with information about the services available. Sixty percent of parents and caregivers surveyed in the 2020-21 White Mountain Apache Tribe Head Start Community Assessment said that they were aware of the special needs services provided for children in the community. However, 83% said they felt more programs are needed to assist children with special needs.

Apache Behavioral Health Services also provides assessment and services for children ages 0 to 18 in the region. The Child and Family Team and School Enrichment Program provide services to families and school-age children with behavioral, developmental, and other health needs, and the THRIVE: Birth to Five program provides play and enrichment services for families with young children ages 0 to 5. These services are described in more depth in the *Behavioral Health* section.

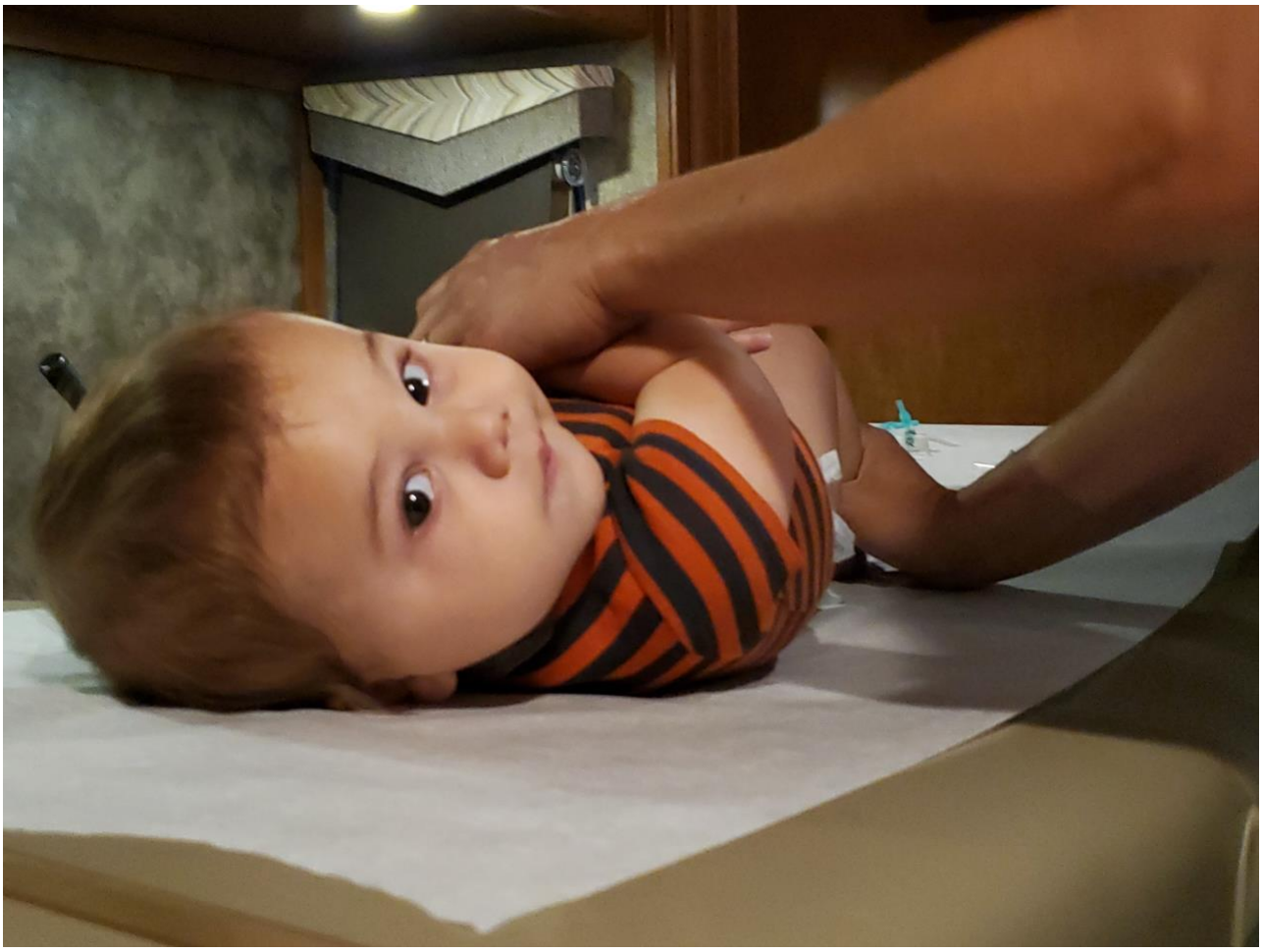
A major strength of the services for children with special developmental and health care needs in the region is the dedication of providers to coordinate with each other as well as advertise their services and reduce barriers to access as possible. Additionally, the wide continuum of services available in the region stands out from many other rural communities. Key informants indicated that programs and agencies often collaborate on community events, which act as a “one stop shop” for community members to learn about services. An example of this collaboration is a mini health fair that was held at the end of summer school in 2021. The event was held outdoors for COVID-19 safety and included physical activities led by local fitness center staff, free car seats provided by the Department of Transportation, oral health kits and more. Informants also noted that collaboration was much easier prior to the pandemic, and many lines of communication have been disrupted by staff turnover and the discontinuation of in-person meetings. In the past, regular meetings held through Tribal Child Find’s Early Childhood Coalition and monthly collaboration meetings held by the speech pathologist were key to sharing concerns and developments related to early childhood in the region. First Things First’s

Family Resource Guide is used by providers to refer families to additional services as well as to establish provider-provider relationships.

However, there are many challenges within the community that may prevent children from receiving needed services. While many resources are available in the region, families do not always seek them out. Key informants felt that younger and teenage parents are less likely to understand the importance of developmental screening and access to early intervention services, and providers are sometimes unable to reach them. Families of children referred for screening may not follow up because they do not want their child to receive a special needs diagnosis due to stigma or the further challenges a diagnosis presents, including scheduling and traveling to more appointments. For example, during the 2020-21 school year, the Whiteriver Unified School District scheduled 22 screening appointments with families through Child Find, but only 1 family attended their appointment. Another significant barrier is the requirement for a legal guardian to sign off on referrals, which especially affects young children in informal kinship care arrangements. To address parental hesitance, informants suggested introducing a community campaign that reframes a special needs diagnosis as an opportunity for the child to become more successful, highlighting the benefits of services that become available to the child and their family and the difference they can make in their lives.

Additional data tables related to

Early Learning can be found in Appendix 1 at the end 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.[227,228] Experiences during the prenatal and early childhood period can result in lifelong impacts on immune functioning, brain development, and risk for chronic diseases.[229,230] 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.[231,232] 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.[233,234,235]

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)[xv,236] 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 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.[237]

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, or prenatal care, can reduce maternal and infant mortality and complications during pregnancy.[238,239] 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.[240] 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.[241, 242] 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.[243]

[xv] *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. For more information about Healthy People 2030 visit https://health.gov/healthypeople*

Health care services are available to residents from the White Mountain Apache Tribe Region through Whiteriver Indian Hospital and the Cibecue Health Center, both of which are part of the Indian Health Service Whiteriver Service Unit. Whiteriver Indian Hospital is a 40-bed facility with a staff of 22 physicians, 1 podiatrist, 5 nurse practitioners, 5 dentists, 2 optometrists, and 79 nursing staff.[244] The facility is designated as a Baby Friendly Hospital and provides medical, pediatric, mental health, obstetric, ambulatory surgery, and alcohol treatment care. Cibecue Health Center is staffed by two physicians and a dentist and can provide outpatient, optometry, dental, and urgent care services. Whiteriver Indian Hospital and Cibecue Health Center house the only clinics and pharmacies in the region. Between October 2019 and September 2020 there were 17,262 active IHS users (as defined by those who had 1 or more visits during the previous two years) within the White Mountain Apache Tribe Region. Of those, 1,941 (11%) were children ages birth to 5 (Table 31).

Other health care services are provided through the White Mountain Apache Tribe Division of Health Programs, which oversees the Apache Behavioral Health Services (ABHS) and the Apache Diabetes and Wellness Center. The White Mountain Apache Tribe Division of Health Programs' Health Education department puts on an annual health fair in the summer, which is a major source of information and services for parents in the region.

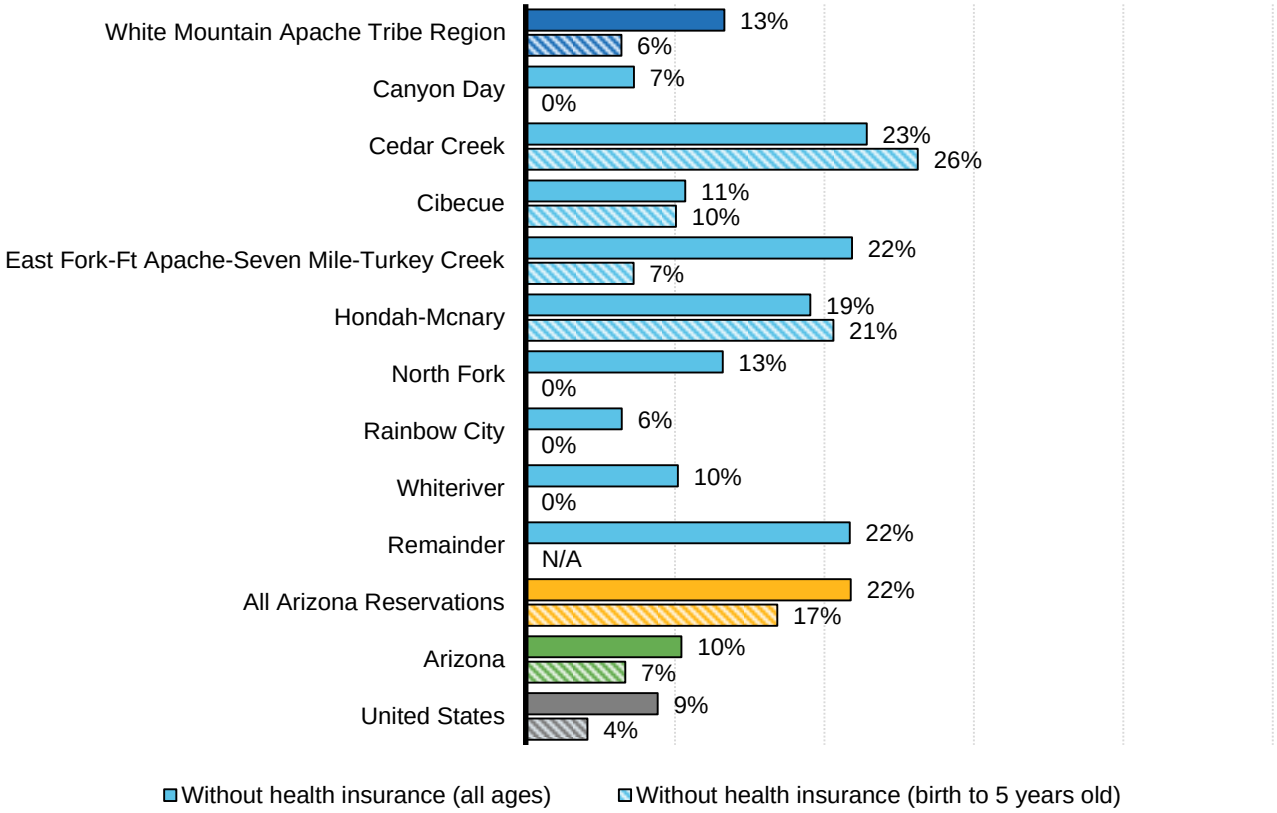
Table 31. Number of Active IHS users in the Whiteriver Service Unit, FY2019

	Young children (ages 0-5)	All ages
White Mountain Apache Tribe Region	1,941	17,262

Source: Indian Health Service, Whiteriver Service Unit (2021). [Health services data]. Unpublished tribal data.

A key factor in accessing health care is health insurance. According to estimates from the American Community Survey, 13% of the total population and 6% of children ages birth to 5 do not have health insurance coverage in the White Mountain Apache Tribe Region (Figure 51). It is important to note that the U.S. Census Bureau considers persons who are covered by the Indian Health Service (IHS) as uninsured.[245] The portions of adults and young children in the region without health insurance are much lower than what is seen across all Arizona reservations (22% and 17%, respectively), and similar to the state as a whole (10% and 7%, respectively). Within the region, larger portions of adults (23%) and young children (26%) in Cedar Creek; adults (19%) and young children (21%) in Hondah-McNary; and adults (22%) in the East Fork-Fort Apache-Seven Mile-Turkey Creek area are uninsured. In Canyon Day, North Fork, Rainbow City and Whiteriver, all children are estimated to be covered by health insurance.

Figure 51. 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. Note that due to sample size limitations, reliable estimates for the number of children without insurance in the Remainder of the region are not available.

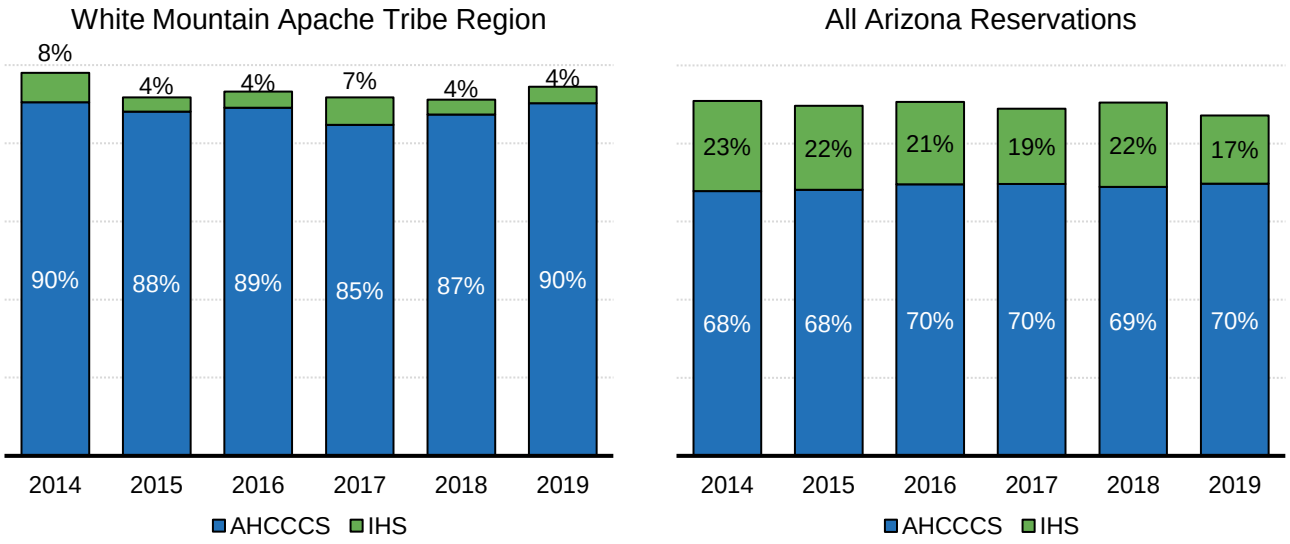
The White Mountain Apache Tribe Head Start facilitates health screening and referrals for children enrolled in the program. Yearly, Head Start brings in a dentist, pediatrician, audiologist, and other providers to provide screenings and services for children entering Head Start. According to data from the 2020-21 school year, all of the children enrolled in Head Start had insurance, had an ongoing source of accessible health care, and received medical services from IHS (258, 100%). In the 2020-21 White Mountain Apache Tribe Head Start Community Assessment, 70% of parents and caregivers indicated that either they or their child are enrolled in the Arizona Health Care Cost Containment System (AHCCCS, or Arizona's Medicaid).

Data from the Arizona Department of Health Services (ADHS) on the payor for births in the region can provider further information about health insurance coverage. Between 2014 and 2019, almost all births in the region were paid for by AHCCCS, which is a higher proportion than that across all Arizona

reservations combined (70%) (Figure 52). Only between 4% and 8% of births were paid for by IHS, and the remaining 2% to 8% of mothers may have been covered by private insurance.

Key informants indicated that healthcare navigators at Whiteriver Hospital have contributed to the continued high rates of AHCCCS enrollment in the region. Facilitating enrollment in AHCCCS can offer benefits both at the individual and community levels. Community members who enroll in a health insurance plan can gain increased access to health care services by being able to receive care through AHCCCS providers, IHS facilities, Tribes and Tribal Organizations, and Urban Indian Organizations. At the community level, tribes can benefit when IHS or tribally-operated 638 facilities bill a third-party insurer for medical services resulting in savings in Contract Health Service funds. The money saved through outside billing can then be used in other ways to benefit all tribal citizens. High insurance coverage through AHCCCS is a significant asset to the White Mountain Apache Tribe community.

Figure 52. Births paid by AHCCCS and 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.[246] 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.[247] 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 abuse programs.[248, 249]

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.[250,251,252,253] In 2019, there were 237 births in the White Mountain Apache Tribe Region (Table 32). Among these births, just over half (54%) were to mothers who began prenatal care in their first trimester, which is lower than the state overall (68.9%), all Arizona reservations (75.3%) and the Healthy People 2020 target (84.8%). Almost a quarter of births (22%) were to mothers who had fewer than 5 prenatal visits, and 7% were to mothers who had no prenatal care. Inadequate prenatal care in the region puts mothers and infants at higher risk of poor health outcomes. Looking at trends over time, births to mothers with inadequate prenatal care rose from 2014 to 2016, declined slightly in 2017 and 2018, and then rose again in 2019 (Figure 53). Both the percent of births to mothers with no prenatal care and the percent with fewer than 5 prenatal visits were highest in 2019 out of the previous 6 years.

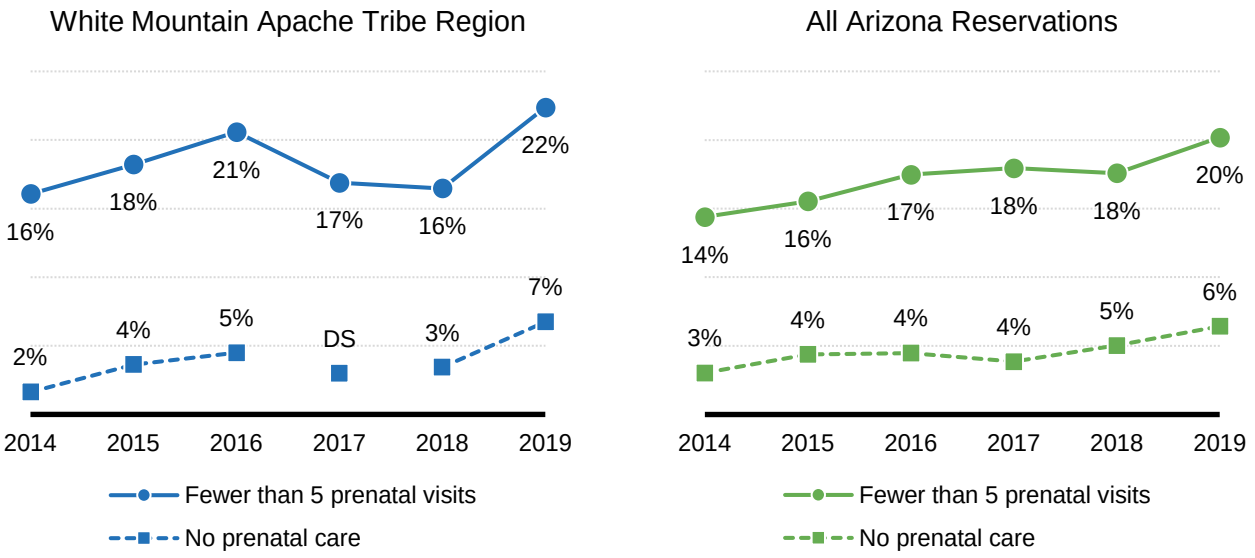
Table 32. Prenatal care for the mothers of babies born in 2018 and 2019

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
White Mountain Apache Tribe Region	**2018**	**261**	**3%**	**16%**	**55.9%**
	2019	**237**	**7%**	**22%**	**54.0%**
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.

Figure 53. 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.

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.[254] Babies born to mothers who smoke are more likely to be born early (pre-term), have low birth weight, die from sudden unexpected infant death (SUID), and have weaker lungs than babies born to mothers who do not smoke.[255, 256]

In 2019, the percent of births to teenaged mothers in the White Mountain Apache Tribe Region was higher than the percentage seen in all Arizona reservations; 6% of births were to mothers younger than 18 (compared to 4% across all Arizona reservations), and 12% were to mothers younger than 20 (compared to 10% across all Arizona reservations) (

Table 33). Rates of gestational diabetes and pre-pregnancy obesity were also higher in the region than in the state as a whole. Of total births in the region, 16% were to mothers with gestational diabetes (compared to 9% statewide) and nearly half (45%) were to mothers with pre-pregnancy obesity

(compared to 30% statewide). Rates of tobacco use in pregnancy greatly exceeded the Healthy People 2020 target of no more than 1.4% at 5.5%, or more than 1 in 20 births.

Table 33. Selected characteristics of mothers giving birth, 2018 to 2019

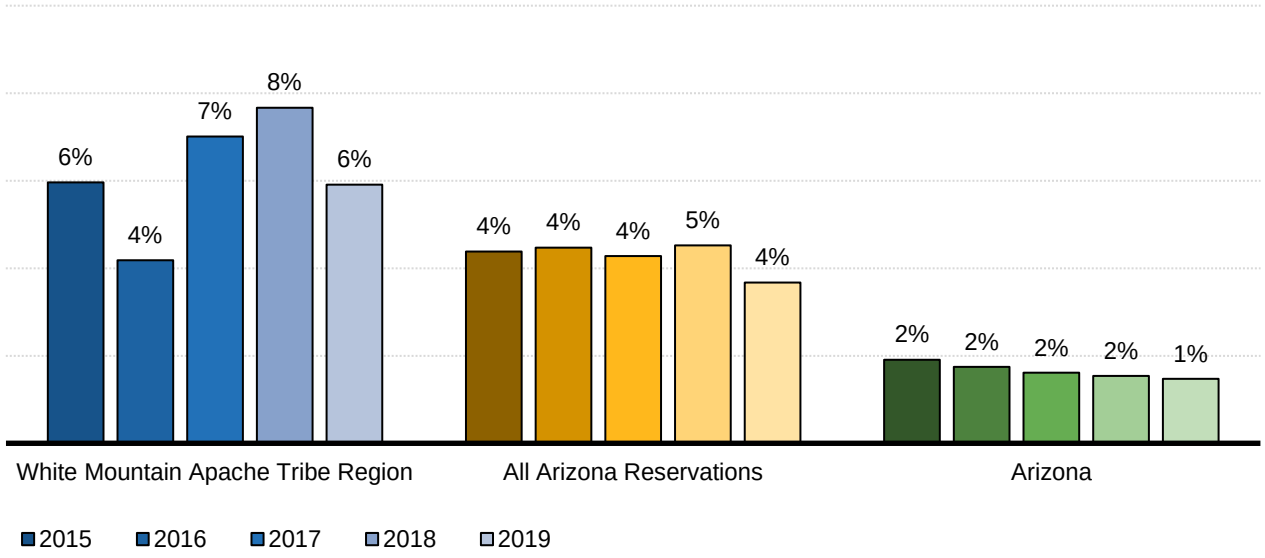
Geography	Calendar year	Number of births	Mother was younger than 18	Mother was younger than 20	Mother had gestational diabetes	Mother had pre-pregnancy obesity	Mother used tobacco during pregnancy
White Mountain Apache Tribe Region	**2018**	**261**	**8%**	**13%**	**18%**	**33%**	**6.9%**
	2019	**237**	**6%**	**12%**	**16%**	**45%**	**5.5%**
All Arizona Reservations	2018	1,990	5%	11%	N/A	N/A	4.0%
	2019	2,180	4%	10%	N/A	N/A	3.2%
Arizona	2018	80,539	2%	6%	8%	29%	4.5%
	2019	79,183	1%	5%	9%	30%	4.3%
Healthy People 2020 Target							1.4%

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

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

Looking longitudinally, the portion of births to mothers younger than 18 in the region has fluctuated over the past 5 years but always remained equal to or greater than the portion seen in all reservation lands in the state (Figure 54). Key informants perceived that the rate of teen parenthood in the community poses a challenge for family stability and early developmental intervention, as discussed in the *Young Children with Special Needs* section. Based on the prevalence of young parents in the region, there is a particular need for targeted parent education as well as additional supports to help parents complete high school and pursue higher education or further career training. Two programs through Apache Behavioral Health Services, Working 2 Wellness and EVOLVD Living with Purpose, may support young parents through substance abuse services and employment or vocational skills training.

Figure 54. Births to mothers younger than 18, 2015 to 2019



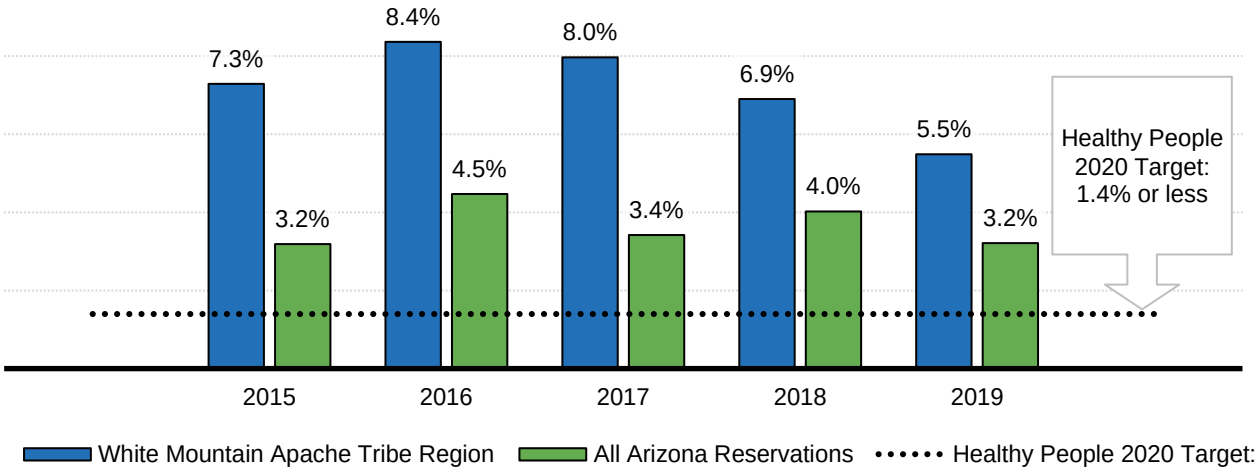
Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from https://pub.azdhs.gov/health-stats/report/hspam/index.php

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

The rate of births to mothers who used tobacco during pregnancy has been declining since 2016, when it peaked at 8.4% of births (Figure 55).[xvi] Another source of data on tobacco exposure is the WIC program. The percentage of children enrolled in WIC who were exposed to smoking in the household decreased from 2% in 2011 to 0% in 2015, where it remained through 2018 (Figure 56). This decline in smoking in households with young children is promising; however, it is important to note that these data are collected through self-reporting. In the past, key informants in the region pointed out that smoking in some households is likely not being reported, so rates of children exposed to secondhand smoke in the region may be higher than those reflected in the WIC data.

[xvi] In 2014, the Arizona Department of Health Services (ADHS) introduced changes to the birth certificate form and collection of vital statistics data. Due to these changes, data from 2015 onward may not be directly comparable to data from 2014 and before.

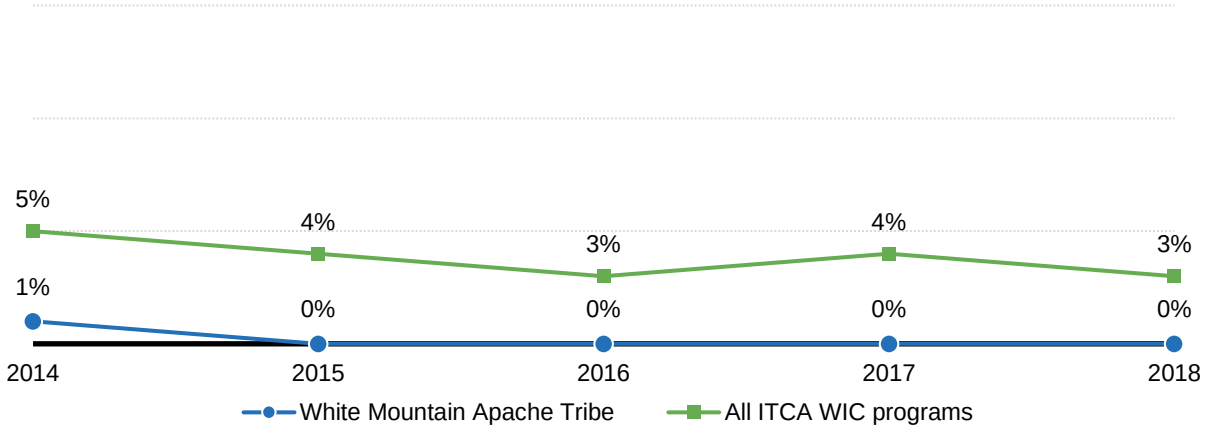
Figure 55. Births to mothers who used tobacco during pregnancy, 2014 to 2019



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 this figure. Tobacco use refers to cigarettes only.

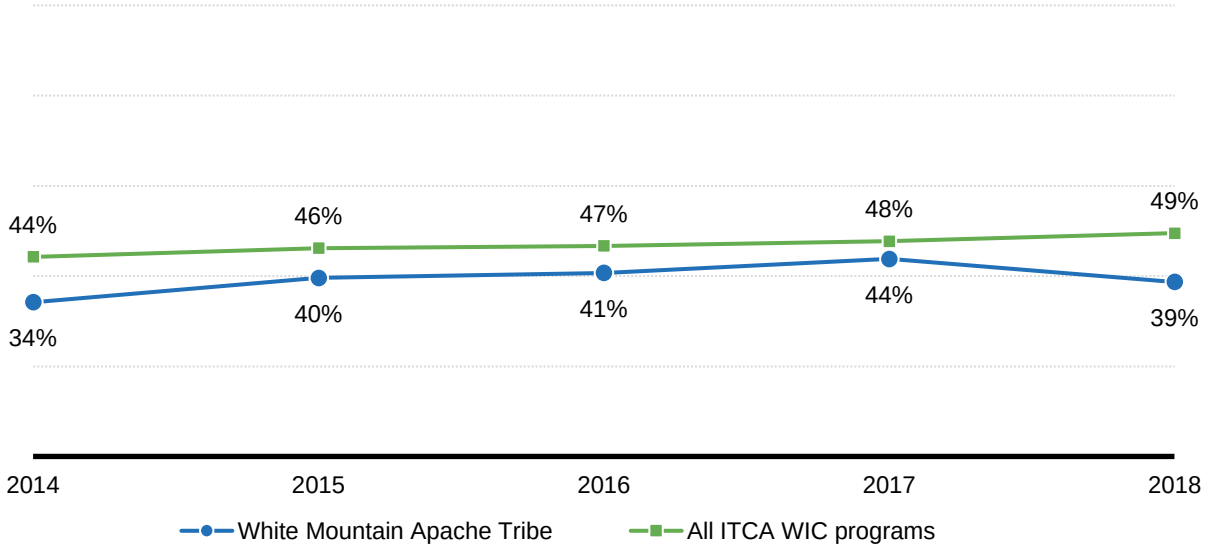
Figure 56. WIC-enrolled children exposed to smoking in the household



Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Pre-pregnancy obesity rates for the 225 women enrolled in WIC correspond with the data from ADHS on births to mothers with pre-pregnancy obesity (Table 33). Pre-pregnancy obesity increased from 34% in 2014 to a high of 44% in 2017, decreasing again in 2018 to 39% (Figure 57). While these rates are lower in the region than across all tribal WIC programs in Arizona, it is significant that more than a third of mothers and babies have a higher likelihood of birth complications and neonatal and infant mortality due to maternal obesity.[257, 258] 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.[259]

Figure 57. Pre-pregnancy obesity rates for mothers enrolled in WIC, 2014 to 2018

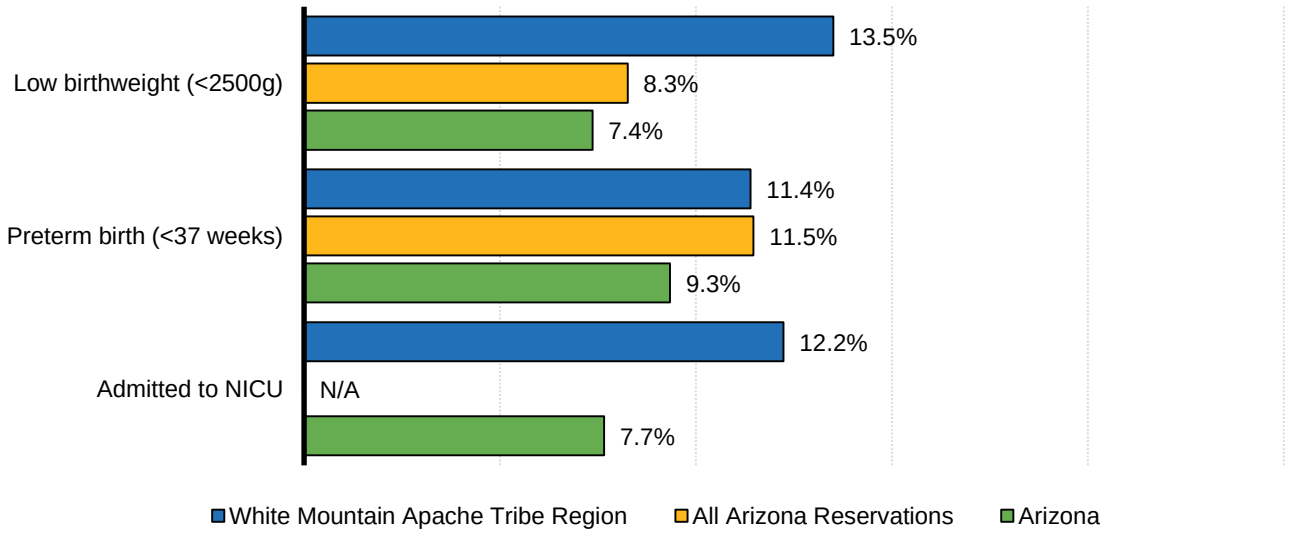


Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Birth outcomes

With regard to perinatal health, babies born in the White Mountain Apache Tribe Region were doing slightly worse than babies born statewide. In 2019, about 1 in 7 babies born (13.5%) were low birthweight, about 1 in 9 (11.4%) were born before 37 weeks, and about 1 in 8 (12.2%) were admitted to the neonatal intensive care unit (NICU) (Figure 58). Rates of each of these birth outcomes was higher in the region than across all Arizona reservations and the entire state.

Figure 58. Selected birth outcomes, calendar year 2019

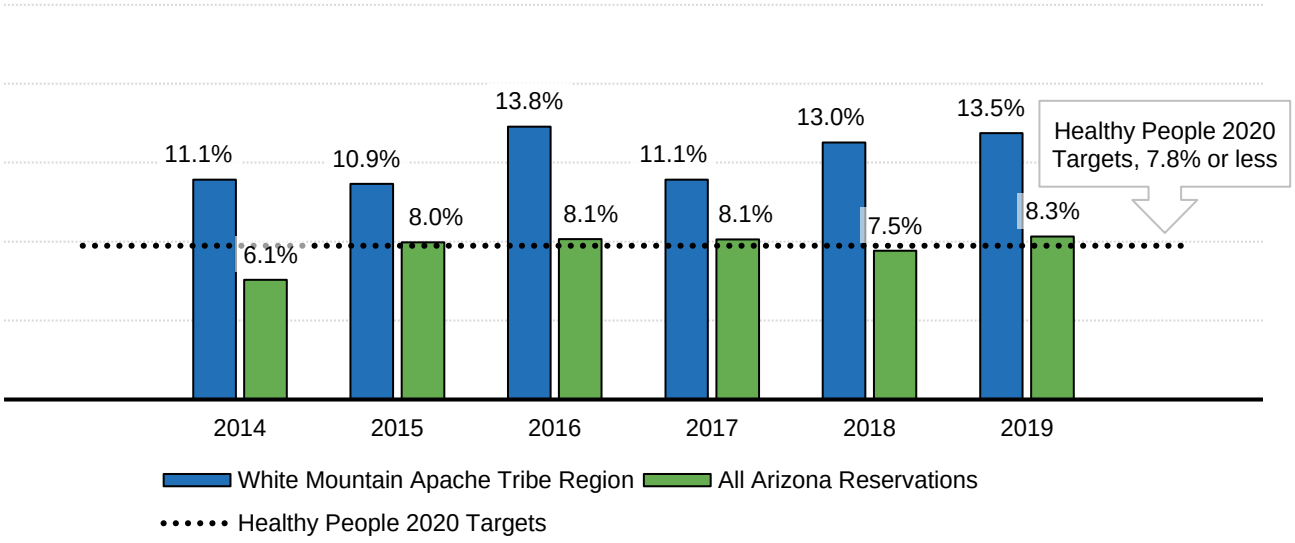


Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from https://pub.azdhs.gov/health-stats/report/hspam/index.php

Note: 'All Arizona Reservations' row reflects only births to American Indian mothers residing on Arizona reservations. Data on NICU admissions were not available for all Arizona reservations.

Babies born at a low birth weight (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.[260,261] From 2014 to 2019, rates of low-birth-weight births were consistently higher in the White Mountain Apache Tribe Region than across all Arizona reservations, as well as the Healthy People 2020 target of less than 7.8% of babies born at low birth weight (Figure 59). The highest percent of low-birth-weight births was in 2016 (13.8%), and the second highest percent was in 2019 (13.5%).

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

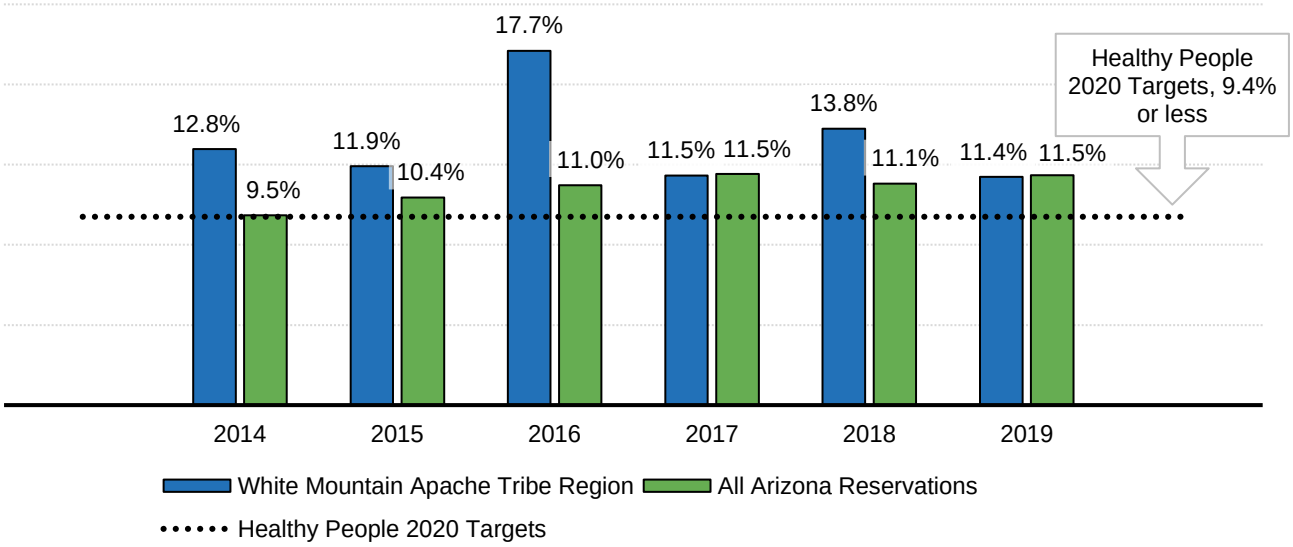


Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from https://pub.azdhs.gov/health-stats/report/hspam/index.php

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

Preterm birth, or 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. [262,263] Between 2014 and 2017, rates of preterm births in the region varied, with the highest rate in 2016 (17.7%) and lowest in 2019 (11.4%) (Figure 60). Over the same period, preterm births in all Arizona reservations increased steadily from 9.5% to 11.5% of births. The percent of preterm births in the region and across all Arizona reservations exceeded the Healthy People 2020 target of no more than of 9.4% of babies born preterm.

Figure 60. Preterm births (less than 37 weeks gestation), 2014 to 2019

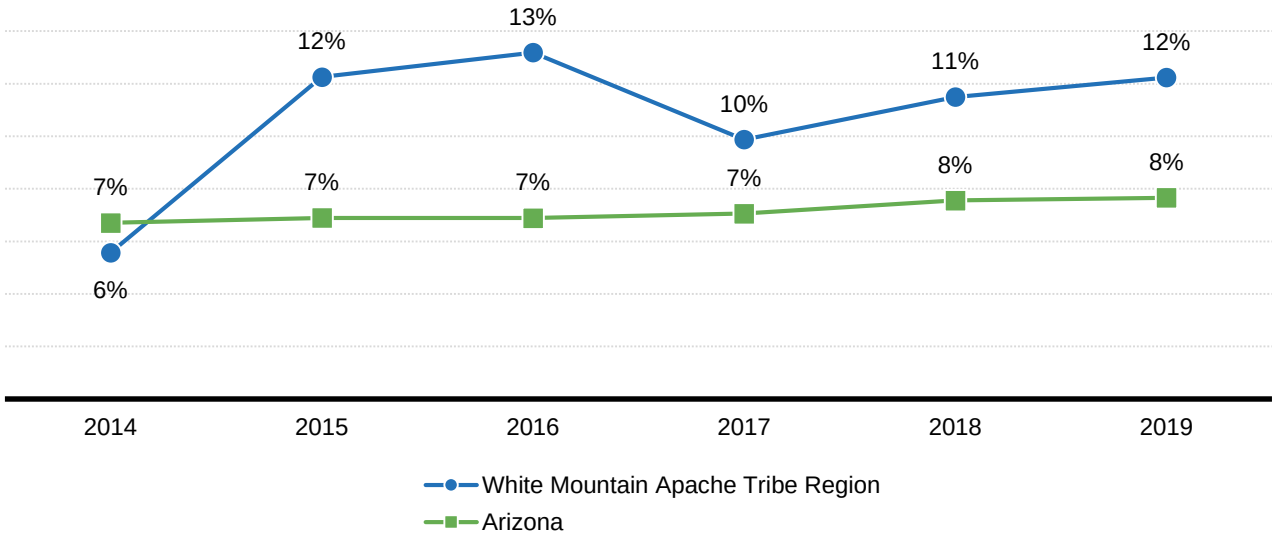


Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from https://pub.azdhs.gov/health-stats/report/hspam/index.php

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

Newborns are admitted into neonatal intensive care units (NICUs) for numerous reasons that can vary across medical providers and have implications for the short and long-term health of babies.[264] While NICU admissions may be an indicator of important health concerns in newborns, including low birth weight, they can also be a site of family-based interventions that can positively impact infant development and parent-child relationships.[265] The portion of babies who were admitted to the NICU was lower in the White Mountain Apache Tribe Region than across Arizona in 2014 (6% compared with 7%) (Figure 61). However the portion doubled from 2014 to 2015 (12%) and remained higher than statewide through 2019.

Figure 61. 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 have 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.[266] This can create longer hospital stays, increase health care costs and increase complications for infants born with NAS. In the White Mountain Apache Tribe Region, 114 newborns were hospitalized between January 2016 and June 2020 due to maternal drug use during pregnancy (Table 34). The average length of hospital stay was slightly shorter in the region than across Arizona (5.2 days compared with 6 days).

Table 34. Newborns hospitalized because of maternal drug use during pregnancy, January 2016 to June 2020 cumulative

Geography	Newborns hospitalized	Average length of stay (days)
White Mountain Apache Tribe Region	**114**	**5.2**
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, SUID, overweight, and type 2 diabetes.[267] The American Academy of Pediatrics (AAP) recommends exclusive breastfeeding for about 6 months, and continuing to breastfeed as new foods are introduced for one year or longer.[268] In the White Mountain Apache Tribe Region, nearly three out every four infants enrolled in WIC (72%) were ever breastfed or given human milk, and 28% were breastfed for 6 or more months (Table 35). Both the percent of infants with breastfeeding initiated and the percent with breastfeeding continued for at least 6 months were slightly higher in the region than across all ITCA WIC programs, a stable trend from 2017 through 2020 (Figure 62).

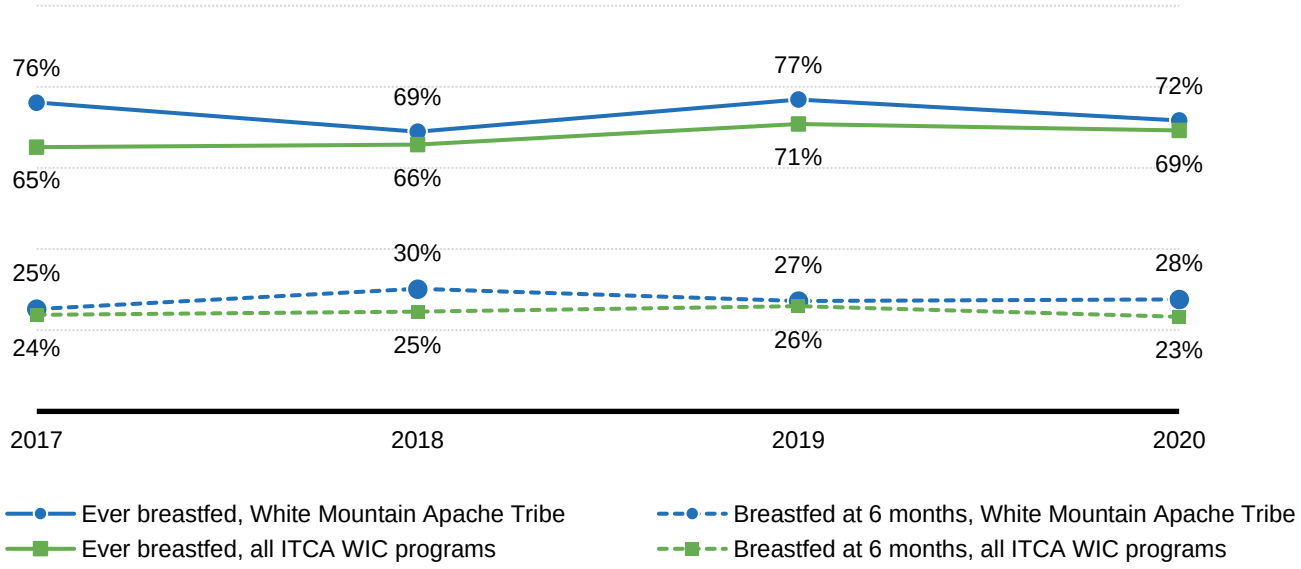
This trend may be related in part to the Indian Health Service's Baby Friendly Hospital Initiative, through which all 13 IHS obstetric hospitals are now baby-friendly, including Whiteriver Hospital.[269] Research shows that hospital practices, like the Baby-Friendly Ten Steps, can impact a mother's choice to breastfeed.[270] Beyond efforts at Whiteriver Hospital, both Alchesay Beginnings Child Development Center and Chaghache Day Care support breastfeeding mothers by providing storage for breastmilk and allowing mothers to come in and breastfeed their infants. According to the 2020 National WIC Report, 11.8% of infants in White Mountain Apache Tribe WIC program were fully breastfed, a higher proportion that the average for all ITCA WIC programs in fiscal year 2020 (10.9%).[271]

Table 35. Breastfeeding status for WIC enrolled infants, 2020

Geography	Infants For Whom Breastfeeding Status Is Determined (2020)	Infants Ever Breastfed (2020)	Infants Ever Breastfed (2020)	Infants Breastfed For 6+ Months (2020)
White Mountain Apache Tribe	191	72%	80	28%
All ITCA WIC programs	1,754	69%	729	23%

Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Figure 62. Breastfeeding rates for WIC-enrolled infants



Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished 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.[272,273] Obesity can have negative consequences on physical, social and psychological well-being that begin in childhood and continue into and throughout adulthood.[274] Higher birth weight 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 increase risk of heart disease, stroke and diabetes).[275, 276]

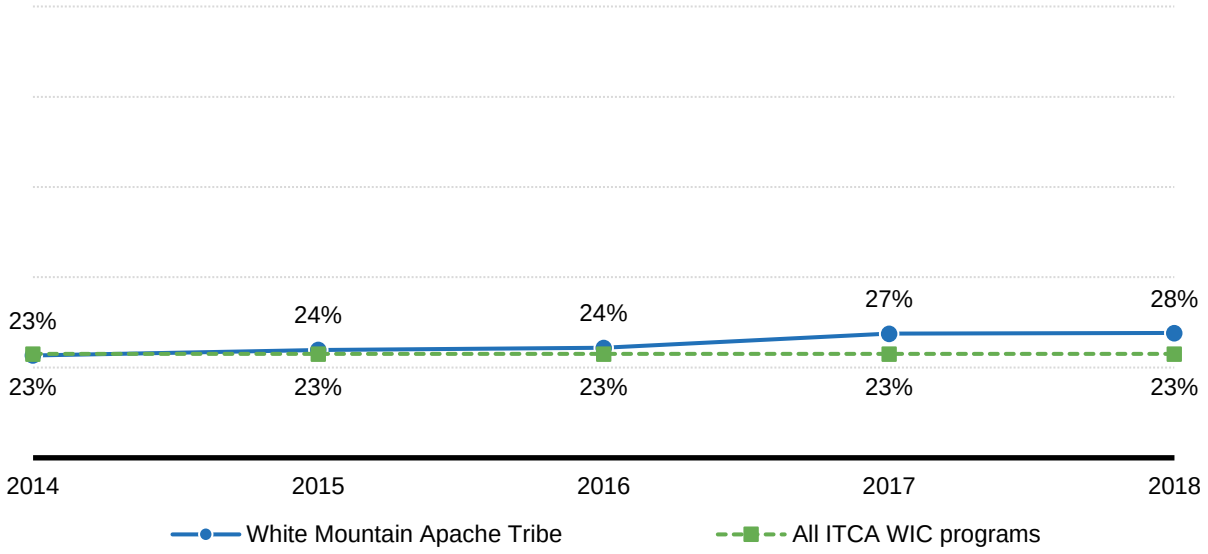
In fiscal year 2020, 27% of children ages 2 to 5 seen at IHS facilities in the Whiteriver Service Unit had obesity (Table 36), which is higher than that seen in IHS facilities nationwide (22.7% in 2020).[277] IHS set a national target for young children with obesity of a 22.6% or lower, meaning that White Mountain Apache Tribe Region did not meet this target in 2020. Similar data is available for all WIC-enrolled children ages 2 to 4. From 2014 to 2018, the percent of WIC-enrolled 2- to 4-year-olds in the region with obesity steadily increased from 23% to 28%, while the percent remained the same across all ITCA WIC programs (23%) (Figure 63). This means that in 2018, 162 out of the 579 WIC-enrolled young children in the region had obesity.

Table 36. Children (ages 2-5) with obesity in the Whiteriver Service Unit, FY2020

	Total number of children (ages 2-5) assessed	Number of children (ages 2-5) with obesity	Percent of children (ages 2-5) with obesity
Whiteriver Service Unit	459	123	27%

Source: Indian Health Service, Whiteriver Service Unit (2021). [Health services data]. Unpublished tribal data.

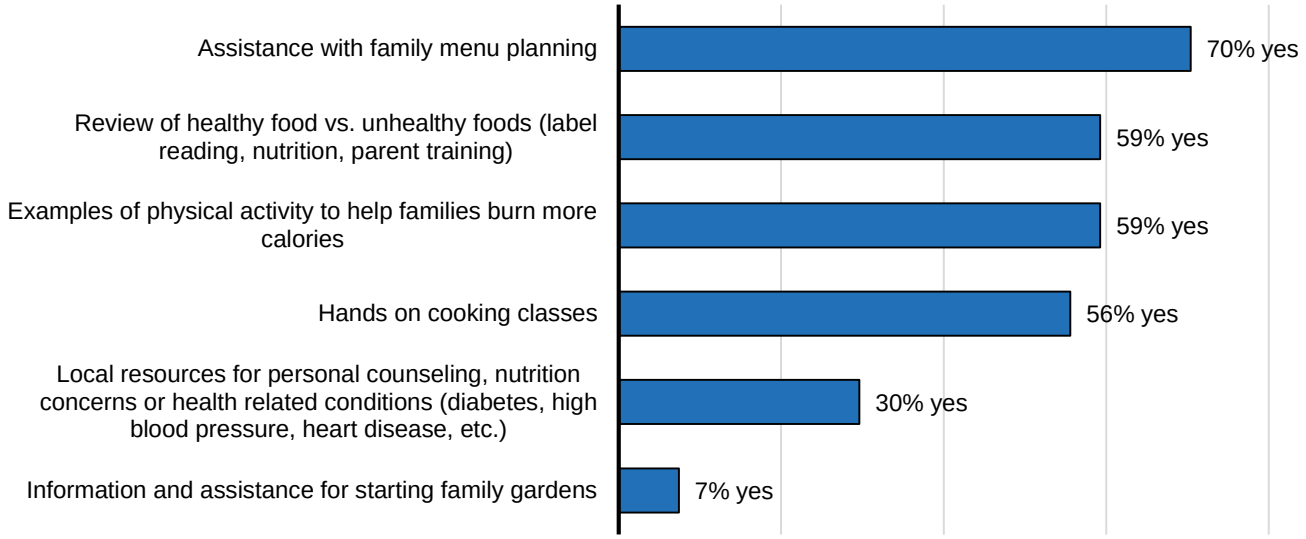
Figure 63. Obesity rates for WIC-enrolled children (ages 2-4), 2014 to 2018



Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

The 2020-21 White Mountain Apache Tribe Head Start Community Survey asked about perceptions of childhood obesity in the region. More than three-quarters of respondents (78%) said they felt childhood obesity was a health issue in the community. Most parents and caregivers indicated that assistance with family menu planning (70%), a review of healthy versus unhealthy foods (such as instruction on nutrition and label reading) (59%), examples of physical activities to help families burn more calories (59%), and hands-on cooking classes (59%) would be most helpful for improving family nutrition (Figure 64).

Figure 64. Positive responses to question on how to improve family nutrition, Head Start community assessment, 2020-21



Source: White Mountain Apache Tribe Head Start (2021). [Community Assessment dataset]. Unpublished tribal data 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.[278] In 2010, the Indian Health Service (IHS) implemented an ongoing oral health surveillance system to monitor the oral health of American Indian and Alaska Native (AI/AN) children.[279] Historically, this population has seen the highest rates of tooth decay in the United States, and it continues today at a rate that is 3 times than that of non-Hispanic 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 children (54%) have early childhood cavities.

According to the Inter Tribal Council of Arizona's 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 1 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 children who were IHS active users in Arizona also decreased in this time period to less than 10% 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 1 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%.[280] These data suggest that there remains a strong need for focused oral health efforts on primary prevention in tribal communities across the state.

Families with young children in the White Mountain Apache Tribe Region can access dental services at the Whiteriver Indian Hospital dental clinic. Indian Health Service (IHS) data show that a total of 606 unique children (36%) ages 1 to 5 received topical fluoride applications in fiscal year 2020 (Table 37). In that same period, 484 children (35%) ages 2 to 5 received sealant applications. There were several disruptions to preventive dental care in FY2020, including the beginning of the pandemic and the dental clinic losing several dental hygienists and dental assistant supervisors, who are responsible for community dental work in the region. Despite these challenges, the proportion of young children receiving sealants appears to be high in the region.

Table 37. Children (ages 1-5) receiving oral health care in the Whiteriver Service Unit, FY2020

	Total number of children (ages 1-5)	Number and percent of children (ages 1-5) who received topical fluorides		Total number of children (ages 2-5)	Number and percent of children (ages 2-5) who received sealants	
Whiteriver Service Unit	1,687	606	36%	1,373	484	35%

Source: Indian Health Service, Whiteriver Service Unit (2021). [Health services data]. Unpublished tribal data.

In addition to dental clinic services, IHS provides dental screenings and fluoride varnishes at Head Start and preschool locations in the region. According to data from the 2019-20 school year, all 258 the children enrolled in the White Mountain Apache Tribe Head Start had continuous, accessible dental care and received preventive dental care that year. All enrolled children received professional dental exams, nearly three-quarters (70%) enrolled were found to need dental treatment, and just over half of these children received the needed dental treatment (39%) (

Table 38).

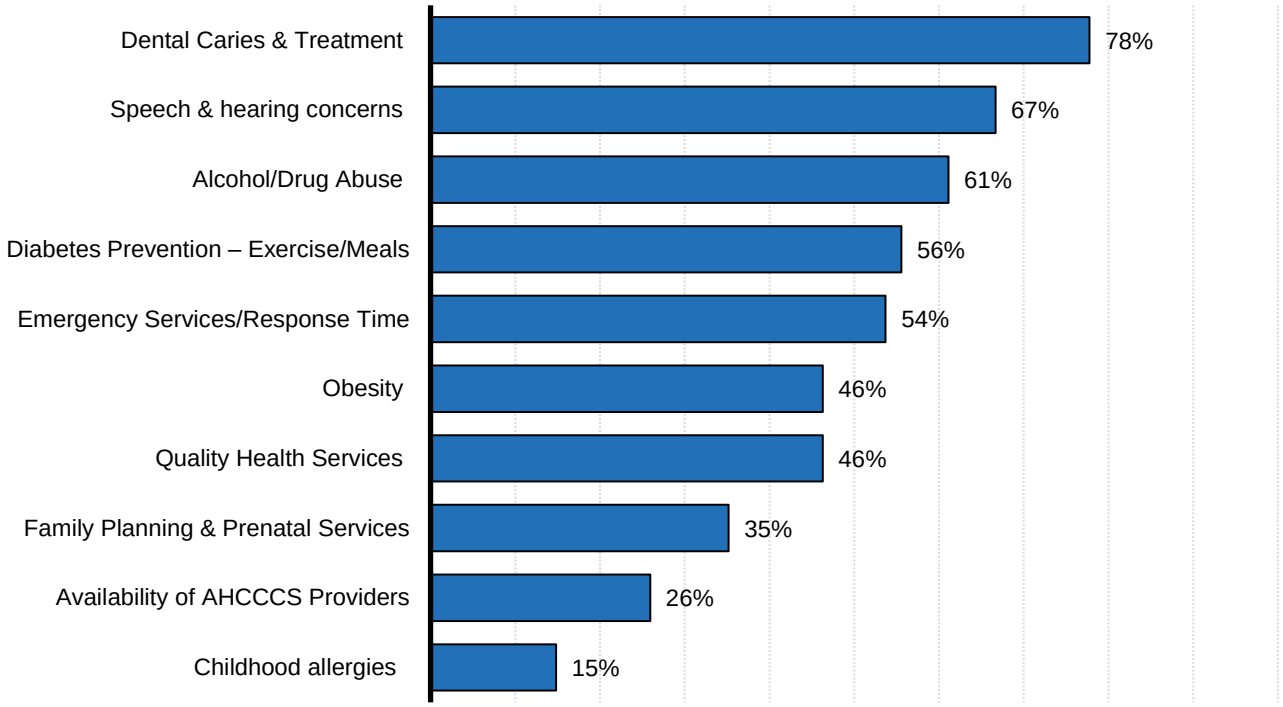
Table 38. Dental care for children enrolled in White Mountain Apache Tribe Head Start, FY2019

	Children (ages 0-5) enrolled in Head Start or Early Head Start	Children with continuous accessible dental care	Children receiving preventative dental care	Children with professional dental exam	Children needing dental treatment	Children receiving dental treatment
White Mountain Apache Tribe Region	258	100%	100%	100%	70%	39%

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

Among parents and caregivers surveyed in the 2020-21 White Mountain Apache Tribe Head Start Community Assessment, most respondents felt that dental caries and treatment should be given top priority among health issues in the region (Figure 65). Given the high rate of dental decay among American Indian children in Arizona, further support for oral health in early childhood is likely needed in the region. The White Mountain Apache Tribe First Things First Regional Partnership Council has funded an oral health strategy, through which IHS is expanding their current dental services to include education on developmentally-appropriate oral health practices for staff and families with young children served in their health clinics. Importantly, IHS is also expanding screenings and varnishes currently provided at early child care and education programs to children who are not enrolled in these programs, live in rural areas, and may lack reliable transportation. Toddler toothbrush kits have also been distributed at community and family events to encourage oral health care.[281]

Figure 65. Responses to question of which health issues should be given priority, Head Start community assessment, 2020-21



Source: White Mountain Apache Tribe Head Start (2021). [Community Assessment dataset]. Unpublished tribal data received by request.

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.[282] 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.[283]

Data from the IHS Whiteriver Service Unit show that 281 toddlers ages 19 to 35 months (68%) had completed their full immunization series on-time for their age group (Table 39).[xvii] The target set by IHS for toddlers with a complete vaccine series in this age range in FY 2020 was 45.9%, which meant that the White Mountain Apache Tribe Region exceeded this national target. Data from early care and education centers in the region suggest that immunization rates are even higher than this. Among the students enrolled in White Mountain Apache Tribe Head Start, 79% were up-to-date on required immunizations for their age group in the 2019-20 school year (Table 40). Children enrolled in child care centers in the region exceeded both Arizona and Healthy People 2020 targets for percent of children receiving 3 major vaccine series (DTAP, polio, and MMR) (95.7%) (Table 41) in the 2017-18 school year. No children had religious or medical exemptions.

Table 39. Children (ages 19-35 months) with complete immunizations in the Whiteriver Service Unit, FY2020

	Total number of children (ages 19-35 months) assessed	Number and percent of children (ages 19-35 months) with complete immunizations (4313*314 series)	
Whiteriver Service Unit	411	281	68%

Source: Indian Health Service, Whiteriver Service Unit (2021). [Health services data]. Unpublished tribal data.

[xvii] The complete vaccine series for this age group is 4 or more doses of Diphtheria, Tetanus and Pertussis (DTaP), 3 or more doses of Polio, 1 or more doses of measles, mumps and rubella (MMR) vaccine, 3 or more doses of Haemophilus influenzae type B (hib) vaccine, 3 or more doses of hepatitis B vaccine, 1 or more dose of Varicella vaccine and 4 or more doses of Pneumococcal conjugate vaccine (PCV).

Table 40. Immunization rates for children enrolled in White Mountain Apache Tribe Head Start, FY2019

	Children (ages 3-5) enrolled in Head Start or Early Head Start	Children up to date on required immunizations
White Mountain Apache Tribe Region	**258**	**79%**

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

Table 41. Children in child care with selected required immunizations, 2017-18

Geography	Number enrolled	DTaP	Polio	MMR	Religious exemption	Medical exemption	Exempt from every required vaccine
White Mountain Apache Tribe Region	**92**	**95.7%**	**95.7%**	**95.7%**	**0.0%**	**0.0%**	**0.0%**
Arizona	95,753	91.3%	92.8%	93.4%	4.3%	0.7%	2.8%
Healthy People 2020 targets		90.0%	90.0%	90.0%			

Source: Arizona Department of Health Services. (2021). [Immunizations dataset]. Unpublished raw data received from the First Things First State Agency Data Request.

Note: No child care centers from the region had data included in the ADHS immunization dataset in 2018-19 or 2019-20 (only child care centers licensed through the state are required to report into this database).

Among the 202 students enrolled in kindergarten at schools in the White Mountain Apache Tribe, all (100%) had completed the 3 major vaccine series in the 2019-20 school year (Table 42). These rates greatly exceeded the statewide immunization rates for these vaccines, as well as the Healthy People 2020 target (95%). No kindergarteners were exempt from required vaccines, which has been the case since 2015. The high rates of kindergarten immunizations and low rates of exemptions are an asset to public health for children in the region.

Table 42. Kindergarteners with selected required immunizations, 2019-20

Geography	Number enrolled	DTaP	Polio	MMR	Personal belief exemption	Medical exemption	Exempt from every required vaccine
White Mountain Apache Tribe Region	**202**	**100.0%**	**100.0%**	**100.0%**	**0.0%**	**0.0%**	**0.0%**
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). [Immunizations dataset]. Unpublished raw data received from the First Things First State Agency Data Request.

Illness, Injury and Mortality

Asthma is the most common chronic illness affecting children,[284] and it is more prevalent among boys, Black children, American Indian or Alaska Native children, and children in low-income households.[285, 286] 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.[287] In the White Mountain Apache Tribe Region, there were 46 emergency room visits between 2016 and 2020 due to asthma for children up to age 14 (Table 43). A subset of these children presented with cases severe enough to need hospitalization. Ten children birth to 4 (excluding newborns) and 12 children ages 4 to 14 were hospitalized during the same 4-year period. The average length of stay was 2.6 days, slightly longer than the average statewide (2.0).

Table 43. Hospitalizations and emergency room visits due to asthma, 2016-2020 combined

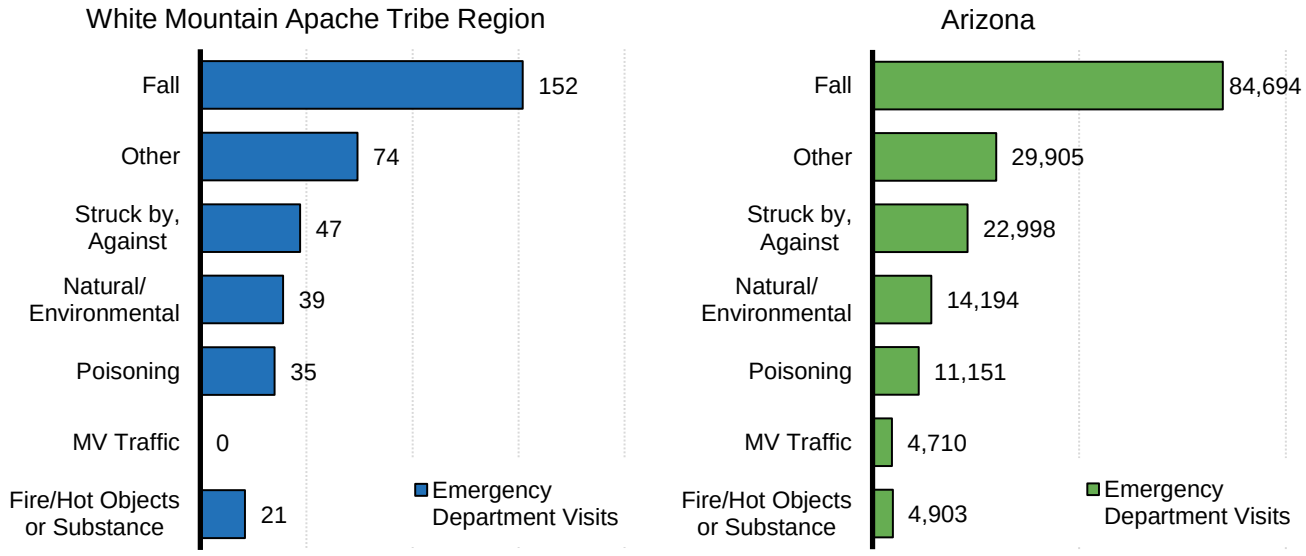
Geography	Number of inpatient asthma hospitalizations for children ages birth to 4 (except newborns)	Number of inpatient asthma hospitalizations for children ages birth to 14 (except newborns)	Average length of stay for asthma hospitalization for children ages birth to 14	Number of emergency department visits for asthma, children ages birth to 14
White Mountain Apache Tribe Region	**10**	**22**	**2.6**	**46**
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.[288, 289] 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.[290] 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.[291, 292]

According to data from ADHS, between 2016 and 2020, there were 391 non-fatal emergency department visits and 10 non-fatal inpatient hospitalizations for unintentional injuries among children aged birth to 4 in the White Mountain Apache Tribe Region. The causes of unintentional injuries for young children in the region resemble what is seen across Arizona, with falls being the most common (152) (Figure 66). The pattern of unintentional injuries in the region mostly resembles the pattern seen statewide.

Figure 66. 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 20th lowest infant mortality rate nationwide in 2019.[293] 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.[294,295] In the White Mountain Apache Tribe Region, fewer than 6 children birth to 17 died in 2020 (Table 44). These very low death numbers mean that mortality rates and cause of death for children and infants cannot be reported to protect individual privacy.

Table 44. 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)
White Mountain Apache Tribe Region	**2018**	**<6**	**DS**	**8**	**N/A**	**8**	**N/A**
	2019	**<6**	**DS**	**<6**	**N/A**	**<6**	**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.

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. [296,297,298,299,300] 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.[301] 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 1 of 5 key protective factors that improve child outcomes and reduce the incidence of child abuse and neglect.[xviii,302]

Unfortunately, not all children are able to begin their lives in positive, stable, nurturing environments. Adverse childhood experiences (ACEs)[xix] have been associated with developmental disruption, mental illness, drug and alcohol use and overall increased healthcare utilization.[303,304] Arizona is among the top ten states with the highest proportion of children birth to 5 who have experienced at least 1 ACE, with nearly 1 in 3 (31.8%) young children in Arizona having 1 or more ACEs.[305] Future poor health outcomes are more likely as an individual's ACE score increases.[306] 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%).[307] 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.[308] These children and their families may require specific, targeted resources and interventions in order to reduce harm and prevent future risk.[309]

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.[310] Strategies for preventing ACEs include: strengthening economic supports for families; promoting social norms that protect against violence and adversity;

[xviii] *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.*

[xix] *ACEs include 8 categories of traumatic or stressful life events experienced before the age of 18 years. The 8 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.*

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.[311]

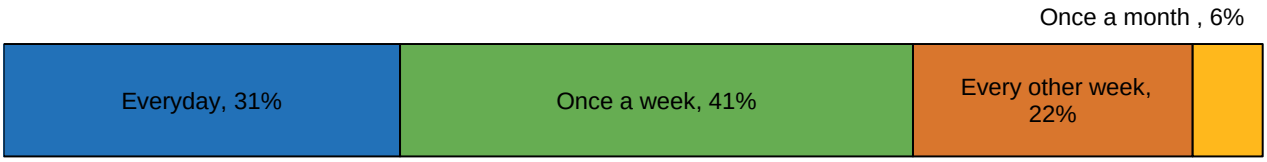
What the Data Tell Us

Parent Education and Early Literacy

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.[312,313] Home-based literacy practices between caregivers and young children, specifically, have been shown to improve children's reading and comprehension, as well as children's motivation to learn.[314,315] 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 practices.[316] The 2020-21 White Mountain Apache Tribe Head Start Community Assessment asked caregiver respondents how often they read to their child(ren). Thirty-one percent indicated every day, 41% said once a week, and 28% read to their child(ren) less frequently than that (Figure 67).

Early literacy efforts in the region include Arizona's American Academy of Pediatrics' (AzAAP) "Reach Out and Read" program. Through this initiative, pediatricians at IHS facilities in Whiteriver and Cibecue provide families with information about the importance of reading aloud with their children along with books they can take home.[317] In the White Mountain Apache Tribe Region, Reach Out and Read translated informational pamphlets into Apache and created graphics with positive imagery of children engaging in preventive health care activities.

Figure 67. Responses to "How often do you read to your child?", Head Start Community Assessment 2020-21

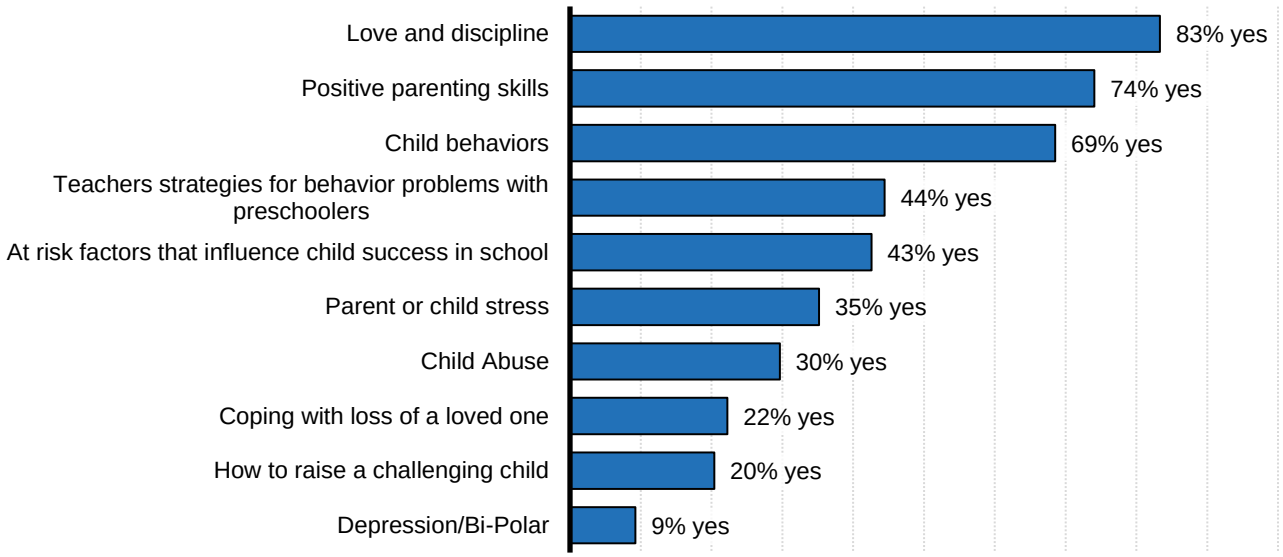


Source: White Mountain Apache Tribe Head Start (2021). [Community Assessment dataset]. Unpublished tribal data received by request.

Key informants interviewed in the region highlighted a need for more community events for young children and their families. In the summer in particular, there are very few activities available for young children. The local Boys and Girls Club has summer activities for older children, and summer school is available for school-age children. However, no summer programs currently exist for children under the age of 6 beyond that provided at Chaghache Day Care Center and Alchesay Beginnings Child Development Center. One key informant noted that a park, recreation center, or similar location for parents and young children to spend time together and be active would be beneficial for families.

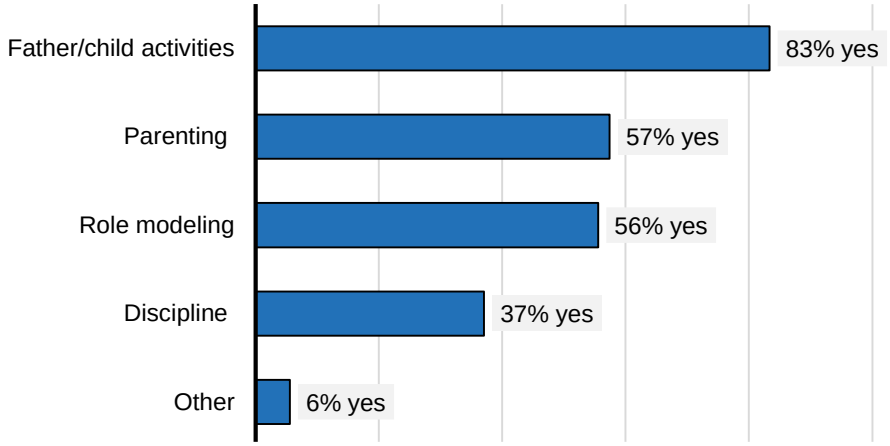
Almost half (48%) of families with a child enrolled in Head Start were receiving social or educational services in FY2019. Respondents to the 2020-21 White Mountain Apache Tribe Head Start Community Assessment identified specific topics for parent education in the region. The top 5 topics were love and discipline (83%), positive parenting skills (74%), child behaviors (69%), teacher strategies for behavior problems with preschoolers (44%) and at-risk factors that influence child success in school (43%) (Figure 68). Almost all respondents (90%) also indicated the need for a fatherhood program. Parents and caregivers felt that trainings on father/child activities (83%), parenting (57%) and role modeling (56%) would benefit fathers in the community (Figure 69).

Figure 68. Positive responses to question on topics that are important as a parent, Head Start community assessment, 2020-21



Source: White Mountain Apache Tribe Head Start (2021). [Community Assessment dataset]. Unpublished tribal data received by request.

Figure 69. Positive responses to questions on the types of trainings which would benefit fathers, Head Start community assessment, 2020-21



Source: White Mountain Apache Tribe Head Start (2021). [Community Assessment dataset]. Unpublished tribal data received by request.

Mental Health

Mental 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.[318] 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 mental health of mothers is also important for the well-being of Arizona's young children. Mothers dealing with mental 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.[319] Improving supports available through coordinated, collaborative efforts are key to early identification and intervention with young children and their families.[320,321]

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 mental health services. Apache Behavioral Health Services (ABHS) serves as the TRBHA for the White Mountain Apache Tribe and provides services through 3 community locations: the Cibecue Behavioral Health Center, the McNary Wellness Center, and the main Apache Behavioral Health Services Center in Whiteriver. Individual, couples, family, and group counseling services are

available to residents of the White Mountain Apache community, as well as White Mountain Apache Tribe members and their families that live outside the reservation. ABHS also provides services such as case management, evaluation and diagnosis, residential treatment, group home treatment, 24-hour crisis management, and traditional healing. The ABHS Child Adolescent and Family Services (CAFS) team specializes in working with children who are at risk for out-of-home placements with the goal of maintaining family stability and reducing out-of-home-placements. The team provides evaluations, individual, family, and group therapy, and case management.[322]

ABHS recently introduced a new program to improve the social, emotional, and mental health of children ages birth to 5. Designed to promote safe and secure attachments between children and their parents or caregivers, THRIVE: Birth to Five (Są'áh Naaghai Bik'eh Gozhoo) works with families through therapeutic play, home visits, family therapy, and group sessions using evidence-based practices. THRIVE extends their services to Our Children's Shelter, delivering trauma-informed education to staff and therapy services to children involved with Tribal Child Protective Services and Tribal Court. The THRIVE team provides groups, family sessions, home visits, and individual skills services to neighboring communities including Whiteriver, McNary, Cibecue, Alchesay High School, White Mountain Apache Head Start, Chaghache Day Care, and ABC Daycare. Their services have also expanded to include telehealth and virtual sessions in order to support families throughout the COVID-19 pandemic. The THRIVE team is currently comprised of a program manager, a clinical supervisor, two clinicians, and two case managers; they hope to expand the team and increase referrals to the program through outreach with community stakeholders.

The number of young children accessing services of different types through ABHS are included in the table below. Some services were not able to be included, such as the number of children involved in weekly group sessions through the THRIVE program. ABHS staff indicated that the number of clients and sessions provided declined in 2020 based on having to switch to telehealth and pause some services due to shutdowns. The data do not include any no-show appointments, the number of which also increased during the COVID-19 pandemic. Staff were unable to complete the usual protocol of conducting home visit outreach when clients had telephone service issues or changed telephone numbers, which resulted in closing out on several clients with whom they lost touch completely.

Table 45. Children ages 0-5 accessing services through Apache Behavioral Health Services, January 2019 to March 2021

	Family Counseling	Family Support	Individual Counseling	Comprehen-sive Assessment	Individual Skills	Ages and Stages Questionn-aire	Contact Log
White Mountain Apache Tribe	**470**	**519**	**339**	**265**	**309**	**176**	**2,348**

Source: Apache Behavioral Health Services (2021). [Service dataset]. Unpublished tribal data received by request.

Note: The contact log tracks all attempts to contact clients and families via telephone, home visits, or walk-in appointments.

A disparately high number of young children in the region, between 25% and 30%, have mild to moderate developmental delays but do not meet thresholds for publicly-funded early intervention services.[323] Key informants have previously indicated a need for increased support for this population in particular. The THRIVE program is an important asset to the White Mountain Apache Tribe Region, which did not have any therapists specializing in providing care for young children before the program. The White Mountain Apache Tribe First Things First Regional Partnership Council is also working to support this need through its Family Support-- Children with Special Needs Strategy. Arizona's Children Association (AzCA) was funded through this strategy to implement a Parents as Teachers (PAT) program, which was modified to a mostly-virtual format and implemented in late SFY2021.[324] The Health Systems Change Strategy additionally has the goal of increasing local provider capacity and awareness around the mental health needs of young children; increasing awareness of resources available for families with young children at risk of developmental delays; and helping parents navigate the health care system to secure needed care and developmental services.[325]

Substance Use Disorders

A mother's use of substances such as drugs and alcohol has implications for her baby. Babies born to mothers who smoke are more likely to be born early (pre-term), have low birth weight, die from sudden infant death syndrome (SIDS) and have weaker lungs than babies born to mothers who do not smoke.[326,327] 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.[328] This can create longer hospital stays, increase health care costs and make complications more likely for infants born with NAS. Infants exposed to cannabis (marijuana) in utero often have lower birth weights and are more likely to be placed in neonatal intensive care compared to infants whose mothers had not used the drug during pregnancy.[329]

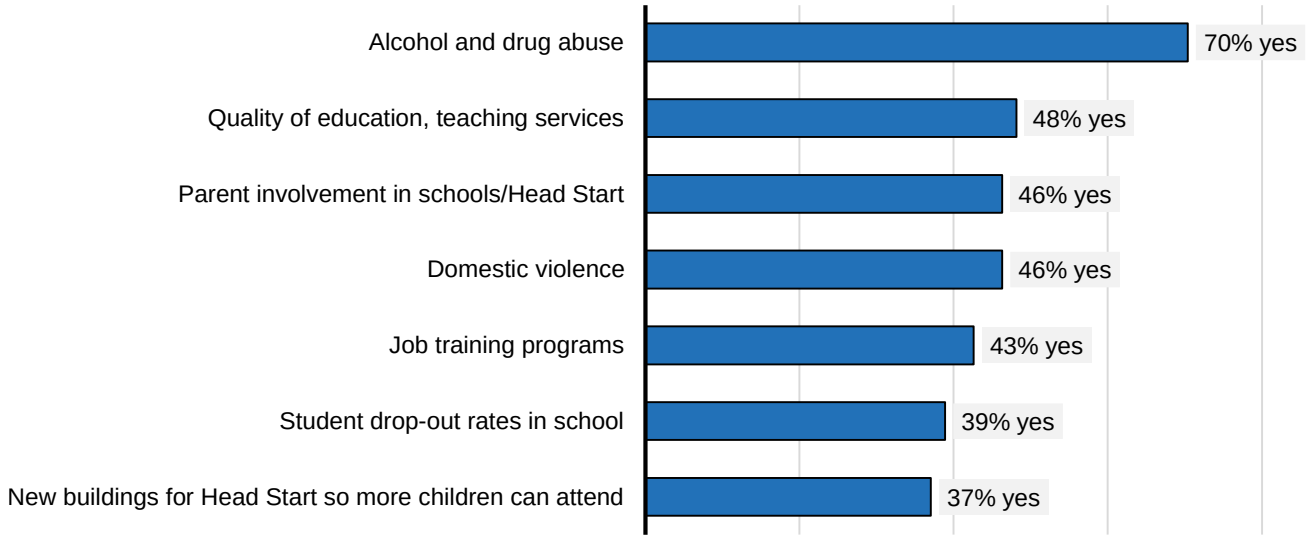
Parental substance abuse also has other impacts on family wellbeing. According to the National Survey of Children's Health, young children in Arizona are more than twice as likely to live with someone with a problem with alcohol or drugs than children in the US as a whole (9.8% compared to 4.5%).[330] Children of parents with substance use disorders are more likely to be neglected or abused and face a

higher risk of later mental health and behavioral health issues, including developing substance use disorders themselves.[331,332] Substance abuse treatment and supports for parents and families grappling with these issues can help to ameliorate the short and long-term impacts on young children.[333]

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 1 in 10 adults (12%) reported increases in alcohol consumption or substance use during the pandemic.[334] 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.[335] 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.[336]

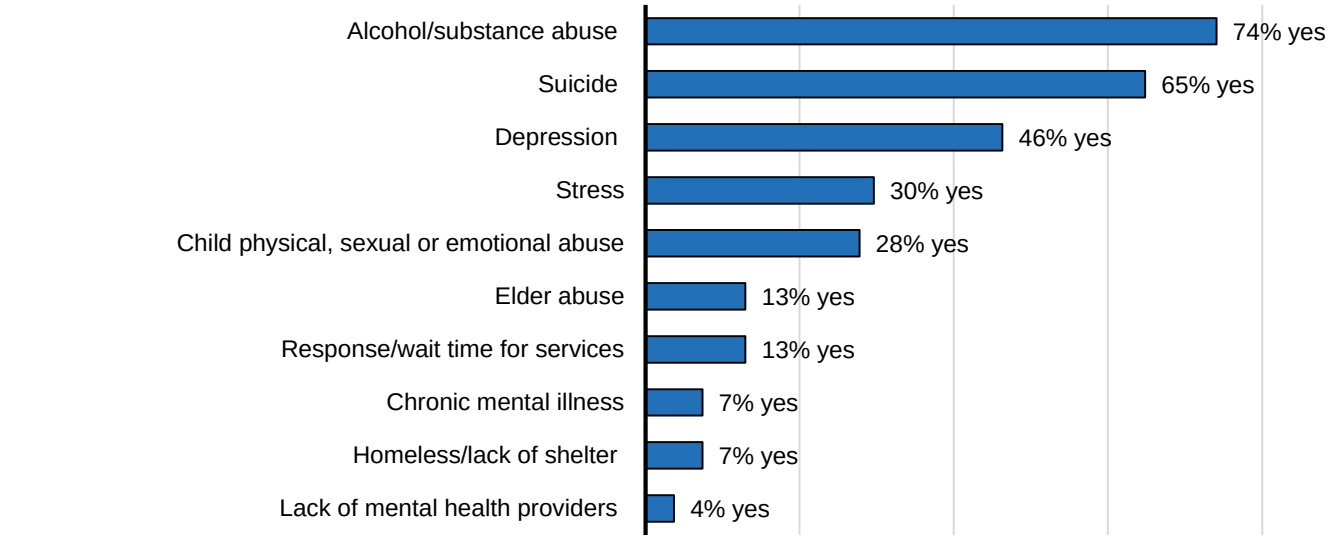
Parents and caregivers surveyed in the 2020-21 White Mountain Apache Tribe Head Start Community Assessment identified alcohol and substance abuse as having the greatest overall impact on the community (Figure 70), being the most damaging to mental health (Figure 71) and being the social problem that should be given top priority for improvement (Figure 72). It was also named by key informants as one of the largest challenges for families in the region. Children exposed to alcohol or other substances in utero or children growing up in homes with substance abuse often have significant social, emotional and behavioral health issues that require extra support, and some fear that there are not sufficient resources to support these children. Arizona Health Care Cost Containment System (AHCCCS) recently funded a needs and assets study focused on pregnant and post-partum mothers who are using substances.[337] A key recommendation from the study was to increase locally-available specialty services within Arizona's tribal communities; the closest program identified for mothers and infants in the White Mountain Apache Tribe Region was located in Phoenix. Key informants noticed that, when a baby is born, both the clinical and family attention is focused on the newborn's wellbeing. The region could benefit from services for pregnant and post-partum women, including for mothers with substance abuse disorders and other mental health needs. Key informants also indicated that parents of newborns in the region often have economic stressors in addition to the usual stress of raising a baby, and that additional supports for purchasing essential items like diapers might help prevent cases of abuse and neglect.

Figure 70. Positive responses to question on factors that have the greatest impact on the community, Head Start community assessment, 2020-21



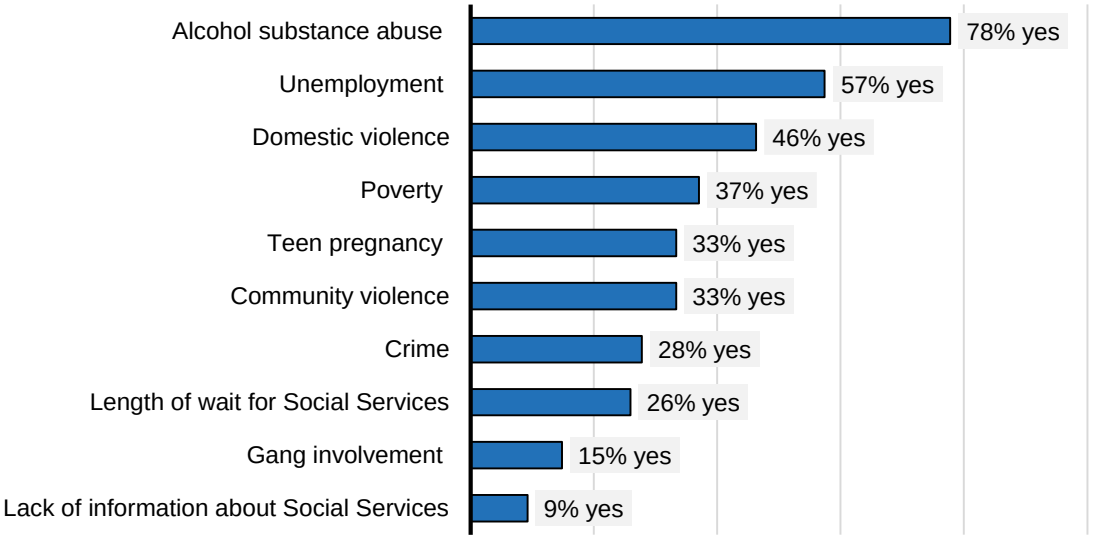
Source: White Mountain Apache Tribe Head Start (2021). [Community Assessment dataset]. Unpublished tribal data received by request.

Figure 71. Positive responses to question on what is most damaging to mental health in the community, Head Start Community Assessment, 2020-21



Source: White Mountain Apache Tribe Head Start (2021). [Community Assessment dataset]. Unpublished tribal data received by request.

Figure 72. Positive responses to question on which social problems should be given top priority for improvement, Head Start community assessment, 2020-21



Source: White Mountain Apache Tribe Head Start (2021). [Community Assessment dataset]. Unpublished tribal data received by request.

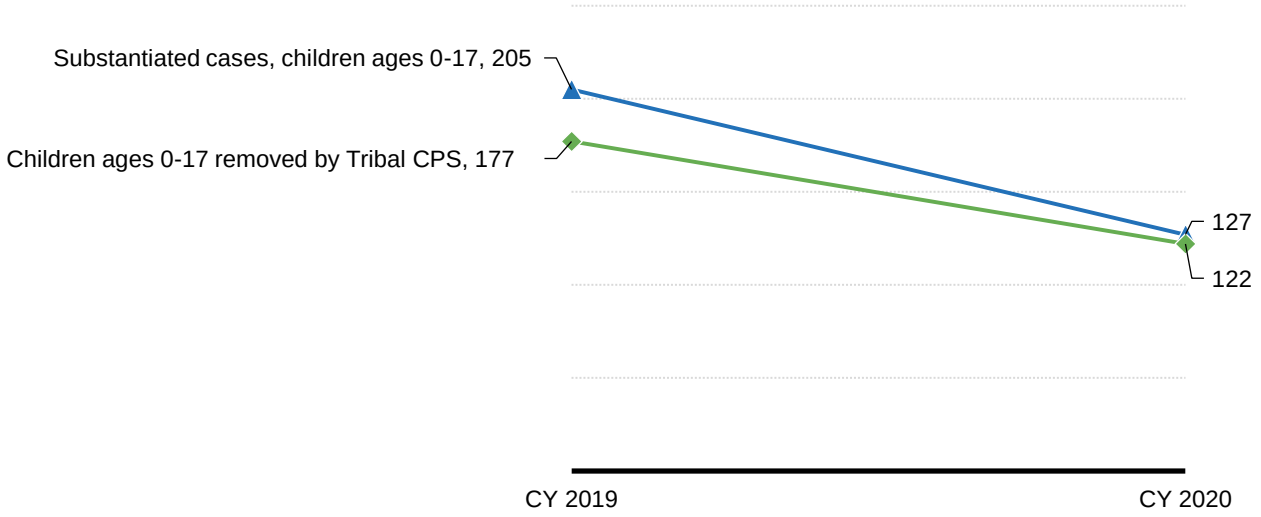
However, it is important to highlight the work that has been done in the community to improve wellbeing and decrease substance abuse. A past partnership between the Colorado School of Public Health's Centers for American Indian and Alaska Native Health and the White Mountain Apache Tribe (through the Healthy Nations Program funded by The Robert Wood Johnson Foundation) supported a 4-phase strategy to reduce alcohol and substance abuse in the region. The strategy included the following approaches: a mass media campaign called "N'dee Benadesh: The People's Vision" aiming to raise awareness around substance abuse, support Apache identity, and publicize programs and resources available; a school-based prevention program with student peer counseling training and community recreation opportunities for young people; a data system to strengthen referrals between agencies around substance-abuse related issues; and, finally, the opening of the Rainbow Treatment Center (RTC).[338] RTC recognizes the importance of cultural and community connection, mindfulness, personal stability and direction in the prevention and lasting treatment of substance abuse disorders. Through programs such as Working 2 Wellness, EVOLVD Living with Purpose, and RTC scholarships, clients can receive ongoing substance abuse support while working towards school and employment goals as well as financial wellness. Café Gozhóó and the Mindfulness Kitchen, both part of RTC's Nutritional Recovery Department, additionally address Apache food sovereignty while grounding recovery in ancestral knowledge and employable culinary skills. Key informants in the region named RTC as an ongoing asset in the community while noting that community members need to be willing to seek help in order for such programs to be effective.

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.[339] 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. The Family First Prevention Services Act, signed into law on February 9, 2018, includes reform to child welfare policies as well as federal investments to keep children safely with their families and avoid the traumatic experience of entering foster care when possible.[340] The Act also aims to ensure children are placed in the least restrictive, most family-like setting appropriate to their special needs when foster care is needed. In Arizona, the Department of Child Safety (DCS) also led an agency-wide strategic effort to standardize and improve the quality of in-home preservation services, which contributed to improved outcomes for families and stronger relationships between DCS and service providers.[341]

Child welfare services in the region are overseen by the White Mountain Apache Tribe Social Services (TSS) Department. Services supporting children in the child welfare system are also available through the tribally-operated Our Children's Shelter, a group home that can house up to 18 children aged birth through 18 years. In calendar year 2020, there were 127 substantiated cases of child abuse and neglect that involved children birth to 17, a significant decrease from 205 in 2019. The number of children removed by Tribal Child Protective Services (CPS) also decreased from 177 in 2019 to 122 in 2020. According to staff, schools and early care and education facilities act as the backbone for young children. Because school staff have daily interaction with the children, they make a majority of the reports to CPS, so the number of referrals dropped when schools closed due to COVID-19. National studies suggest that the transition to distance learning and remote work resulted in fewer opportunities for educators, health care professionals, and other key social service providers to identify and report child maltreatment during the pandemic.[342] Early care and education programs in the region made efforts to stay connected with children during closures and maintain this role. For example, Head Start staff traveling the bus routes to deliver CACFP and activity packets did their best to observe children and their caregivers as often as possible.

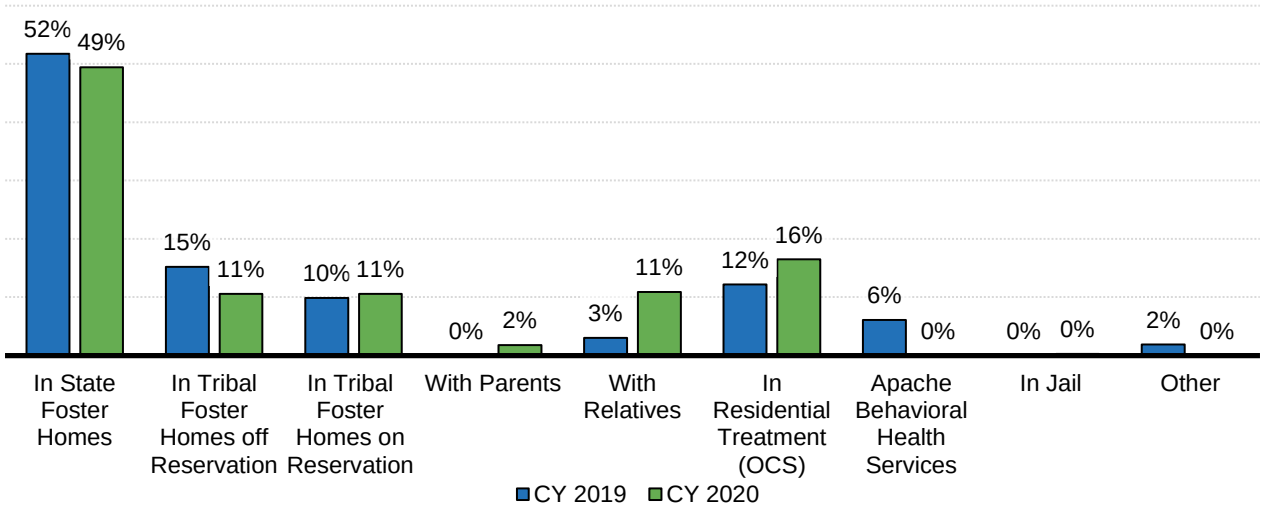
Figure 73. Cases of child abuse or neglect and Tribal CPS removals, 2019 to 2020



Source: White Mountain Apache Tribe Social Services Department (2021). [Child welfare dataset]. Unpublished tribal data.

Tribal CPS contracts with 12 total foster homes, 3 of which are located within the Tribal Social Services Department service area and are licensed by the Tribe. The other nine homes are either licensed by the state or another TSS. According to data from Head Start, more than 1 in 10 children enrolled in 2019 were in foster care (13%). Over the course of 2019 and 2020, 603 children ages birth to 17 were placed as wards of the tribe. In 2020, about half of these children were placed in state foster homes (49%) (Figure 75). Just over 1 in 10 were placed in tribal foster homes located on the reservation (11%), in tribal foster homes located off the reservation (11%), with relatives other than parents (11%), and in residential care at Our Children's Shelter (16%). The low proportion of children placed with parents (2%) or other relatives (11%) is noticeably different from what had been reported in previous Needs and Assets reports for the region; in 2015, nearly two-thirds were placed with parents (36%) or other relatives (29%). Key informants were unable to speak to why this change occurred. This could be an area of focus in the region, since research shows that children in kinship care placements have better wellbeing, fewer mental health disorders, fewer behavioral problems, and less placement disruption than children in non-relative foster care.[343]

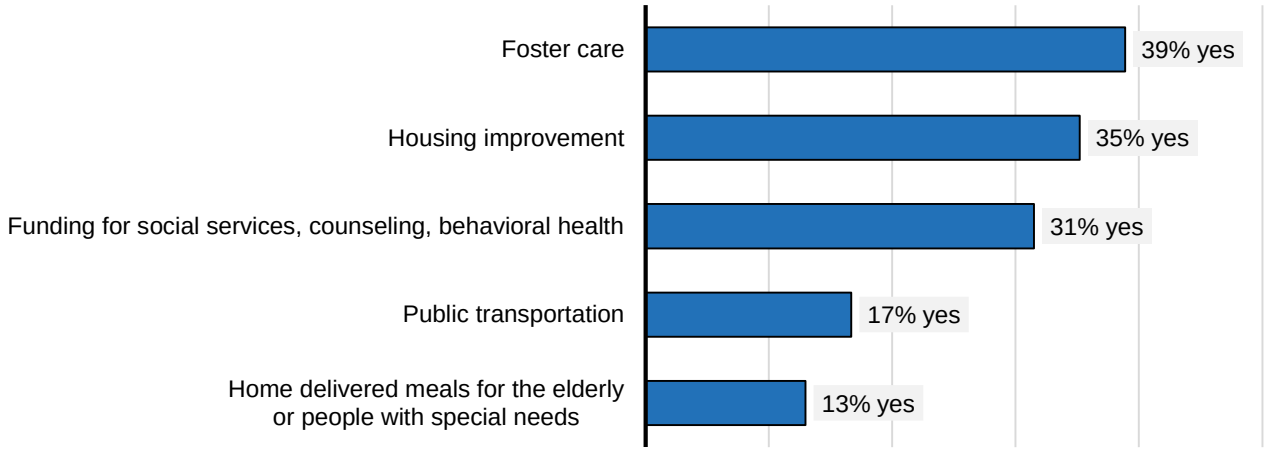
Figure 74. Placements of wards of the court (ages 0-17), 2019 to 2020



Source: White Mountain Apache Tribe Social Services Department (2021). [Child welfare dataset]. Unpublished tribal data.

The 2020-21 White Mountain Apache Tribe Head Start Community Assessment asked a question about the social services that should be given top priority for improvement in the region (Figure 75). The largest portion of parent and caregiver respondents chose foster care (39%). To better meet the needs of children in CPS, key informants indicated that more staff, better systems coordination, and technical assistance and training are needed. Staff said that CPS has strong relationships with Child Find, Head Start, AzEIP, and ABHS but could benefit from more feedback from partners about how they could better support families. Staff also suggested that it could be helpful to set up a system of communication with other Tribes to learn about best practices and share how each agency is using their funding and managing issues that may arise. It was also noted that more foster homes are needed on the reservation, but that recruitment of foster families can be challenging. One positive change to the region's child welfare system has been the addition of 2 new employees, bringing the total to 6 CPS workers. Informants noted that the increased capacity has made a significant impact. The fact that case managers are members of the community with a deep understanding of family life and the resources available locally is also seen as an asset to the region.

Figure 75. Positive responses to questions on which social services should be given top priority for improvement, Head Start community assessment, 2020-21



Source: White Mountain Apache Tribe Head Start (2021). [Community Assessment dataset]. Unpublished tribal data received by request.

Data on the number of juvenile and domestic violence-related reports from the White Mountain Apache Tribe Police Department were not available for this report. Additional data tables related to

Family Support and Literacy can be found in Appendix 1 at the end of this report.

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 White Mountain Apache Tribe Region. The data presented in this report, both quantitative and qualitative, show that the region has substantial strengths. The following sections highlight some of the White Mountain Apache Tribe Region's many strengths:

Population Characteristics

- Many young children in the region live in their grandparent's household. Multigenerational families may pass on cultural values and help support young parents. This may have been especially helpful when early care and education centers closed during the pandemic.
- Fewer households in the region are considered "limited-English-speaking" than across all Arizona reservations. Almost half of the White Mountain Apache Tribe Region's population is proficiently bilingual.
- There are multiple programs for language preservation and revitalization in the region, including a strong curriculum in the Whiteriver Unified School District.

Economic Circumstances

- Local efforts to build food sovereignty and restore traditional food ways in the community include N'dee Bikiyaa (the People's Farm), the newly-opened Café Gozhóó, and a Childhood Food Security Committee.
- Several federal nutrition assistance programs support the food needs of many young children in the region, including Supplemental Nutrition Assistance Program (SNAP), free and reduced-price lunch, the Summer Food Service Program (SFSP), and Child and Adult Care Feeding Program (CACFP).
- Schools in the region continued to provide meals to young children in the region during the COVID-19 pandemic through SFSP. A significant number of meals were delivered via bus routes, eliminating potential transportation barriers.
- A high portion of housing units are owned, and residents of the region have a lower housing cost burden than residents of the state as a whole. White Mountain Apache Housing Authority (WMAHA) has received significant funding for new construction, housing rehabilitation, and needed infrastructure. This included 8 transitional housing units that were used for emergency COVID-19-isolation.
- Pandemic CARES act funding helped to expand rural and Tribal broadband access as well as provide WiFi hotspots and devices to children enrolled in schools in the region. During the

pandemic, local programs were creative and proactive in order to stay connected with families with diverse communication needs.

Educational Indicators

- The drop-out rate for students enrolled in schools in the region are decreasing.
- Apache Behavioral Health Service's (ABHS) EVOLVD Living with Purpose and Rainbow Treatment Center's (RTC) scholarship programs may help parents in the region return to school.

Early Learning

- There are a number of high-quality early care and education providers in the region, all of which are enrolled in Quality First (QF). There is capacity for all 4-year-olds to be enrolled in early education programs.
- Educational attainment of teachers and staff providing early care and education is a considerable asset in the region. Early care and education staff may be eligible for First Things First college scholarships, and programs in the region also have professional development requirements. The early childhood program at Alchesay High School and Alchesay Beginnings Child Development Center is allowing high school students to graduate with a CDA credential and be hired right out of high school, contributing to the high education attainment of early childhood teachers in the region.
- There is a wide continuum of services available to serve children with special developmental and health care needs in the region. A major strength of the services for children with special developmental and health care needs in the region is the dedication of providers to coordinate with each other as well as advertise their services and reduce barriers to access as possible.

Child Health

- Breastfeeding rates in the region for infants enrolled in WIC are increasing slightly. Twenty-eight percent of infants were breastfed for 6 months, and 11.8% were fully breastfed. Several programs in the region support breastfeeding, including the Indian Health Service's Baby Friendly Hospital Initiative and breastfeeding-friendly policies at the local child care centers.
- It is a major asset that dental screenings and varnishes are provided at early care and education centers in the region. Importantly, Indian Health Services (IHS) is also expanding community dental services to children who are not enrolled in these programs, live in rural areas, and may lack reliable transportation.
- More than two-thirds of toddlers had completed their full immunization series on-time for their age group, which exceeded the IHS target of 45.9%. Young children enrolled in early care and education programs had even higher rates of immunization: 79% of children enrolled in White

Mountain Apache Tribe Head Start, 95.7% of children enrolled in child care centers and 100% of students enrolled in kindergarten had completed the 3 major vaccine series (DTAP, polio, and MMR). No children had religious or medical exemptions.

- Health fairs, WMAT Child Find screening events, and Head Start screening events remain important sources of health services and information for young children and their families. The inability to hold in-person events due to COVID-19 disrupted both important community events and professional meetings that helped coordinate health and education services for young children.

Family Support and Literacy

- Both the ABHS THRIVE: Birth to Five program and FACE program include parent education components. The Parents as Teachers (PAT) program, newly implemented by Arizona's Children Association (AzCA), also focuses on parenting behaviors to promote positive attachment and child development.

However, there continue to be substantial challenges to fully serving the needs of young children throughout the region. Many of these have been recognized as ongoing issues by the White Mountain Apache Tribe Regional Partnership Council and are being addressed by current First Things First-supported strategies in the region. Some of these needs, and the strategies proposed to deal with them, are highlighted below:

Population Characteristics

- Most families in the region do not primarily speak Apache at home, which makes language revitalization among the younger generation more difficult. Key informants suggested that strategies other than school-based language programs may be needed to increase the use of Apache in community and home settings.

- The poverty rate for grandparents raising grandchildren is higher in the region than across all Arizona reservations.

Economic Circumstances

- More than 4 out of 5 young children in the region are estimated to live in households with incomes under 185% of the poverty level, a threshold commonly used for safety net benefits. Despite high levels of child poverty, enrollment in social safety net benefits is low and/or declining, indicating that many families with young children may not have their food and other essential needs met. The number of children receiving Tribal TANF in the region decreased 78% between 2017 and 2020. Enrollment in the White Mountain Apache Tribe WIC program also fell at a steeper rate in 2019-20.

- The average unemployment in the region rate exceeds the unemployment rate across all Arizona reservations. Spurred by the pandemic, the number of unemployment claims jumped substantially, and only a small portion of claims were found eligible and paid. This suggests there may be widespread economic challenges in families with lost incomes who requested but did not receive unemployment benefits.

- A shortage of housing in the region may be leading to families living together instead of renting or owning their own homes. The number of young children living "doubled up" increased from SY2017-18 to SY2019-20. There is also a significant waiting list for low-income housing units.

- Lack of transportation was cited as reason for poor attendance of community events, medical appointments and follow-up care. Tribally-operated shuttle services were also paused during the pandemic. Exploring ways to provide additional transportation opportunities would benefit families in the region who struggle to keep appointments, participate in community events and take advantage of the services available to them due to lack of transportation.

- Children in the region were less prepared for the transition to remote schooling due to low device and internet access.

Educational Indicators

- There are high rates of chronic absences in local schools, and a small percentage of students passed the AzMERIT assessments in English language arts and math.

- Just under a third of adults in the region have less than a high school degree. Mothers of babies born in 2019 had lower levels of education than the overall adult population in the region. Parental educational attainment has been shown to influence child educational outcomes, so programs assisting parents in going back to school could be a benefit to the region.

Early Learning

- There are a very limited number of child care slots for infants and toddlers in the region. Only one daycare in the region accepts DES subsidies, which may limit the number of families who can use this benefit. However, key informants felt the largest barrier to children enrolling in early care and education is a lack of parental knowledge about the benefits of these services.

- A high percentage of parents and caregivers surveyed in Head Start Community Assessments indicated that they rely on informal care arrangements for additional child care support. Providing additional training and support for home care providers could improve access to quality care for young children in the region.

- A disparately high number of young children in the region, between 25% and 30%, have mild to moderate developmental delays but do not meet thresholds for publicly-funded early intervention

services. Key informants in the region expressed concern for children who do meet eligibility requirements for special needs services.

- While there are many resources available in the region, families do not always seek them out. Key informants felt that younger and teenage parents are less likely to understand the importance of developmental screening and access to early intervention services. Another significant barrier is the requirement for a legal guardian to sign off on referrals, which especially affects young children in informal kinship care arrangements. To address parental hesitance, informants suggested introducing a community campaign that reframes a special needs diagnosis as an opportunity for the child to become more successful, highlighting the benefits of services that become available to the child and their family and the difference they can make in their lives.

Child Health

- Rates of mothers accessing prenatal care in the first trimester of pregnancy were low, and a high percentage of women had fewer than 5 prenatal care visits, suggesting that many women in the region are not getting sufficient prenatal care.

- With regard to perinatal health, babies born in the White Mountain Apache Tribe Region were doing slightly worse than babies born statewide. More babies in the region were born preterm, born low birthweight, or admitted to the neonatal intensive care unit (NICU) than across all Arizona reservations. Over a 4.5-year period, 114 newborns were hospitalized due to maternal drug use during pregnancy.

- There are high rates of developmental delay and speech and language impairments in the region. There is a particular need for continued services and outreach around speech language pathology and hearing services.

- Obesity is increasing in the region. More than a quarter of young children are obese, and many mothers giving birth have gestational diabetes and obesity. Diabetes and obesity prevention remain a continued need in the community.

- In the past, regular meetings held through Tribal Child Find's Early Childhood Coalition and monthly collaboration meetings held by the speech pathologist were key to sharing concerns and developments related to early childhood in the region. New lines of communication between providers need to be established after the pandemic.

Family Support and Literacy

- More than two-thirds of caregivers indicated that they read to their child once a week or less.

- There is a need for more activities for young children and their families, particularly in the summer and after-school hours. A variety of community spaces and activities could support child development, physical activity, and positive family interactions.

- A lack of parental involvement was named as a major challenge for service providers in the region. Parents and caregivers indicated there is need for a fatherhood program. Topics recommended for parent education are: love and discipline, positive parenting skills, child behaviors, teacher strategies for behavior problems with preschoolers and at-risk factors that influence child success in school.

- High rates of alcohol and substance abuse remain a serious challenge in the region. Tribally-operated Rainbow Treatment Center (RTC) provides culturally-centered preventive and treatment services for substance abuse disorders.

- The 2020-21 White Mountain Apache Tribe Head Start Community Assessment asked a question about the social services that should be given top priority for improvement in the region. The largest portion of parent and caregiver respondents chose foster care (39%). To better meet the needs of children in CPS, key informants indicated that more staff, better systems coordination, and technical assistance and training are needed. More CPS staff and foster homes are needed to support the region's child welfare system.

- Pandemic disruptions resulted in fewer opportunities for educators, health care professionals, and other key social service providers to identify and report child maltreatment. Both substantiated cases of child abuse and neglect and the number of children removed by Tribal Child Protective Services (CPS) declined significantly from 2019 to 2020.

- The low proportion of children placed with parents or other relatives (13%) is noticeably different from what had been reported in previous Needs and Assets reports for the region; in 2015 nearly two-thirds were placed with parents or other relatives (65%).This could be an area of focus in the region, since research shows that children in kinship care placements have better wellbeing, fewer mental health disorders, fewer behavioral problems, and less placement disruption than children in non-relative foster care

- Key informants in the region were concerned that child welfare and police resources may not be sufficient to meet the demand for their intervention in the region.

Although families with young children in the region continue to face challenges, the White Mountain Apache Tribe has substantial strengths that can be leveraged to support the parents and caregivers of its youngest members. With the continued coordination and collaboration between the multiple programs available in the region and emphasis on the cultivation of healthy cultural values, children in the region will be able to grow up healthy and begin at school ready to learn.

APPENDIX 1: ADDITIONAL DATA TABLES

Population Characteristics

Table 46. Number of babies born, 2015 to 2019

Geography	2014	2015	2016	2017	2018	2019
White Mountain Apache Tribe Region	305	302	311	314	261	237
All Arizona Reservations	2,640	2,510	2,460	2,340	1,990	2,180
Arizona	86,648	85,024	84,404	81,664	80,539	79,183

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 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.

Table 47. Race and ethnicity of the population of all ages, 2015-2019 ACS

Geography	Estimated population (all ages)	Hispanic or Latino	White, not Hispanic or Latino	Black or African-American	American Indian or Alaska Native	Asian or Pacific Islander	Two or more races
White Mountain Apache Tribe Region	**15,487**	**2%**	**1%**	**0%**	**96%**	**1%**	**1%**
Canyon Day	1,629	2%	0%	0%	99%	0%	1%
Cedar Creek	517	0%	0%	0%	100%	0%	0%
Cibecue	2,173	1%	0%	0%	98%	1%	1%
East Fork-Ft Apache-Seven Mile-Turkey Creek	2,263	2%	1%	0%	98%	0%	1%
Hondah-McNary	1,606	5%	2%	2%	91%	1%	2%
North Fork	1,676	1%	2%	0%	87%	3%	7%
Rainbow City	1,041	7%	0%	0%	92%	3%	2%
Whiteriver	4,296	2%	1%	0%	98%	0%	0%
Remainder of the Region	286	2%	9%	0%	89%	1%	0%
All Arizona Reservations	185,988	6%	4%	0%	90%	1%	2%
Arizona	7,050,299	31%	55%	5%	5%	4%	4%
United States	324,697,795	18%	61%	13%	1%	6%	3%

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) persons reporting Hispanic ethnicity are counted twice if their race is Black, American Indian, Asian, Pacific Islander, or any combination of two or more races, (b) persons reporting any other race are not counted here unless they have Hispanic ethnicity, and (c) rounding.

Table 48. 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
White Mountain Apache Tribe Region	**1,515**	**2%**	**0%**	**0%**	**96%**	**2%**	**2%**
Canyon Day	254	0%	0%	0%	100%	0%	0%
Cedar Creek	53	0%	0%	0%	100%	0%	0%
Cibecue	249	4%	0%	0%	96%	0%	4%
East Fork-Ft Apache-Seven Mile-Turkey Creek	166	0%	0%	0%	100%	0%	0%
Hondah-McNary	95	1%	0%	0%	99%	0%	1%
North Fork	184	0%	0%	0%	79%	15%	7%
Rainbow City	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Whiteriver	429	2%	0%	0%	98%	0%	0%
Remainder of the Region	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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.

Note: Due to sample size limitations, reliable estimates for Rainbow City and Remainder of the Region could not be provided.

Table 49. 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
White Mountain Apache Tribe Region	**1,828**	**37%**	**55%**	**8%**	**1%**
Canyon Day	310	28%	72%	0%	0%
Cedar Creek	80	88%	0%	13%	0%
Cibecue	338	38%	48%	14%	0%
East Fork-Ft Apache-Seven Mile-Turkey Creek	194	42%	51%	7%	0%
Hondah-McNary	136	48%	52%	0%	0%
North Fork	184	21%	72%	7%	0%
Rainbow City	78	32%	49%	19%	0%
Whiteriver	481	36%	54%	7%	3%
Remainder of the Region	N/A	N/A	N/A	N/A	N/A
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 stepparents but not cohabitating partners.

Note: Due to sample size limitations, a reliable estimate for Remainder of the Region could not be provided.

Table 50. Children ages birth to 5 living with foreign-born parent(s), 2015-2019 ACS

Geography	Estimated number of children (birth to 5 years old) living with one or two parents	Number and percent living with one or two foreign-born parents	
White Mountain Apache Tribe Region	**1,673**	**0**	**0%**
Canyon Day	310	0	0%
Cedar Creek	70	0	0%
Cibecue	290	0	0%
East Fork-Ft Apache-Seven Mile-Turkey Creek	180	0	0%
Hondah-McNary	136	0	0%
North Fork	172	0	0%
Rainbow City	63	0	0%
Whiteriver	432	0	0%
Remainder of the Region	N/A	N/A	N/A
All Arizona Reservations	16,370	277	2%
Arizona	494,590	126,082	25%
United States	22,727,705	5,631,005	25%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B05009

Note: The term "parent" here includes stepparents but not cohabitating partners. Due to sample size limitations, a reliable estimate for Remainder of the Region could not be provided.

Table 51. 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
White Mountain Apache Tribe Region	**13,972**	**49%**	**1%**	**50%**
Canyon Day	1,375	43%	0%	57%
Cedar Creek	464	50%	0%	50%
Cibecue	1,924	45%	0%	55%
East Fork-Ft Apache-Seven Mile-Turkey Creek	2,097	47%	1%	52%
Hondah-McNary	1,511	62%	5%	33%
North Fork	1,492	51%	0%	49%
Rainbow City	976	51%	5%	44%
Whiteriver	3,867	49%	1%	50%
Remainder of the Region	266	28%	2%	70%
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 52. 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
White Mountain Apache Tribe Region	**13,972**	**49%**	**47%**	**4%**
Canyon Day	1,375	43%	53%	4%
Cedar Creek	464	50%	40%	10%
Cibecue	1,924	45%	46%	9%
East Fork-Ft Apache-Seven Mile-Turkey Creek	2,097	47%	49%	4%
Hondah-McNary	1,511	62%	37%	2%
North Fork	1,492	51%	47%	3%
Rainbow City	976	51%	44%	5%
Whiteriver	3,867	49%	48%	3%
Remainder of the Region	266	28%	60%	12%
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 53. Limited-English-speaking households, 2015-2019 ACS

Geography	Estimated number of households	Number and percent of limited-English-speaking households	
White Mountain Apache Tribe Region	**3,451**	**160**	**5%**
Canyon Day	333	13	4%
Cedar Creek	112	13	12%
Cibecue	393	44	11%
East Fork-Ft Apache-Seven Mile-Turkey Creek	483	12	2%
Hondah-McNary	390	12	3%
North Fork	423	11	3%
Rainbow City	241	0	0%
Whiteriver	972	45	5%
Remainder of the Region	104	10	10%
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 54. Attitudes toward culture and language in Head Start, Head Start Community Assessment 2020-21

	Number of responses	Share of responses
Are you aware that the Apache language and culture is taught in Head Start?	44	81%
Would you like more culture/language in the Head Start curriculum?	45	92%

Source: White Mountain Apache Tribe Head Start Program (2021). Head Start Community Needs Assessment. Report received by request.

Table 55. Number of English Language Learners enrolled in kindergarten to third grade, 2017 18 to 2019 20

Geography	Kindergarten to third-grade English Language Learners, 2017-18	Kindergarten to third-grade English Language Learners, 2018-19	Kindergarten to third-grade English Language Learners, 2019-20
White Mountain Apache Tribe Region schools	**28**	**12**	**12**
Off-Reservation Schools serving White Mountain Apache students (All Students)	35	38	34
Arizona schools	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.
Notes: English Language Learners are students who do not score 'proficient' in the English language based on the Arizona English Language Learning Assessment (AZELLA) and thus are eligible for additional supportive services for English language acquisition. Legislation in Arizona requires children in Arizona public schools be taught in English, and English Language Learners to attend English immersion programs. Senate Bill 1014 passed in 2019, increased the flexibility districts have in structuring English Language Learners immersion programs, and lessened the duration required of this instruction. For more information see https://www.azed.gov/oelas/structured-english-immersion-models

Table 56. Family relationships for respondents to Head Start Community Assessment, 2020-21

	Number of 'Yes' responses	Share of responses
Are you the mother of a child in Head Start?	37	53%
Are you the father of a child in Head Start?	22	31%
Are you the grandparent of a child in Head Start?	<10	6%
Are you a relative other than those above?	<10	4%
You are not related but you are the legal guardian of the Head Start Child?	<10	6%

Source: White Mountain Apache Tribe Head Start Program (2021). Head Start Community Needs Assessment. Report received by request.

Table 57. 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	
White Mountain Apache Tribe Region	**1,828**	**608**	**33%**
Canyon Day	310	97	31%
Cedar Creek	80	34	43%
Cibecue	338	85	25%
East Fork-Ft Apache-Seven Mile-Turkey Creek	194	68	35%
Hondah-McNary	136	24	18%
North Fork	184	95	52%
Rainbow City	78	42	54%
Whiteriver	481	149	31%
Remainder of the Region	N/A	N/A	N/A
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. Due to sample size limitations, a reliable estimate for Remainder of the Region could not be provided.

Table 58. 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
White Mountain Apache Tribe Region	**496**	**67%**	**41%**	**44%**	**5%**	**30%**
Canyon Day	53	62%	49%	45%	0%	42%
Cedar Creek	35	63%	26%	60%	14%	0%
Cibecue	33	70%	33%	70%	0%	0%
East Fork-Ft Apache-Seven Mile-Turkey Creek	42	88%	29%	40%	26%	40%
Hondah-McNary	66	56%	44%	67%	0%	18%
North Fork	64	67%	67%	0%	16%	48%
Rainbow City	50	62%	22%	38%	0%	62%
Whiteriver	146	68%	41%	45%	0%	21%
Remainder of the Region	N/A	N/A	N/A	N/A	N/A	N/A
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. Reliable estimates were not available for the Remainder of the Region sub-region due to sample size limitations.

Economic Circumstances

Table 59. 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
White Mountain Apache Tribe Region	**$33,900**	**$48,600**	**$31,500**	**$17,500**
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.

Note: Data on median family income is not available at the sub-regional level.

Table 60. 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
White Mountain Apache Tribe Region	**15,103**	**43%**	**1,814**	**51%**
Canyon Day	1,620	58%	310	77%
Cedar Creek	517	57%	80	43%
Cibecue	1,933	66%	338	67%
East Fork-Ft Apache-Seven Mile-Turkey Creek	2,256	34%	194	30%
Hondah-McNary	1,604	31%	136	10%
North Fork	1,676	19%	184	27%
Rainbow City	1,041	45%	78	49%
Whiteriver	4,170	45%	467	56%
Remainder of the Region	286	34%	27	26%
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 61. Children ages birth to 5 living at selected poverty thresholds, 2015-2019 ACS

Geography	Estimated number of children (birth to 5 years old) who live with parents or other relatives	Percent of children under 50% of the poverty level	Percent of children between 50% and 99% of the poverty level	Percent of children between 100% and 184% of the poverty level	Percent of children at or above 185% of the poverty level
White Mountain Apache Tribe Region	**1,814**	**34%**	**17%**	**30%**	**18%**
Canyon Day	310	64%	14%	15%	7%
Cedar Creek	80	0%	43%	33%	25%
Cibecue	338	41%	27%	8%	25%
East Fork-Ft Apache-Seven Mile-Turkey Creek	194	23%	7%	51%	19%
Hondah-McNary	136	10%	0%	60%	30%
North Fork	184	27%	0%	27%	46%
Rainbow City	78	33%	15%	19%	32%
Whiteriver	467	31%	25%	39%	5%
Remainder of the Region	27	26%	0%	74%	0%
All Arizona Reservations	17,906	31%	20%	24%	25%
Arizona	508,453	11%	13%	22%	54%
United States	23,253,254	9%	11%	19%	60%

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.

Table 62. Families with children ages birth to 5 receiving TANF, state fiscal years 2016 to 2020

Geography	Households with one or more children (ages 0-5)	Number of families with children (ages 0-5) participating in TANF					Percent of households with young children (ages 0-5) participating in TANF in SFY 2020
		SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	
White Mountain Apache Tribe Region	**1,267**	**47**	**41**	**39**	**16 to 20**	**10 to 18**	**DS**
Arizona	384,441	13,925	12,315	10,538	9,360	9,947	3%

Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P20.

Table 63. Children ages birth to 5 receiving TANF, state fiscal years 2016 to 2020

Geography	Number of young children (ages 0-5) in the population	Number of young children (ages 0-5) participating in TANF					Percent of young children (ages 0-5) participating in TANF in SFY 2020
		SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	
White Mountain Apache Tribe Region	**2,003**	**54**	**47**	**50**	**26**	**10 to 18**	**DS**
Arizona	546,609	18,968	17,143	14,659	13,029	13,747	3%

Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P14.

Table 64. Families participating in SNAP, state fiscal years 2016 to 2020

Geography	Households with one or more children (ages 0-5)	Number of families participating in SNAP					Percent of households with young children (0-5) participating in SNAP in SFY 2020
		SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	
White Mountain Apache Tribe Region	**1,267**	**1,199**	**1,138**	**1,087**	**1,025**	**945**	**75%**
Arizona	384,441	171,977	164,092	151,816	140,056	132,466	34%

Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P20.

Table 65. Children participating in SNAP, state fiscal years 2016 to 2020

Geography	Number of young children (ages 0-5) in the population	Number of children (0-5) participating in SNAP					Percent of young children (0-5) participating in SNAP in SFY 2020
		SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	
White Mountain Apache Tribe Region	**2,003**	**1,878**	**1,777**	**1,705**	**1,634**	**1,469**	**73%**
Arizona	546,609	258,455	247,414	229,275	211,814	198,961	36%

Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data. & U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P14.

Table 66. Children ages birth to 17 and birth to 5 receiving Pandemic EBT, March to May 2021

Geography	Children ages 0-17 receiving P-EBT			Children ages 0-5 receiving P-EBT		
	March 2021	April 2021	May 2021	March 2021	April 2021	May 2021
White Mountain Apache Tribe Region	9,520	9,526	9,520	518	477	418
Arizona	628,147	628,087	628,221	38,053	34,402	30,926

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

Table 67. Children (ages 0-4) enrolled in the White Mountain Apache Tribe WIC program, 2017 to 2020

	Children and infants in WIC, 2017	Children and infants in WIC, 2018	Children and infants in WIC, 2019	Children and infants in WIC, 2020
White Mountain Apache Tribe	**1,410**	**1,379**	**1,366**	**1,189**
All ITCA WIC programs	12,801	11,897	10,870	9,342

Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Table 68. Yearly participation rates in the White Mountain Apache Tribe WIC Program, 2017 to 2020

	Participation Rate (2017)	Participation Rate (2018)	Participation Rate (2019)	Participation Rate (2020)
White Mountain Apache Tribe	**96%**	**98%**	**96%**	**95%**
All ITCA WIC programs	90%	94%	91%	92%

Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Table 69. Percent of students eligible for free or reduced-price lunch, 2018 to 2020

	2017-18	2018-19	2019-20
White Mountain Apache Tribe schools	>98%	>98%	>98%
McNary Elementary School (K-8)	95%	98%	93%
Whiteriver Elementary (PS-5)	>98%	>98%	>98%
Canyon Day Junior High School	>98%	>98%	>98%
Cradleboard School (K-5)	>98%	>98%	>98%
Alchesay High School	98%	98%	98%
Seven Mile School (K-5)	>98%	>98%	>98%
Theodore Roosevelt School	>98%	>98%	>98%
John F Kennedy Day School	>98%	>98%	>98%
Dishchii'bikoh Community School	>98%	>98%	>98%
Blue Ridge Unified School District No 32 (all students)	49%	49%	56%
Arizona schools	57%	56%	55%

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

Table 70. Meals served through the Child and Adult Care Feeding Program (CACFP), 2018 to 2020

	2017-18	2018-19	2019-20
White Mountain Apache Tribe schools	59,786	69,862	32,136
Cibecue Head Start	7,149	5,998	3,795
Whiteriver Head Start	52,637	52,214	28,341
Alchesay Beginnings Child Development Center	0	11,650	0
Arizona schools	23,667,794	24,469,018	17,188,748

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

Table 71. Public assistance program participation, Head Start Community Assessment 2020-21

	Number of 'Yes' responses	Share of responses
Do you or your child receive AHCCCS?	38	70%
Are you or your child are on WIC?	32	59%
Do you receive nutrition assistance (SNAP)?	25	46%
Are you or your child on WIA or TANF?	0	0%
Do you receiving assistance (GA, SSI, SSA)?	0	0%

Source: White Mountain Apache Tribe Head Start Program (2021). Head Start Community Needs Assessment. Report received by request.

Table 72. Monthly unemployment insurance claims, Nov 2019 to Nov 2020

Month	White Mountain Apache Tribe Region			Arizona		
	Total claims (all outcomes)	Claims found eligible and paid	Percent of claims found eligible and paid	Total claims (all outcomes)	Claims found eligible and paid	Percent of claims found eligible and paid
Nov 2019	26	<10	DS	7,787	2,275	29%
Dec 2019	25	12	48%	7,906	2,312	29%
Jan 2020	35	18	51%	9,892	2,712	27%
Feb 2020	31	12	39%	7,185	1,919	27%
Mar 2020	74	42	57%	110,129	66,655	61%
Apr 2020	200	113	57%	186,217	93,529	50%
May 2020	129	51	40%	98,786	33,481	34%
Jun 2020	102	32	31%	94,720	30,465	32%
July 2020	86	24	28%	78,744	26,081	33%
Aug 2020	55	20	36%	46,360	16,028	35%
Sept 2020	53	<10	DS	39,660	9,464	24%
Oct 2020	60	17	28%	30,032	7,807	26%
Nov 2020	32	<10	DS	15,835	1,812	11%

Sources: Arizona Department of Economic Security (2021). [Unemployment Insurance dataset]. Unpublished data.

Table 73. 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
White Mountain Apache Tribe Region	**3,451**	**11%**	**2,103**	**7%**	**1,348**	**18%**
Canyon Day	333	11%	219	7%	114	19%
Cedar Creek	112	13%	101	14%	11	0%
Cibecue	393	19%	243	21%	150	16%
East Fork-Ft Apache-Seven Mile-Turkey Creek	483	10%	318	9%	165	11%
Hondah-McNary	390	16%	247	10%	143	27%
North Fork	423	7%	275	0%	148	20%
Rainbow City	241	6%	173	0%	68	21%
Whiteriver	972	10%	449	1%	523	18%
Remainder of the Region	104	0%	78	0%	26	0%
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.

Table 74. Homeless students (McKinney-Vento definition) enrolled in public and charter schools, 2017-18 to 2019-20

Geography	Total number of students enrolled			Number of homeless students			Percent of students who were homeless		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
White Mountain Apache Tribe schools	**2,334**	**2,399**	**2,467**	**<11**	**17**	**31**	**DS**	**1%**	**1%**
Blue Ridge Unified School District 32 (all students)	2,095	2,034	1,898	21	29	16	1%	1%	1%
Arizona	1,108,598	1,141,694	1,151,084	15,923	12,931	11,538	1%	1%	1%

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

Table 75. 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
White Mountain Apache Tribe Region	**3,451**	**30%**	**5%**	**25%**	**40%**
Canyon Day	333	35%	2%	25%	38%
Cedar Creek	112	35%	15%	23%	27%
Cibecue	393	30%	0%	29%	41%
East Fork-Ft Apache-Seven Mile-Turkey Creek	483	37%	5%	18%	41%
Hondah-McNary	390	31%	4%	29%	36%
North Fork	423	39%	4%	16%	41%
Rainbow City	241	22%	8%	39%	31%
Whiteriver	972	23%	6%	27%	44%
Remainder of the Region	104	15%	11%	15%	59%
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.

Table 76. Persons of all ages in households with and without computers and internet connectivity, 2015-2019 ACS

Geography	Estimated number of persons (all ages) living in households	Have a computer and internet	Have a computer but no internet	Do not have a computer
White Mountain Apache Tribe Region	**15,359**	**40%**	**29%**	**30%**
Canyon Day	1,629	57%	21%	22%
Cedar Creek	517	35%	52%	13%
Cibecue	2,173	43%	27%	30%
East Fork-Ft Apache-Seven Mile-Turkey Creek	2,263	49%	20%	31%
Hondah-McNary	1,606	45%	28%	27%
North Fork	1,676	38%	33%	28%
Rainbow City	1,041	25%	47%	28%
Whiteriver	4,185	32%	30%	37%
Remainder of the Region	269	25%	32%	42%
All Arizona Reservations	184,145	42%	23%	35%
Arizona	6,892,175	87%	7%	6%
United States	316,606,796	86%	7%	6%

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

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

Table 77. Children ages birth to 17 in households with and without computers and internet connectivity, 2015-2019 ACS

Geography	Estimated number of children (ages 0-17) living in households	Have a computer and internet	Have a computer but no internet	Do not have a computer
White Mountain Apache Tribe Region	**5,657**	**48%**	**30%**	**22%**
Canyon Day	815	61%	26%	13%
Cedar Creek	207	39%	57%	5%
Cibecue	1,090	58%	25%	17%
East Fork-Ft Apache-Seven Mile-Turkey Creek	709	52%	16%	32%
Hondah-McNary	502	48%	34%	18%
North Fork	442	44%	36%	20%
Rainbow City	330	27%	56%	17%
Whiteriver	1,497	39%	30%	30%
Remainder of the Region	65	28%	32%	40%
All Arizona Reservations	55,802	46%	24%	29%
Arizona	1,632,019	88%	8%	4%
United States	73,225,376	89%	7%	3%

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

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

Table 78. 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
White Mountain Apache Tribe Region	**6,199**	**75%**	**79%**	**0.0%**
Canyon Day	936	78%	78%	0.0%
Cedar Creek	181	76%	69%	0.0%
Cibecue	932	23%	89%	0.0%
East Fork-Ft Apache-Seven Mile-Turkey Creek	1,107	90%	76%	0.0%
Hondah-McNary	721	81%	88%	0.0%
North Fork	644	100%	73%	0.0%
Rainbow City	261	61%	100%	0.0%
Whiteriver	1,349	81%	68%	0.0%
Remainder of the Region	68	100%	81%	0.0%
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.

Educational Indicators

Table 79. Trends in graduation rates, 2017 to 2019

	Four-year graduation rates			Five-year graduation rates		
	2017	2018	2019	2017	2018	2019
White Mountain Apache Tribe schools	56%	67%	64%	60%	71%	70%
Alchesay High School	56%	67%	64%	60%	71%	70%
Blue Ridge Unified School District No 32 (American Indian students)	78%	73%	85%	77%	70%	83%
Arizona schools (American Indian students)	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 (CRED) team

Table 80. Trends in dropout rates, 2017 to 2019

	2017	2018	2019
White Mountain Apache Tribe schools	12%	8%	7%
McNary Elementary School (K-8)	0%	0%	3%
Canyon Day Junior High School	9%	5%	8%
Alchesay High School	17%	13%	8%
Arizona schools (American Indian students)	9%	7%	5%
Arizona schools	5%	4%	3%

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

Table 81. 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
White Mountain Apache Tribe Region	**2018**	**261**	**39%**	**40%**	**21%**
	2019	**237**	**41%**	**39%**	**20%**
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.

Early Learning

Table 82. White Mountain Apache Tribe Head Start Waitlist, 2017 to 2020

	2017	2018	2019	2020
Total number of children on waiting list	<10	<10	<10	<10
Number of children on waiting list with an IEP	0	0	0	0
Number of incomplete applications	<10	<10	<10	<10
Over income applications	0	0	0	0
3-year-old applications	<10	<10	<10	<10

Source: White Mountain Apache Tribe Head Start (2020). [Waitlist data]. Unpublished data received by request

Table 83. School enrollment for children ages 3 to 4, 2015-2019 ACS

Geography	Estimated number of children (3 or 4 years old)	Number and percent enrolled in school	
White Mountain Apache Tribe Region	**621**	**177**	**29%**
Canyon Day	106	10	9%
Cedar Creek	N/A	N/A	N/A
Cibecue	108	26	24%
East Fork-Ft Apache-Seven Mile-Turkey Creek	66	14	21%
Hondah-McNary	N/A	N/A	N/A
North Fork	105	35	33%
Rainbow City	N/A	N/A	N/A
Whiteriver	175	65	37%
Remainder of the Region	N/A	N/A	N/A
All Arizona Reservations	6,575	2,836	43%
Arizona	183,386	71,233	39%
United States	8,151,928	3,938,693	48%

Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B14003

Note: In this table, "school" may include nursery school, preschool, or kindergarten. Reliable estimates were not available for Cedar Creek, Honday-McNary, Rainbow City, or Remainder of the Region due to sample size limitations.

Table 84. 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
White Mountain Apache Tribe Region	**131**	**106**	**58**	**30**	**28**	**22**	**23%**	**26%**	**38%**
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.

Table 85. 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
White Mountain Apache Tribe Region	**19**	**26**	**1 to 9**	**1 to 9**	**N/A**
Arizona	5,520	6,123	4,005	4,078	-26%

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

Table 86. 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
White Mountain Apache Tribe Region	**39**	**29**	**-26%**	**1,046**	**2.8%**
Arizona	6,376	5,721	-10%	270,519	2.1%

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

Table 87. Children ages 3-5 with disabilities identified by Child Find by disability type, FY2018 and FY2019

	Developmental delay	Speech or language impairments	Hearing impairments	Visual impairments	Orthopedic impairment	Other health impairments	Other disabilities
FY 2018	32%	31%	6%	4%	5%	6%	16%
FY 2019	35%	31%	9%	8%	4%	6%	6%

Source: White Mountain Apache Tribe Child Find (2021). [Child Find data]. Unpublished tribal data received by request.

Note: Other disabilities include intellectual disability, emotional disturbance, multiple disabilities (FY2018 only), autism, and traumatic brain injury

Table 88. Preschoolers with a disability enrolled in White Mountain Apache Tribe schools by primary disability, 2017-18 to 2019-20

School year	Developmental delay	Preschool severe delay	Speech or language impairment	Other disabilities
2017-18	48%	17%	30%	4%
2018-19	53%	27%	13%	7%
2019-20	42%	33%	25%	<2%

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

Child Health

Table 89. Health insurance coverage, 2015-2019 ACS

Geography	Estimated civilian non-institutionalized population (all ages)	Without health insurance (all ages)	Estimated number of children (ages 0-5)	Without health insurance (ages 0-5)
White Mountain Apache Tribe Region	**15,366**	**13%**	**1,828**	**6%**
Canyon Day	1,629	7%	310	0%
Cedar Creek	517	23%	80	26%
Cibecue	2,173	11%	338	10%
East Fork-Ft Apache-Seven Mile-Turkey Creek	2,263	22%	194	7%
Hondah-McNary	1,606	19%	136	21%
North Fork	1,676	13%	184	0%
Rainbow City	1,041	6%	78	0%
Whiteriver	4,175	10%	481	0%
Remainder of the Region	286	22%	27	74%
All Arizona Reservations	185,032	22%	18,201	17%
Arizona	6,941,028	10%	517,639	7%
United States	319,706,872	9%	23,653,661	4%

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.

Table 90. Access to health care for children enrolled in White Mountain Apache Tribe Head Start, FY2019

	Children (ages 0-5) enrolled in Head Start or Early Head Start	Children with health insurance coverage	Children with ongoing source of accessible health care	Children receiving IHS medical services	Children up to date on primary and preventative care
White Mountain Apache Tribe Region	**258**	**100%**	**100%**	**100%**	**0%**

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

Note: Access to care in this table is as measured at the start of the enrollment year.

Table 91. Pre-pregnancy weight status for mothers enrolled in WIC, 2018

Geography	Women With BMI Determined	Underweight	Obese
White Mountain Apache Tribe	225	0.4%	39%
All ITCA WIC programs	2,184	2%	49%

Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Table 92. Pre-pregnancy obesity rates for mothers enrolled in WIC, 2014 to 2018

Geography	Maternal Obesity (2014)	Maternal Obesity (2015)	Maternal Obesity (2016)	Maternal Obesity (2017)	Maternal Obesity (2018)
White Mountain Apache Tribe	34%	40%	41%	44%	39%
All ITCA WIC programs	44%	46%	47%	48%	49%

Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Table 93. 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
White Mountain Apache Tribe Region	**2018**	**261**	**13.0%**	**13.8%**	**11%**
	2019	**237**	**13.5%**	**11.4%**	**12%**
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.

Table 94. Percent of WIC-enrolled infants ever breastfed, 2016 to 2020

Geography	2017	2018	2019	2020
White Mountain Apache Tribe	76%	69%	77%	72%
All ITCA WIC programs	65%	66%	71%	69%

Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Table 95. Percent of WIC-enrolled infants breastfed at 6 months, 2016 to 2020

Geography	2017	2018	2019	2020
White Mountain Apache Tribe	25%	30%	27%	28%
All ITCA WIC programs	24%	25%	26%	23%

Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Table 96. Weight status of WIC-enrolled children (ages 2-4), 2018

Geography	Children (Ages 2-4) For Whom Weight Determined (2018)	Underweight (2018)	Obese (2018)
White Mountain Apache Tribe	579	3%	28%
all ITCA WIC programs	4,176	2%	23%

Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Table 97. Obesity rates for WIC-enrolled children (ages 2-4), 2014 to 2018

Geography	2014	2015	2016	2017	2018
White Mountain Apache Tribe	23%	24%	24%	27%	28%
All ITCA WIC programs	23%	23%	23%	23%	23%

Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Table 98. Kindergarten immunization exemption rates, 2015 16 to 2019 20

	Kindergarteners with personal belief exemptions					Kindergarteners exempt from all vaccines				
Geography	2015-16	2016-17	2017-18	2018-19	2019-20	2015-16	2016-17	2017-18	2018-19	2019-20
White Mountain Apache Tribe Region	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Arizona	4.5%	4.9%	5.4%	5.9%	5.4%	1.8%	2.4%	3.5%	3.8%	3.4%

Source: Arizona Department of Health Services (2021). Kindergarten 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). Kindergarten 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

Table 99. 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
White Mountain Apache Tribe Region	**10**	**391**
Arizona	2,890	181,035

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

Family Support and Literacy

Table 100. Substantiated cases of child abuse or neglect, 2019 and 2020

	2019	2020
White Mountain Apache Tribe Region	**205**	**127**

Source: White Mountain Apache Tribe Social Services Department (2021). [Child welfare dataset]. Unpublished tribal data.

Table 101. Children removed by Tribal Child Protective Services, 2019 and 2020

	2019	2020
White Mountain Apache Tribe Region	**177**	**122**

Source: White Mountain Apache Tribe Social Services Department (2021). [Child welfare dataset]. Unpublished tribal data.

Table 102. Children (ages birth to 17) placed as wards of the court, 2019 and 2020

	2019	2020
Total placements	263	340
In state foster homes	52%	49%
In tribal foster homes off-reservation	15%	11%
In tribal foster homes on-reservation	10%	11%
With parents	0%	2%
With relatives	3%	11%
In residential treatment (OCS)	12%	16%
Apache Behavioral Health Services	6%	0%
In jail	0%	0%
Other	2%	0%

Source: White Mountain Apache Tribe Social Services Department (2021). [Child welfare dataset]. Unpublished tribal data.

Table 103. Foster care availability, 2019

	Calendar Year 2019
Foster homes used by Tribal Social Services	12
Foster homes licensed by WMAT Tribal Social Services	3

Source: White Mountain Apache Tribe Social Services Department (2021). [Child welfare dataset]. Unpublished tribal data.

Note: Foster homes used by Tribal Social Services are mostly located off the reservation. These homes are licensed by WMAT TSS, other tribes' social services departments, or the state of Arizona.

Table 104. Number of deaths with opiates or opioids contributing, 2017 through 2020

Geography	Number of deaths with opiates or opioids contributing, 2017 through 2020
White Mountain Apache Tribe Region	**0 to 5**
Arizona	5,455

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

Note: Over a third (35%) of overdose deaths were missing address information, so they could not be accurately assigned to a First Things First region. These deaths are reflected in county numbers.

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 requested from various White Mountain Apache Tribe departments and agencies with approval from the White Mountain Apache Tribal Council by Resolution Number 11-2019-233, 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[344] is an enumeration of the population of the United States. It is conducted every ten years, and includes information about housing, race, and ethnicity. The 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 White Mountain Apache Tribe Region presented in this report are drawn from the Census Geography for the Fort Apache Reservation. 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).[345]

The American Community Survey (ACS)[346] is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-to-face interviews. It covers many different topics, including income, language, education, employment, and housing. 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 White Mountain Apache Tribe Region were also drawn from the Census Geography for the Fort Apache Reservation. 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 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 in the region based on the school's physical location within the region as well as local knowledge as to whether any schools located outside the region served a substantial number of children living within the region. This list was used to assign schools and districts to the region as well to aggregate school-level data to the region-level. This methodology differs slightly from the methods that ADE uses to allocate school-level data to counties, so county and region totals may vary in some tables. Data were presented over time where available; however, due to changes in the ADE data system and business rules over the past 3 years, some indicators could not be presented as a time series.

Indian Health Service Data

The Indian Health Service (IHS) provided data to be included in this report through a special request submitted by First Things First. These data cover fiscal year (FY) 2019 (October 2018 to September 2019) and represent patients who were 'active users' during FY 2019, meaning that they accessed IHS services within the 3 prior years. Active users were assigned to First Things First regions based on their place of residence. Users who reported that they resided within the White Mountain Apache Reservation were assigned to the White Mountain Apache Tribe Region by IHS for the data included in this report. It is important to note that the methodology that IHS used to compile data for this report differs from that used for the 2018 White Mountain Apache Tribe Regional Needs and Assets Report. In 2018, the data provided by IHS were based on the patient's tribal affiliation and location where services were received, not their place of residence. Because the IHS data included in the 2022 and 2018 reports represent different populations, they should not be compared or used to determine trends overtime.

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 6. 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 6; the Arizona Department of Economic Security (DES) does not report counts between 1 and 9; and the Arizona Department of Education (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."

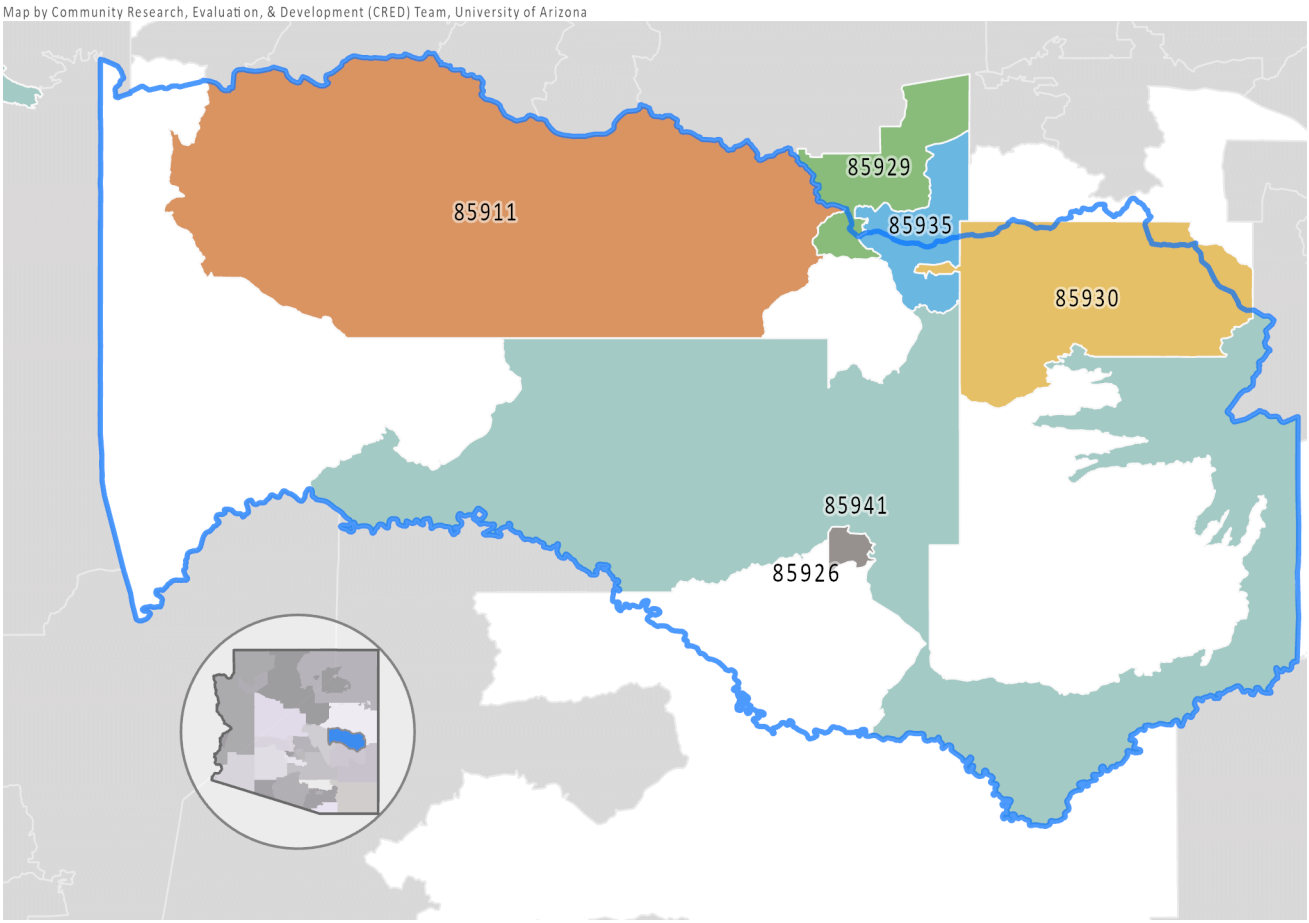
For some data, an exact number was not available because it was the sum of several numbers provided by a state agency, and some numbers were suppressed in accordance with agency guidelines or because the number was suppressed as a second-smallest value that could be used to calculate a suppressed value. 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 1 and 9, so the possible range of values is the sum of the 2 known numbers plus 1 on the lower bound to the sum of the 2 known numbers plus 9 on the upper bound. Ranges that include numbers below the suppression threshold of less than 6 or 10 may still be included if the upper limit of the range is above 6 or 10. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.

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 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 Tribal Council prior to publication.

APPENDIX 3: ZIP CODES OF THE WHITE MOUNTAIN APACHE TRIBE REGION

Figure 76. Zip Code Tabulation Areas (ZCTAs) in the White Mountain Apache Tribe 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)

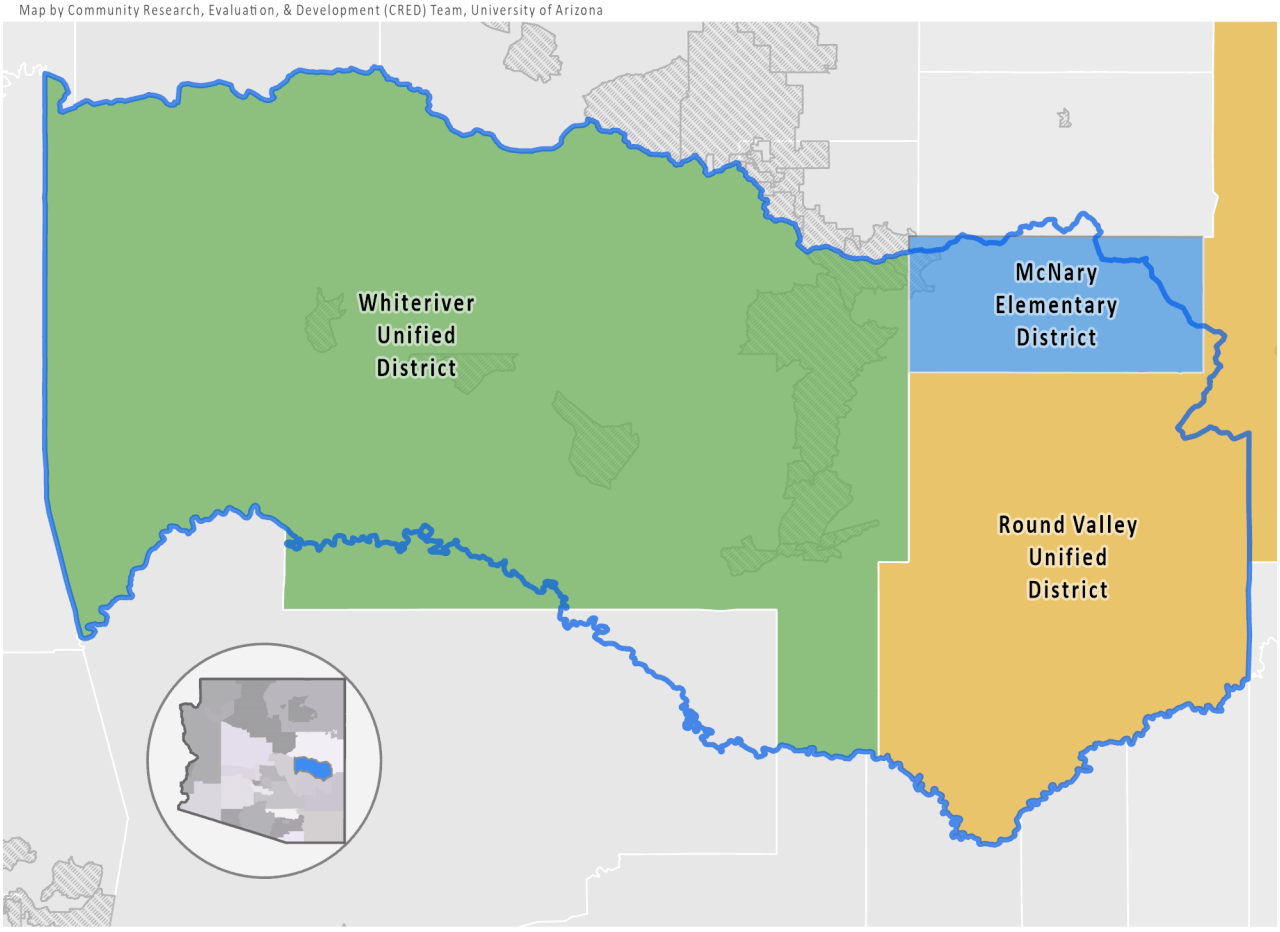
Table 105. Zip Code Tabulation Areas (ZCTAs) in the White Mountain Apache Tribe Region

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 White Mountain Apache Tribe Region	This ZCTA is shared with
White Mountain Apache Region	**13,409**	**2,003**	**3,301**	**1,267**	**N/A**	
85911	1,800	269	441	178	100%	
85926	265	29	74	22	100%	
85929	14	1	6	1	0.2%	Navajo/Apache
85930	1,086	172	259	112	100%	
85935	303	23	95	20	6%	Navajo/Apache
85941	9,941	1,509	2,426	934	100%	

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

APPENDIX 4: SCHOOL DISTRICTS OF THE WHITE MOUNTAIN APACHE TRIBE REGION

Figure 77. School Districts in the White Mountain Apache Tribe 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)

Note: Round Valley Unified District overlaps an unpopulated portion of the region, but does not have any schools located within the region.

Table 106. School Districts and Local Education Authorities (LEAs) in the White Mountain Apache Tribe Region

Name of district or Local Education Agency (LEA)	Number of schools	Number of students in kindergarten through third grade
White Mountain Apache Tribe Region	**6**	**851**
McNary Elementary District	**1**	**44**
McNary Elementary School (PS-8)	1	44
Whiteriver Unified District	5	807
Whiteriver Elementary (PS-5)	1	275
Cradleboard School (PS-5)	1	197
Seven Mile School (PS-5)	1	335
Canyon Day Junior High School (6-8)	1	N/A
Alchesay High School (9-12)	1	N/A
Blue Ridge Unified School District No 32 (Off-reservation district)	6	487

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

APPENDIX 5: DATA SOURCES

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