FIRST THINGS FIRST

San Carlos Apache Region

2022

NEEDS AND ASSETS REPORT

SAN CARLOS APACHE
REGIONAL PARTNERSHIP COUNCIL
2022
NEEDS AND ASSETS REPORT

Funded by the

First Things First San Carlos Apache Regional Partnership Council

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INTRODUCTION

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

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

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

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

ACKNOWLEDGMENTS

The San Carlos Apache Regional Partnership 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, Education and Health Services; the Arizona Health Care Cost Containment System; Child Care Resource and Referral; and the U.S. Census Bureau. Local partners included the San Carlos Apache Tribal Council, the San Carlos Apache Tribe Department of Health and Human Services and its programs–Wellness Center, Special Supplemental Nutrition Program for Women, Infants and Children (WIC), Public Health Nursing, Maternal Child Health, San Carlos Apache Tribe Social Services Department, and the San Carlos Apache Healthcare Corporation. 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 San Carlos Apache Region.

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

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EXECUTIVE SUMMARY

The San Carlos Apache Region. The San Carlos Apache Tribe is a sovereign nation located in east central Arizona. Geographically the boundaries of the First Things First San Carlos Apache Region are defined to be those of the San Carlos Apache Indian Reservation. The region covers almost 3,000 square miles in east-central Arizona. Most of the region lies within Gila and Graham Counties, although there is a small, uninhabited section in Pinal County. The reservation, which was established in 1871, is divided into four districts: Seven Mile Wash, Gilson Wash, Peridot, and Bylas.

Population Characteristics. According to 2010 U.S. Census, the San Carlos Apache Region had a population of 10,068, of whom 1,435 were children birth to 5. More than one in three households in the region include at least one child ages birth to 5. New redistricting data from the 2020 Census estimates that population levels have remained stable, with 10,251 people residing in the region as of 2020. Data from the San Carlos Apache Enrollment Office shows that there were 16,760 enrolled San Carlos Apache members in 2021, of which 11,142 resided within the San Carlos Apache Region. This indicates that the 2020 Census likely undercounted the total number of residents in the region. However, enrollment numbers for children birth to 5, particularly for very young children birth to 2, are low compared to Census estimates and births in the region, indicating that many families may wait until their children are preschool-age or older to enroll them as members. Birth rates in the region have been steadily declining over the past six years, which may indicate that the number of very young children in the region (ages birth to 2) is lower than in the past.

Over one in three residents ages 5 and older (35%) speak other languages besides English or Spanish, and Native North American languages are the most common of these 'other languages' spoken statewide. This rate of 'other language' use is lower than that seen across all Arizona reservations (51%). Efforts in the community to preserve and revitalize the Apache language include partnerships between the San Carlos Apache Tribe's Apache Language Preservation Department and Apache Kid Child Care Center and San Carlos Apache Head Start to teach the Apache language in preschool classrooms, as well as Apache language courses offered by the Apache Language Preservation Department and San Carlos Apache College.

Nearly two out of every three children birth to 5 (63%) live with a single parent in the San Carlos Region, and one in five (23%) live with two parents (or a parent and a stepparent). Another one out every 10 children birth to 5 (12%) live in kinship care arrangements, meaning they live with a relative who is not their parent, such as a grandparent or aunt. More than half of all children birth to 5 (55%) in the region live in their grandparent's household, with or without their parent, indicating a high prevalence of multi-generational households. Nearly 350 grandparents in the San Carlos Apache Region are responsible for raising their grandchildren according to the American Community Survey (ACS). Multigenerational households, and grandparent caregivers in particular, may need additional supports due to the heightened health risks faced by older adults during the COVID-19 pandemic and challenges accessing technology to support young children engaging in remote learning.

Economic Circumstances. The ACS estimates that the overall median family income for the San Carlos Apache Region is $37,300, while married-couple families with children have a higher median income of $51,700. However, even this higher median income is well below the self-sufficiency standard for a two-parent family with two young children in Gila County ($63,629), suggesting that without the no-cost and low-cost resources provided in the San Carlos Apache Region, families may struggle to make ends meet. The median income for single-female-headed households is substantially lower, $18,800, which is far below the self-sufficiency standard for a single parent with a preschool-age child in Graham County ($43,639). More than half of young children birth to 5 in the region live in poverty (59%), as do nearly half of the overall population (46%). Local key informants highlight poverty as a major challenge for families in the region. Three out of every four young children (75%) live in low-income households with incomes below 185% of the federal poverty level, meaning they may be eligible for social safety programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and the Nnee Bich'o Nii, which is the San Carlos Apache Tribal TANF program. However, despite these high rates of poverty and low-income for young children, the number of young children participating in Nnee Bich'o Nii has been declining over the past three years. Nnee Bich'o Nii provides wrap-around services for low-income families in the San Carlos Apache Region through temporary cash assistance, job training, work experience, child care support and parent education programs. Eligibility criteria for the program are strict, and participants are regularly drug tested, which may contribute to low participant rates.

The number of children participating in many safety net programs designed to combat food insecurity also declined across the San Carlos Apache Region despite the economic stresses of the pandemic. The percentage of the region's children who participate in the Supplemental Nutrition Assistance Program (SNAP) fell by more than 40%, and the number of infants and children enrolled in WIC fell by more than 25%. However, participation rates in the San Carlos Apache WIC program (the percent of enrolled women, infants and children who receive benefits) reached all-time highs in 2020. The rollout of Pandemic EBT (a resource for families with young children enrolled in SNAP) was not very effective for young children in the region. Comparing the number of recipients of Pandemic EBT recipients to the number of SNAP recipients in the region shows that less than one in 10 eligible children ages birth to 5 in the region were able to participate in Pandemic EBT. School meal service changed dramatically in the 2019-20 school year due to pandemic-related closures of schools. San Carlos Unified School District and other public and private schools in the region shifted to serving meals through the Summer Food Service Program due to relaxed eligibility criteria and greater reimbursement, leading to more meals distributed through this program and fewer through the National School Lunch Program. Efforts to foster food sovereignty, grow and forage traditional foods and support cultural, mental, physical and spiritual health are ongoing through the efforts of the Traditional Western Apache Diet Project and affiliated programs.

According to the ACS, the unemployment rate in the San Carlos Apache Region (27%) was already substantially higher than that seen across all Arizona reservations (17%) and statewide (6%) even before the pandemic. A spike in monthly unemployment insurance claims in the region between April 2020 and October 2020 indicates that unemployment rates likely worsened during the pandemic. More than two-

thirds of children birth to 5 in the region (65%) live with a single parent who is in the labor force or two married parents who are both in the labor force, meaning that access to child care is particularly important to enable parents to work. These families may have particularly struggled with pandemic-related child care disruptions.

Local key informants highlighted a lack of safe and adequate housing as a major challenge in the region. More than one in 10 housing units in the region lack complete plumbing facilities or complete kitchen facilities. Many families live in overcrowded conditions, living 'doubled up' to pool resources and support each other. The number of students attending school in the region experiencing homelessness increased substantially in 2019-20 to 54 students in kindergarten to 12th grade (3% of all students) compared to prior years, but key informants in the region suspect that the number of students experiencing homelessness may be even higher.

Less than half of children birth to 17 had access to both a computer and the internet at home in the region (46%) before the pandemic, the same share seen in all Arizona reservations (46%). Multiple tribal departments and programs, including the Education Department and Social Services Department, as well as the San Carlos Unified School District were able to purchase laptops and Wi-Fi hotspots for families who needed them. The San Carlos Apache Tribe also worked with a local telecommunications provider to waive internet payments for the first 18 months of the pandemic. Even with these efforts, many families struggled to use technology to engage in remote learning during the worst of the pandemic.

Educational Indicators. Children in the San Carlos Apache Region attend school at public schools in the San Carlos Unified School District and the Fort Thomas Unified School District, private schools such as Peridot- Our Savior's Lutheran School and St. Charles Apache Mission School, and off-reservation schools including Globe Unified School District schools and Destiny Charter School in Globe. As of October 1, 2019, there were 564 children enrolled in preschool through 3rd grade in public schools in the San Carlos Apache Region. Most of these children attended Rice Elementary School (n=497), while 67 children enrolled at Mt. Turnbull Elementary School. An additional 159 American Indian students were enrolled in kindergarten to 3rd grade at Copper Rim Elementary School and Destiny School in Globe.

Chronic absenteeism rates for kindergarten to 3rd grade students were very high in the region before the pandemic, exceeding 40% at Rice Elementary School in 2018-19. While absenteeism rates fell in 2019-20, this likely reflects changes in how attendance was recorded during remote learning more than a substantive improvement. When 3rd grade students in the San Carlos Apache Region took AzMERIT assessments in the 2018-19 school year, only 7% received passing scores on English Language Arts and 11% had passing scores on Math. Local key informants raised concerns that students may be even further behind after a year of remote learning. At the high-school level, graduation rates at San Carlos High School were consistently higher than those seen statewide, and more than 19 out of 20 seniors graduated in four years in 2019. Graduation rates for American Indian students enrolled at Globe High School also exceeded statewide rates. Dropout rates for 7th to 12th grade students in the region have been falling, with the greatest improvements at San Carlos Alternative High School and Mt. Turnbull

Academy. Troublingly, dropout rates at San Carlos Middle School dramatically increased in 2019-20 to 11%, a rate 5 times that of the 2% seen in 2018-19, which may indicate students lost to contact during the transition to remote learning during the COVID-19 pandemic.

For adults ages 25 and older in the region, the ACS estimates that 28% have less than a high-school education, 37% graduated high school or received a GED but did not go farther and 35% completed at least some college or professional education or received a higher education degree or credential. More than one in three babies in the region are born to mothers with less than a high school education. This suggests a need to support young parents in completing their high school education, returning to school or pursing post-secondary education or job training programs.

Early Learning. Families in the San Carlos Apache Region can access early childhood education and child care services at the Apache Kid Child Care Center, San Carlos Apache Head Start Program, San Carlos Apache Early Head Start Program and the school-based preschool at Rice Elementary, a local public school in the San Carlos Unified School District. Apache Kid Child Care Center and the San Carlos Apache Head Start and Early Head Start programs are all tribally-operated under the San Carlos Apache Education Department.

Apache Kid Child Care Center provides child care and early education at two sites located in San Carlos and Bylas, and both locations combined had a licensed capacity to 84 children birth to 12 before the pandemic. San Carlos Apache Head Start has a funded enrollment of 233 children ages 3 to 4 and served 251 preschool-age children cumulatively in the 2018-19 school year at four facilities located in each of the four districts of the San Carlos Apache reservation (Bylas, Gilson Wash, Peridot and Seven Mile Wash). In 2017, the San Carlos Apache Education Department received funding to open the Early Head Start Program, which has a funded enrollment to serve children birth to 2 at centers in Bylas and San Carlos. The new inclusive preschool program at Rice Elementary School, launched in the 2021-22 school year, includes a general education preschool classroom that can serve up to 20 preschool-age children. This program serves both typically-developing children and those with developmental delays and disabilities. Overall, early education and child care programs in the San Carlos Apache Region have the capacity to serve 412 children ages birth to 5. This means that there is sufficient capacity to serve only 29% of the estimated 1,435 young children in the region according to 2010 Census estimates. Local key informants also indicated that most early education programs in the region are currently operating well under their funded enrollment or licensed capacity due to staffing shortages and space constraints. Due to the high turnover of early education teachers and staff at Apache Kid Child Care and the Head Start and Early Head Start programs, qualified early education teachers are greatly needed to bring programs back up to pre-pandemic enrollments. Key informants emphasized that there is a need for more early education and child care capacity in the region, as evidenced by consistent waitlists at many programs. Given the limited capacity of early care and education programs in the region, some families seek care outside the region using DES child care subsidies. However, the number of children eligible for and receiving these subsidies fell precipitously in 2020 due to the pandemic.

Fewer than 10 children per year ages birth to 3 received services from either the Arizona Early Intervention Program (AzEIP) or the Division of Developmental Disabilities in 2020, and only 12 received services in 2019, even though 17 to 33 children are referred to AzEIP each year. Research on

the prevalence of developmental delays suggests that as many as 100 children in the region could benefit from early intervention services, indicating that more work to identify children with delays and help them connect with AzEIP providers may be needed. Preschool-age children with disabilities in the region receive services through the San Carlos Unified School District at Rice Elementary School. The number of preschoolers enrolled in special education at Rice Elementary has fallen by half over the past three years, even as the number of kindergarten to 3rd grade students enrolled in special education has remained steady. The most common disabilities for preschoolers receiving services at Rice Elementary in 2019-20 were developmental delays (50%), speech or language impairments (25%) or preschool severe delays (25%). Preschoolers with disabilities can also receive services while enrolled in Head Start; most children with disabilities enrolled in Head Start (92%) had developmental delays. Among kindergarten to 3rd grade students at Rice Elementary, developmental delays (52%) and speech or language impairment (25%) were the most common disabilities, followed by specific learning disabilities, autism and other disabilities.

Child Health. Health care services are available to residents of the San Carlos Apache Region through Izee Baa' Gowąh San Carlos Apache Healthcare Corporation. Izee Baa' Gowąh is a tribally-operated hospital located in Peridot that operates under a 638 contract with Indian Health Service and offers a wide array of preventive, specialty and emergency medical services. The hospital campus also houses other programs within the San Carlos Apache Tribe Department of Health and Human Services, including emergency medical services, public health nursing, WIC, Maternal Child Health and behavioral health services. Between January 2018 and April 2021, there were 17,053 active users who received care at Izee Baa' Gowąh, 1,595 of whom were children ages birth to 5. This suggests that most residents of the San Carlos Apache Region seek care at Izee Baa' Gowąh. Of the children birth to 5 seen at Izee Baa' Gowąh between January 2018 and April 2021, nearly nine in 10 (89%) had AHCCCS coverage or private insurance. This high rate of insurance enrollment is a strength in the region and allows Izee Baa' Gowąh to bill insurance for health services, freeing up more funds to support community health in other areas.

Of the 195 births in the San Carlos Apache Region in 2019, only half (50.8%) were to mothers who received prenatal care in the first trimester, far below the Healthy People 2020 target of 84.8% or more. About one in 10 births (10%) were to mothers with no prenatal care at all, and more than one in three births (39%) were to mothers who had fewer than five prenatal care visits. This lack of adequate prenatal care puts mothers and infants at higher risk of poor health outcomes. Rates of births to teenaged mothers in the region have also remained high over the past five years, and rates of tobacco use during pregnancy in 2019 were alarmingly high at 5.6%, quadruple the Healthy People 2020 target of no more than 1.4% of birth to mothers who used tobacco during pregnancy. Rates of low birthweight and preterm births also consistently exceeded the Healthy People 2020 targets for these indicators as well as rates seen across all Arizona reservations.

The percent of infants enrolled in WIC who were ever breastfed in 2020 in the San Carlos Apache Region (47%) was substantially lower than that seen across all Inter Tribal Council of Arizona WIC Programs (69%), and rates of both breastfeeding initiation and breastfeeding at 6 months have been

declining since 2018. Rates of obesity for children ages 2 to 4 enrolled in WIC have however been decreasing, from 30% in 2014 to 23% in 2018, a positive trend. Among children birth to 5 seen at Izee Baa' Gowąh in that same period, 1,586 young children were diagnosed with dental caries, which represents nearly all children seen at Izee Baa' Gowąh and suggests that there is a high prevalence of dental decay among young children in the region. However, local key informants noted that this also suggests that most children in the region are receiving dental services, which indicates greater community awareness of the importance of early dental care and greater willingness on the part of parents to bring their children in for pediatric dental visits. All preschoolers enrolled in Rice Elementary School and more than 96% of kindergarteners in Rice Elementary School, Mt. Turnbull Elementary School and Peridot- Our Savior's Lutheran School were immunized with the DTaP, Polio, and MMR vaccine series in the 2018-19 school year. Rates of immunization exemptions for kindergarteners were consistently near 0%. Among children ages birth to 4 enrolled in WIC, the rate of exposure to secondhand smoke at home fell dramatically from 11% in 2014 to 3% in 2018, a positive development for child health. There were seven child deaths in the San Carlos Apache Region in 2018 and fewer than six deaths in 2019.

Family Support and Literacy. Families in the San Carlos Apache Region have the opportunity to participate in many parent education and early literacy programs offered in the region, which help parents understand how to promote healthy child development and lay the foundation for kindergarten readiness. These programs include the Dolly Parton Imagination Library program offered by the Gila County Library District and funded by the First Things First San Carlos Apache Regional Partnership Council, Gowa: Teachable Moments for Apache Children offered by University of Arizona Cooperative Extension, the Motherhood is Sacred and Fatherhood is Sacred parenting programs offered by Nnee Bich'o Nii and parenting classes offered by the San Carlos Apache Social Services Department.

The San Carlos Apache Wellness Center offers mental and behavioral health services for residents of all ages, including before- and after-school programs, in-school mentoring and individual and family therapy for youth. Two behavioral health technicians at the Wellness Center specialize in working with children, including young children birth to 5. According to local key informants in the region, Izee Baa' Gowąh recently hired a child psychologist who previously worked at the Wellness Center. The child psychologist now works in the pediatrics department and convenes many of the community service providers and Izee Baa' Gowąh pediatricians to share information, resources and community events. This convening work is seen as a major asset to the community in supporting holistic health and wellbeing for young children. Due to the substantial losses experienced by many in the community during the pandemic, trauma-informed mental health services and grief support will be important for supporting families and children in the years to come.

Child welfare services in the San Carlos Apache Region are provided by San Carlos Apache Social Services Department, which houses Tribal Child Protective Services (CPS). The cases of child abuse and neglect and the number of children removed from their families increased during the pandemic. Local key informants reported an uptick in incidents of domestic violence and family conflict as well as material hardship during the lockdowns caused by the pandemic. Tribal CPS receives a very high volume of reports of child abuse and neglect that need to be investigated and followed up on, and this

high caseload, combined with difficulties maintaining adequate staffing, has led to challenges in ensuring that families receive the referrals and services they need. Staff are at high risk of burnout, and recruiting new staff to fill open positions has been difficult. Most children removed from their parents' care in the region are placed with relatives, and relative placements increased between 2019 and 2020. However, key informants indicated that these kinship caregivers (e.g., relatives caring for children) often find it challenging to care for traumatized children who need mental and behavioral health supports. The Social Services Department has also had difficulty recruiting new foster parents both in and out of the region. The pandemic required Social Services to transition many of their services and appointments to video conferencing and phone-based systems, which led to loss of contact with some families. Going forward, there is a need for better coordination of referrals and services, adequate staffing to prevent burnout and ensure families do not fall through the cracks and for trauma-informed care to support families in creating nurturing and healthy environments for their children.

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] 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 San Carlos Apache departments and agencies with approval from the San Carlos Apache Tribal Council by Resolution Number S9-19-146; 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 the FTF regional level because not all data sources analyze their data based on FTF regional boundaries. When regional data are unavailable, this will be noted by N/A.

The First Things First San Carlos Apache Regional Director and Tribal Department stakeholders participated in a facilitated data discussion on March 3rd, 2022 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 San Carlos Apache Region. When available, the next rows show data that are useful for comparison purposes: all Arizona reservations combined, Gila County, Graham County, the state of Arizona and national estimates or targets where available. Data tables and graphs are as complete as possible. Data which are not available for a particular geography are indicated by the abbreviation "N/A." State agencies have varying policies about reporting small values. Entries such as "<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

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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*

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*.

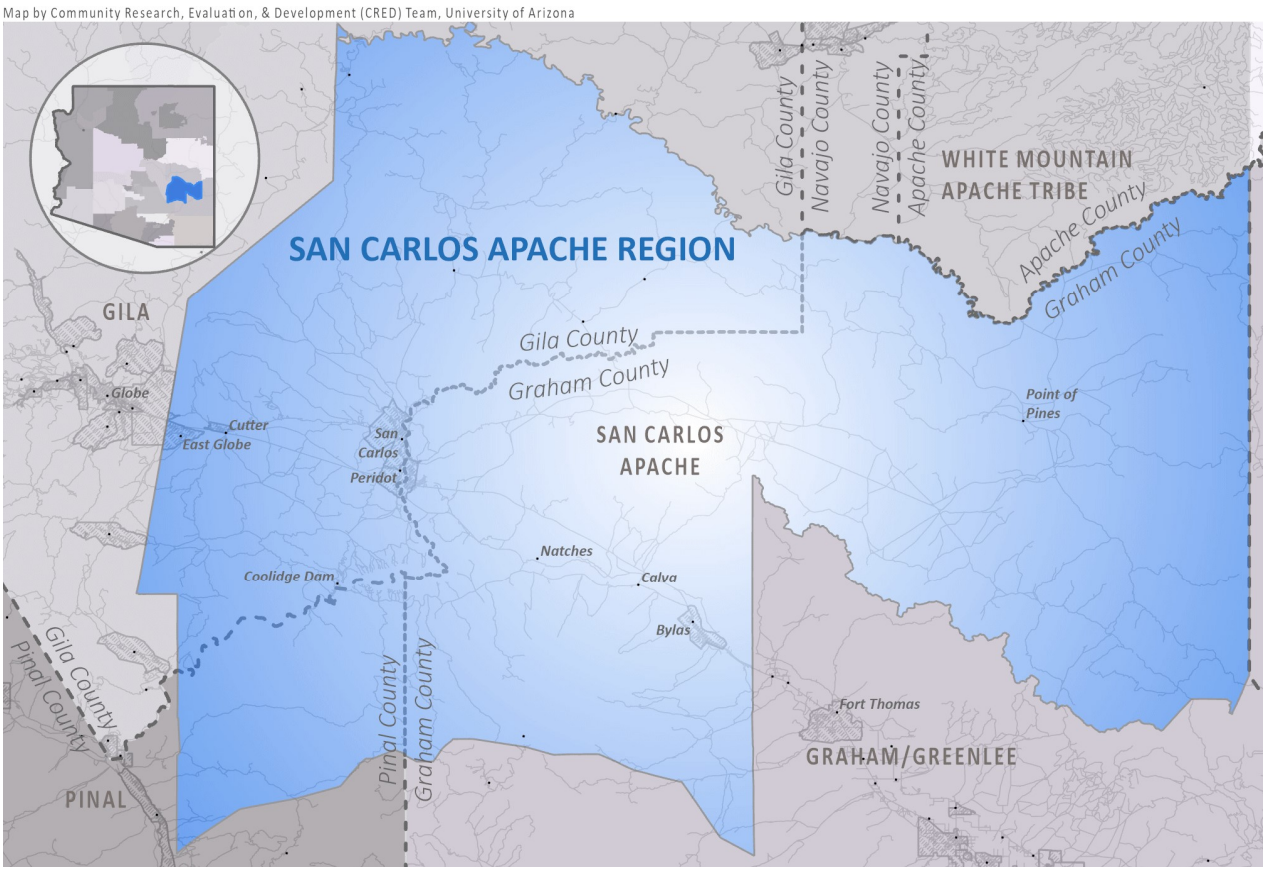
THE SAN CARLOS APACHE REGION

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 San Carlos Apache were one of 10 tribes that chose to be designated as its own region. This decision must be ratified every two years, and the San Carlos Apache has opted to continue to be designated as its own region.

The boundaries of the First Things First San Carlos Apache Region are defined to be those of the San Carlos Apache Indian Reservation. The region covers almost 3,000 square miles in east-central Arizona. Most of the region lies within Gila and Graham Counties, although there is a small, uninhabited section in Pinal County. The reservation, which was established in 1871, is divided into four districts: Seven Mile Wash, Gilson Wash, Peridot, and Bylas.

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

Figure 1. The First Things San Carlos Apache 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 are spoken pose a unique balance of benefits for child learning and barriers to parental engagement. Acknowledging and valuing linguistic heritage (such as through language preservation efforts) and recognizing needs for resources and services in languages other than English should remain important considerations for organizations and agencies across Arizona.[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.

Population, race, and ethnicity

According to the 2010 U.S. Census, the San Carlos Apache Region had a population of 10,068, of whom 1,435 were children birth to 5. The percent of households in the San Carlos Apache Region that included at least one young child (36%) was higher than in all Arizona reservations (26%) and more than twice that in the state (16%) (Table 1).

Table 1. Population and households in the 2010 U.S. Census

Geography	Total population	Population (ages 0-5)	Total number of households	Number and percent of households with one or more children (ages 0-5)	
San Carlos Apache Region	**10,068**	**1,435**	**2,320**	**844**	**36%**
All Arizona Reservations	178,131	20,511	50,140	13,115	26%
Gila County	53,597	3,657	22,000	2,488	11%
Graham County	37,220	3,830	11,120	2,448	22%
Arizona	6,392,017	546,609	2,380,990	384,441	16%
United States	308,745,538	24,258,220	116,716,292	17,613,638	15%

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

Note: The total population of Arizona in the 2020 Decennial Census is 7,151,502, which is a 12% increase from 2010.

Even though the 2010 Decennial Census had the most recent detailed estimate of the population by age residing in the San Carlos Apache Region as of the writing of this report, limited redistricting data have been released from the 2020 U.S. Census. These data show that in the period between the decennial counts, the total population of the region remained stable. In 2020, there were 10,251 residents in the region, compared to 10,068 in 2010 (Table 1; Table 2). Of these 10,251 residents, 3,584 were children ages birth to 17 (Table 2). Additional data from the 2020 U.S. Census were not available, including the breakdown of children birth to 5 in the region. Those files will be released in 2023.

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

Geography	Total population	Children (ages 0-17)	Total number of households
San Carlos Apache Region	10,251	3,854	2,387
All Arizona Reservations	173,499	51,848	50,362
Gila County	53,272	11,471	22,312
Graham County	38,533	10,575	12,150
Arizona	7,151,502	1,609,526	2,705,878
United States	331,449,281	73,106,000	126,817,580

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

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

Due to the limitations often seen in Census data for individuals residing on reservations (outlined further in Appendix 2: Methods and Data Sources at the end of this report), tribal enrollment is another important source of data regarding population counts in Native communities. According to data provided by the San Carlos Apache Tribal Enrollment Office, there were 16,760 enrolled San Carlos Apache members in 2021 (Table 3). Of these enrolled members, 11,142 resided within the San Carlos Apache Region, with the remaining 34% (n=5,618) residing off-reservation. Overall enrollment in 2021 was very similar to enrollment numbers in 2020. Both 2020 and 2021 enrollment data show on-reservation enrollment numbers that exceed the 2020 Census estimate for the population in the region by more than 10%. This indicates that the 2020 Census likely undercounted the overall number of residents in the region. However, the number of enrolled children birth to 17 residing in the region according to the Enrollment Office (n=3,415) matches the Census population estimate more closely (n=3,854).

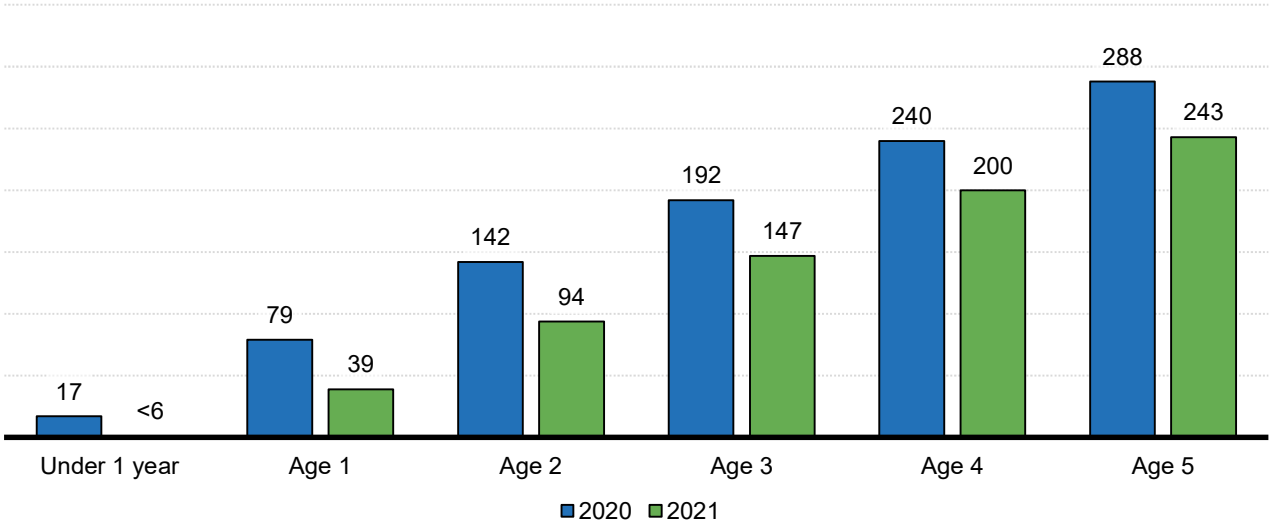
Table 3. San Carlos Apache Tribal Enrollment, 2020 to 2021

	On-reservation, 2020	Off-reservation, 2020	Total, 2020	On-reservation, 2021	Off-reservation, 2021	Total, 2021
Young children (ages 0-5)	**724**	**234**	**958**	**533**	**191**	**724**
Under 1 year	15	<6	17	<6	0	<6
Age 1	51	28	79	32	7	39
Age 2	97	45	142	62	32	94
Age 3	141	51	192	101	46	147
Age 4	186	54	240	148	52	200
Age 5	234	54	288	189	54	243
School-age children (ages 6-17)	2,840	947	3,787	2,882	929	3,811
All children (ages 0-17)	3,564	1,181	4,745	3,415	1,120	4,535
Adults (ages 18 and older)	7,576	4,432	12,008	7,727	4,498	12,225
Elders (ages 55 and older)	1,879	888	2,767	1,958	941	2,899
Total Enrollment	11,140	5,613	16,753	11,142	5,618	16,760

Source: San Carlos Apache Enrollment Office (2021). [Enrollment dataset]. Unpublished tribal data received by request.

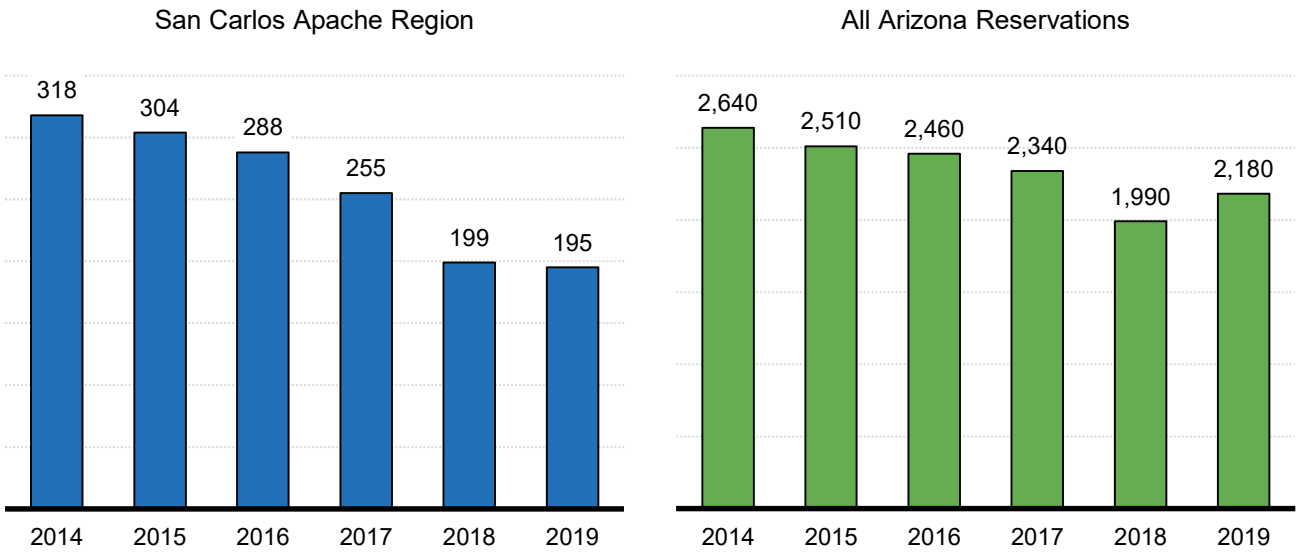
According to the San Carlos Apache Enrollment Office, there were 724 enrolled members ages birth to 5 in 2021, a substantial decline from the 958 enrolled in 2020. This may reflect decreased enrollment during the pandemic as the community was closed and many services such as child care were not offered in-person. There are also many fewer enrolled children ages birth to 2 than there are preschool-age children (Figure 2). Examining trends in the number of births in the region shows that there has been a significant decline in the number of babies born each year, from 318 in 2014 to 195 in 2019 (Figure 3). This decline mirrors a decline in the number of births seen across all Arizona reservations. However, even the lower number of births in the region (n=195) still greatly exceeds the number of infants who were enrolled in 2020 according to the Enrollment Office (n=17) (Figure 2). This may indicate that parents are often waiting to enroll their children until they reach preschool age. Overall, looking at the 6-year birth cohort of babies born from 2014 to 2019 shows that as of 2020, there were 1,559 children born in the region that would be ages birth to 5 (Table 4). This does not account for children who may have moved in or out of the community; however, comparing these numbers to the 2010 Census estimate for children birth to 5 (n=1,435) shows that the population of young children in the region has likely remained stable over the past decade. The recent decline in the number of births may however indicate a declining number of very young children (ages birth to 2) in the region.

Figure 2. San Carlos Apache Enrollment, 2020 to 2021



Source: San Carlos Apache Enrollment Office (2021). [Enrollment dataset]. Unpublished tribal data received by request.

Figure 3. Number of babies born, 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, 2014- 2019. Retrieved from https://pub.azdhs.gov/health-stats/report/hspam/index.php

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

Table 4. Number of babies born, 2015 to 2019

Geography	2014	2015	2016	2017	2018	2019
San Carlos Apache Region	**318**	**304**	**288**	**255**	**199**	**195**
All Arizona Reservations	2,640	2,510	2,460	2,340	1,990	2,180
Gila County	649	580	593	541	497	473
Graham County	603	580	558	530	513	493
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. 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.

The U.S. Census Bureau made design improvements to the race and ethnicity questions in the 2020 Census to allow individuals to more accurately and thoroughly report how they self-identify.[29] Overall, these changes show that the U.S. population as a whole is more diverse than what the Census Bureau had measured in the past: the multi-racial population in the country changed substantially since 2010, showing a 276% increase in the 2020 Census. For the American Indian and Alaska Native population specifically, there was an increase of 27.1% in those who identify as American Indian and Alaska Native alone from 2010 to 2020. In that same period, the population of individuals reporting their race as American Indian and Alaska Native in combination[iii] grew by 160% nationally.[30]

As of the writing of this report, 2020 Census data were available for the racial and ethnic breakdown of the San Carlos Apache population as a whole, but not for that of young children. Table 5 below shows that, according to the 2020 Census, nearly all the population in the region (99%) identified as American Indian (alone or in combination), a higher proportion compared to all Arizona reservations combined (93%) (Table 5). Very small proportions of residents identified as Hispanic or Latino (2%), non-Hispanic White (1%), multiracial (1%), Asian or Pacific Islander (0.4%) or Black or African American (0.3%).

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

Table 5. 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
San Carlos Apache Region	**10,251**	**2%**	**1%**	**0.3%**	**99%**	**0.4%**	**1%**
All Arizona Reservations	173,499	6%	5%	1%	93%	1%	3%
Gila County	53,272	17%	64%	1%	19%	2%	9%
Graham County	38,533	30%	55%	2%	16%	1%	11%
Arizona	7,1515,02	31%	57%	6%	6%	5%	14%
United States	331,449,281	19%	62%	14%	3%	8%	10%

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

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

According to the 2015-2019 American Community Survey (ACS), in both the San Carlos Apache Region (88%) and reservation lands across Arizona (91%), most young children birth to 4 identify as American Indian or Alaska Native (Table 6). A much larger share of young children in the San Carlos Apache Region identify as Hispanic or Latino (10%) or multiracial (11%) than in the overall population. The percentage of young children identified as multiracial (11%) is nearly double that seen across all Arizona reservations. Please note that children who identify as Hispanic or Latino may be counted twice in the table below if they also identify with any race besides White (e.g., a child who is both Latina and American Indian will be counted in both columns).

Table 6. 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
San Carlos Apache Region	**1,261**	**10%**	**1%**	**0%**	**88%**	**0%**	**11%**
All Arizona Reservations	15,185	9%	1%	0.1%	91%	0.3%	4%
Gila County	2,935	28%	38%	0.4%	31%	1%	7%
Graham County	2,765	34%	43%	0%	19%	2%	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.

According to the Arizona Department of Health Services (ADHS), in 2019 – the most recent year for which data were available—the racial and ethnic breakdown of mothers giving birth in the region was similar to 2020 Census estimates for all ages. Nearly all mothers giving birth in the region (98%) identified as American Indian or Alaska Native, while a small percentage (3%) identified as non-Hispanic White.[iv]

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

Table 7. 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
San Carlos Apache Region	**2018**	**199**	**2%**	**0%**	**0%**	**98%**	**0%**
	2019	**195**	**3%**	**0%**	**0%**	**97%**	**0%**
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
Gila County	2018	497	49%	22%	[0% to 1%]	28%	[0% to 1%]
	2019	473	48%	19%	1%	31%	1%
Graham County	2018	513	50%	32%	[0% to 1%]	17%	[0% to 1%]
	2019	493	54%	30%	[0% to 1%]	15%	[0% to 1%]
Arizona	2018	80,539	43%	41%	6%	6%	4%
	2019	79,183	43%	41%	6%	6%	4%

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

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

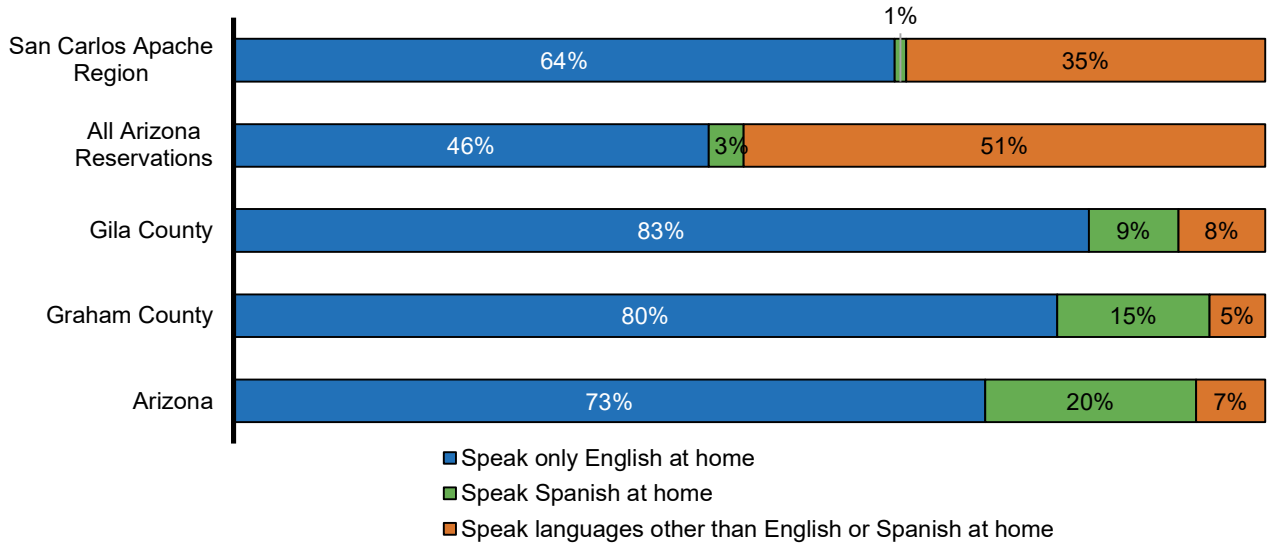
Language Use

The ACS estimates that about two-thirds (64%) of the San Carlos Apache Region's residents speak only English at home, and that only 1% speak Spanish at home (Figure 4). Almost one in three residents (35%) speak other languages, of which Native North American languages are the most commonly spoken in Arizona. This suggests that native language use at home is a bit lower in the region than in reservations across Arizona, where more than half (51%) of the population speak a language other than English or Spanish at home.

Efforts are in place to continue to seek out ways to preserve and revitalize the Apache language, including the San Carlos Apache Tribe's Apache Language Preservation Department. Both the Apache Kid Child Care Center and the San Carlos Apache Head Start Program provide Apache language instruction for young children, using curriculum developed by the One People ~ One Nation Project. The One People ~ One Nation Project aims to develop Apache language curricula for pre-kindergarten through 12th grade students for use in both immersion and non-immersion classrooms and to develop Apache language resources for use in both classrooms and the community.[31] The San Carlos Unified

School District provides Apache language classes at all grade levels, including pre-kindergarten, and has Apache language immersion classrooms at Rice Elementary School. The district recognizes the importance of fluent native speakers and pays these Apache language instructors at the same level as certified teaching staff.[32] San Carlos Apache College also offers Apache Language courses as well as Apache history courses.[33] The Apache Language Preservation Department has also held Apache language classes via Zoom and Facebook Live throughout the COVID-19 pandemic.

Figure 4. Language spoken at home (by persons ages 5 and older), 2015-2019 ACS



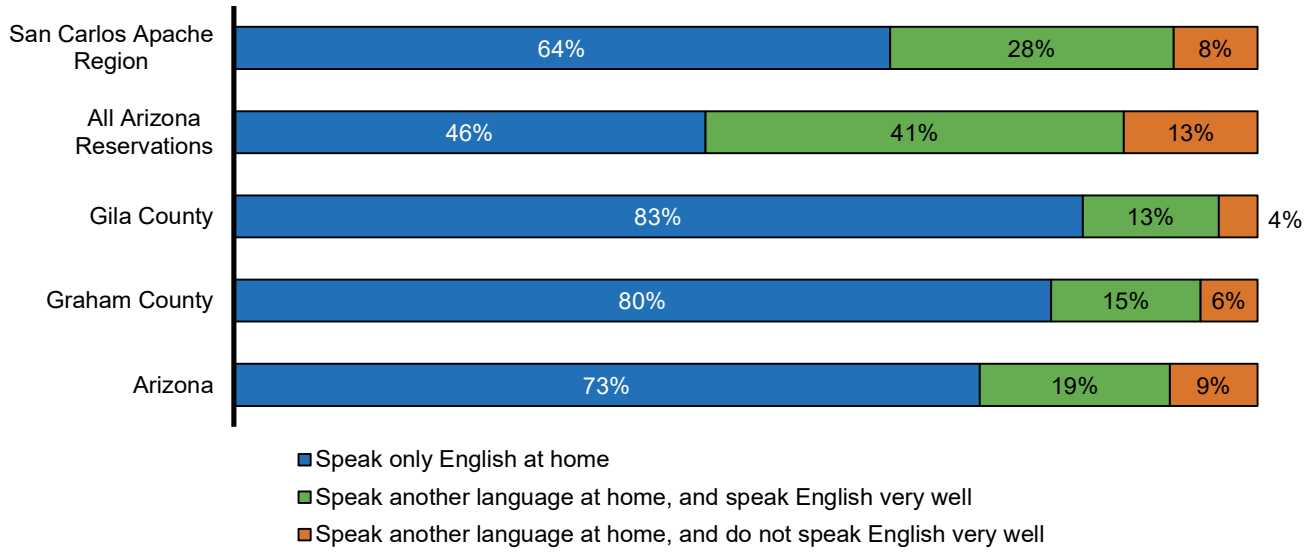
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16001

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

Most residents who speak a language other than English at home report that they speak English "very well,"[v] meaning they are proficiently bilingual or multilingual. This is the case for 28% of San Carlos Apache Region residents ages 5 and older (Figure 5).

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

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

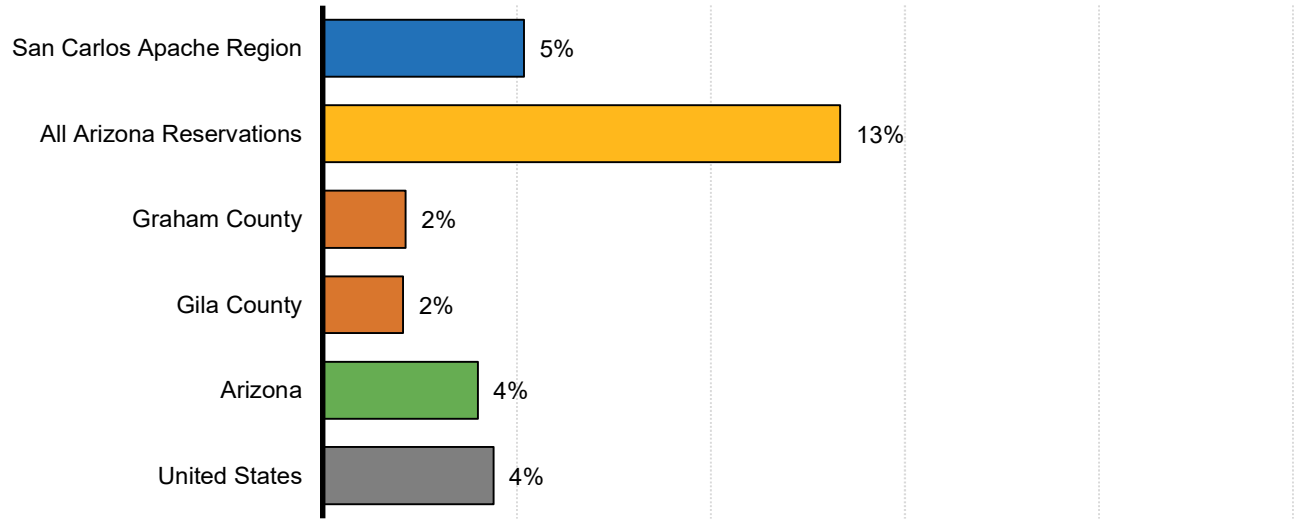


Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16001

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

At the household level, 5% of the households in the San Carlos Apache Region are identified as "limited-English-speaking," which means that no adult or teenager in the home report speaking English very well (Figure 6). While this proportion is nearly double that seen in Gila and Graham Counties (2% in each), it is substantially lower than that across all Arizona reservations (13%). However, for these one in 20 households where English language skills are limited for adults and teenagers, providing Apache language materials and services will help ensure access to resources for all families.

Figure 6. Proportion of households that are limited-English-speaking, 2015-2019 ACS



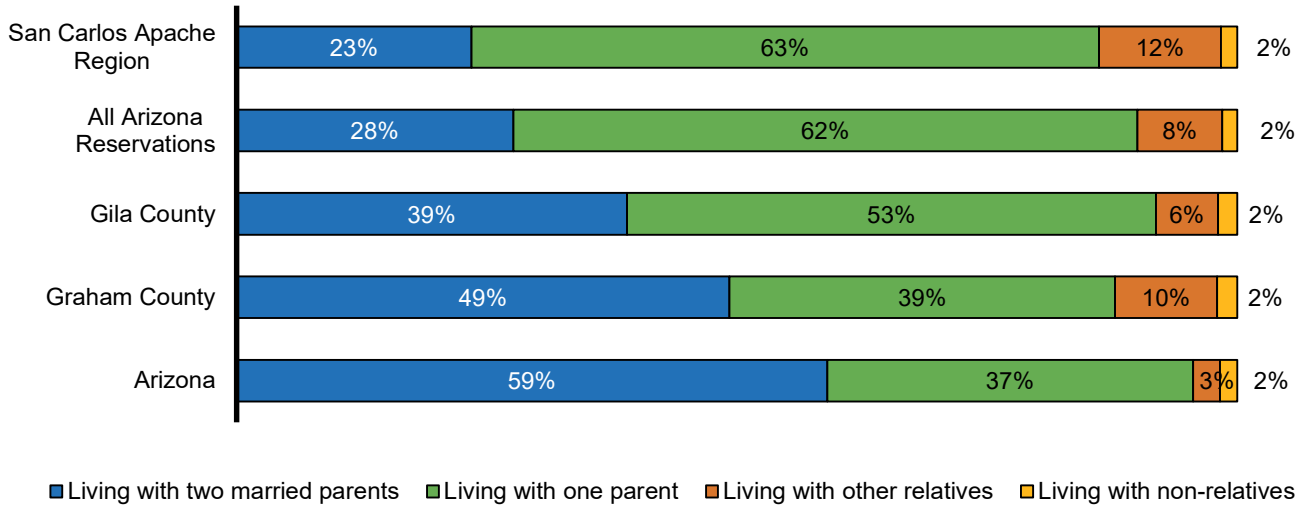
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table C16002

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

Family and Household Composition

According to the ACS, nearly two-thirds (63%) of children birth to 5 in the San Carlos Apache Region live with a single parent (Figure 7). More than one in five young children (23%) live with two married parents (or a parent and a stepparent) and most of the rest (12%) live with a relative who is not their parent, meaning that they are in kinship care arrangements. Children living in kinship care can arrive in those situations for a variety of reasons, including a parent's absence for work or military service, chronic illness, substance 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. In some situations, children in kinship care may also face special needs as a result of trauma and could benefit from additional support and assistance to help them adjust and to ensure they have a stable and nurturing home environment.[34] About 2% of young children in the region live with non-relatives, likely foster parents, which is the same percentage seen across all Arizona reservations, as well as Gila County, Graham County and the state of Arizona.

Figure 7. 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 bar 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 ACS data, grandparents are considered responsible for their grandchildren if they are "currently responsible for most of the basic needs of any grandchildren under the age of 18" who live in the grandparent's household. An estimated 349 grandparents in the San Carlos Apache Region are responsible for raising one or more grandchildren (ages birth to 17) who live with them (Table 8). About a fifth of these grandparents (21%) do not have the child's parent(s) living in the household. Furthermore, of these 349 grandparents, 73% are female, 55% are in their sixties or older, 36% are in poverty, and 33% percent are not proficient English speakers. Compared to all Arizona reservations, a higher share of grandparents who are responsible for their grandchildren in the San Carlos Apache Region are age 60 or older (55% vs 45%) and do not speak English very well (33% vs 19%) (Table 8). This indicates that services for grandparents who are older and Apache language materials and services may be particularly important in the region.

Table 8. Selected characteristics of grandparents who are responsible for one or more grandchildren under 18 in their households, 2015-2019 ACS

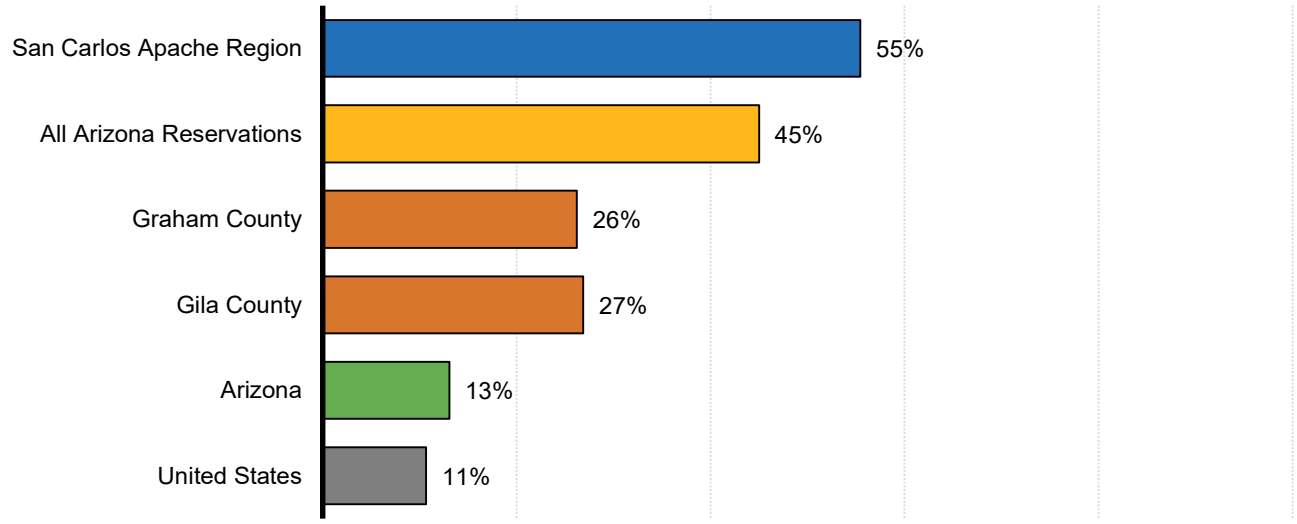
Geography	Estimated number of grandparents who live with and are responsible for grandchildren under 18 years old	Percent of these grandparents who:				
		Are female	Are 60 years old or older	Have an income below the poverty level	Do not speak English very well	Do not have the child's parents in the household
San Carlos Apache Region	**349**	**73%**	**55%**	**36%**	**33%**	**21%**
All Arizona Reservations	5,630	65%	45%	38%	19%	29%
Gila County	792	68%	58%	32%	11%	30%
Graham County	479	54%	38%	20%	14%	44%
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.

Beyond grandparents who live with their grandchildren in kinship care arrangements, many young children live in multi-generational households. The ACS estimates that 55% of children birth to 5 in the San Carlos Apache Region live in their grandparent's household, compared to 45% across all Arizona reservations and 13% in Arizona (Figure 8). Understanding the circumstances of grandparents living with their grandchildren is critical to providing services in a way that will meet the unique needs of grandparent-led families. 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.[35] Although multigenerational households can enhance family bonds and provide additional financial and caregiving resources, children's risk of living in poverty is higher for those living with grandparents, and grandparents often encounter multiple barriers when accessing public assistance as caregivers and face unique psychological and physical stressors.[36,37,38,39] 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.[40] Grandparents in multigenerational households are also at heightened risk of COVID-19 infection, especially those living with essential workers.[41]

Figure 8. Grandchildren 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.

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.[42] Poverty can affect the way children grow and develop, even including changes to their brains.[43,44] 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.[45,46,47,48,49,50,51] They are also more likely to remain poor later in life, passing along these challenges to future generations.[52,53] 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.[54,55,56,57]

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.[58] 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.[59]

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"[60] 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%).[61] Safety-net programs aim to minimize the impacts of poverty on child and family well-being.[62,63,64] These programs include:

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

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

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

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

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

- Temporary Assistance for Needy Families (TANF),[x]
- KidsCare (the state children's health insurance program),[xi]
- Tribal food distribution programs, such as the Food Distribution Program on Indian Reservations (FDPIR),
- Tribal child care assistance programs, such as the Tribal Child Care and Development Fund, and
- Tribal housing programs, such as the San Carlos Apache Housing Authority.

Other factors related to economic stability include employment and housing.[65] Unemployment (and underemployment[xii]) 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.[66,67] Similarly, housing instability can harm the physical, social-emotional and cognitive development of young children.[68] High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health and homelessness.[69,70] This high relative cost leaves inadequate funds for other necessities, such as food and utilities.[71]

What the Data Tell Us

Income and Poverty

The American Community Survey (ACS) estimates that the median family income for the San Carlos Apache Region is $37,300 (Table 9), which means that half of the region's families have incomes lower than that amount and the other half have incomes above it. This includes all families of at least two people, whether or not they have children. For married couple families who have at least one child, the median income ($51,700) is higher than that of all families, likely because many such families are dual-income families. However, even this higher median income is about $20,000 less than the median income for married couples in Gila County or Graham County. This disparity in income between the region and the surrounding counties may mean that families face more difficulties affording services outside the region. The 2021 self-sufficiency standard in Gila County for a two-parent family with an infant and a preschooler was $63,629,[72] suggesting that many families in the region may not have sufficient incomes to meet all their families' needs without support. The median income for single-female-headed households is much lower than that seen for other families, only $18,800. This is much lower than the median income for single-female-headed households statewide ($30,400), but comparable to the estimate for Graham County ($18,200). The 2021 self-sufficiency standard in Graham

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

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

[xii] *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*

County for a single-parent family with a preschooler was $43,639,[73] indicating that a single-female-headed household in the region or Graham County would need to make 2.5 times the median income to make ends meet.

Table 9. Median annual family income, 2015-2019 ACS

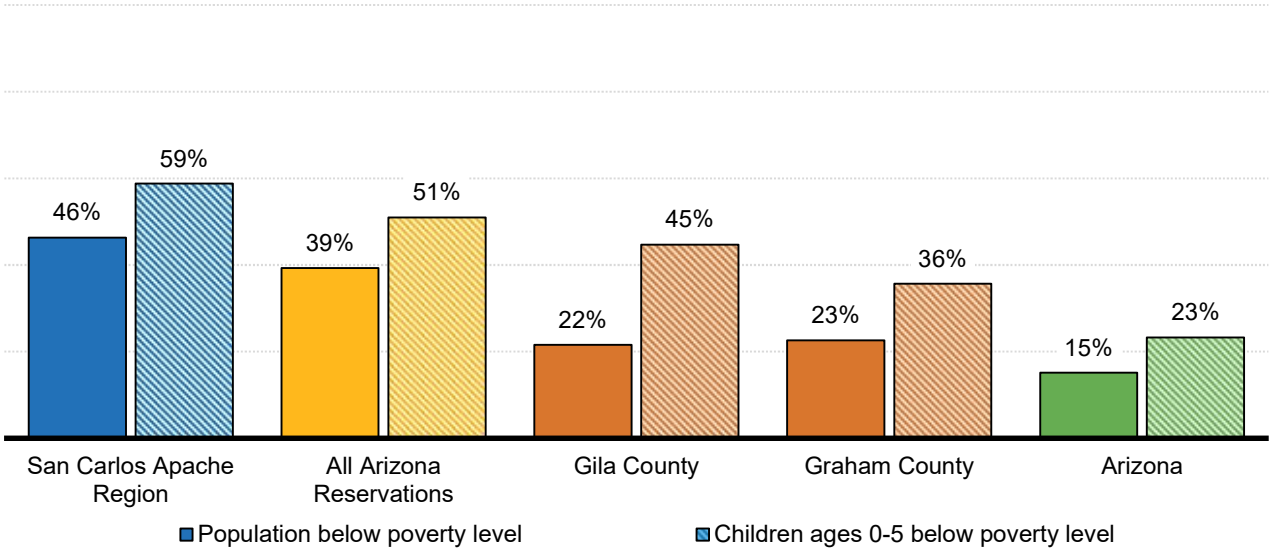
Geography	Median annual income for all families	Median annual income for married-couple families with children under 18 years old	Median annual income for single-male-headed families with children under 18 years old	Median annual income for single-female-headed families with children under 18 years old
San Carlos Apache Region	**$37,300**	**$51,700**	N/A	**$18,800**
All Arizona Reservations	N/A	N/A	N/A	N/A
Gila County	$51,400	$71,900	$35,300	$26,200
Graham County	$59,500	$74,700	$29,300	$18,200
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.

Consistent with the lower median family incomes in the region, rates of poverty for the overall population (46%) and for young children (59%) are about triple those seen statewide (15% and 23%), respectively (Figure 9). Regional rates also exceeded the overall poverty rate (39%) and young child poverty rate (51%) seen in reservations across Arizona. Local key informants identified poverty in the region as a major challenge for families with young children. They describe many families, particularly young parents, in the region as living in 'survival mode' where meeting basic needs, including food and safe housing is a challenge. This way of living makes it difficult for families to put energy into further education or pursuing better jobs or other ways of improving their lives. Poverty is a well-known risk factor for many adverse outcomes for both children and their families, including chronic health problems, mental health disorders, substance abuse, poor academic achievement and child abuse and neglect.[74] Poverty can also amplify and exacerbate Adverse Childhood Experiences (ACEs) and have long-term effects on health into adulthood.[75] Given these effects, strategies and programs to support families with young children experiencing poverty are particularly important.

Figure 9. Rates of poverty for persons of all ages and for children ages birth to 5, 2015-2019 ACS

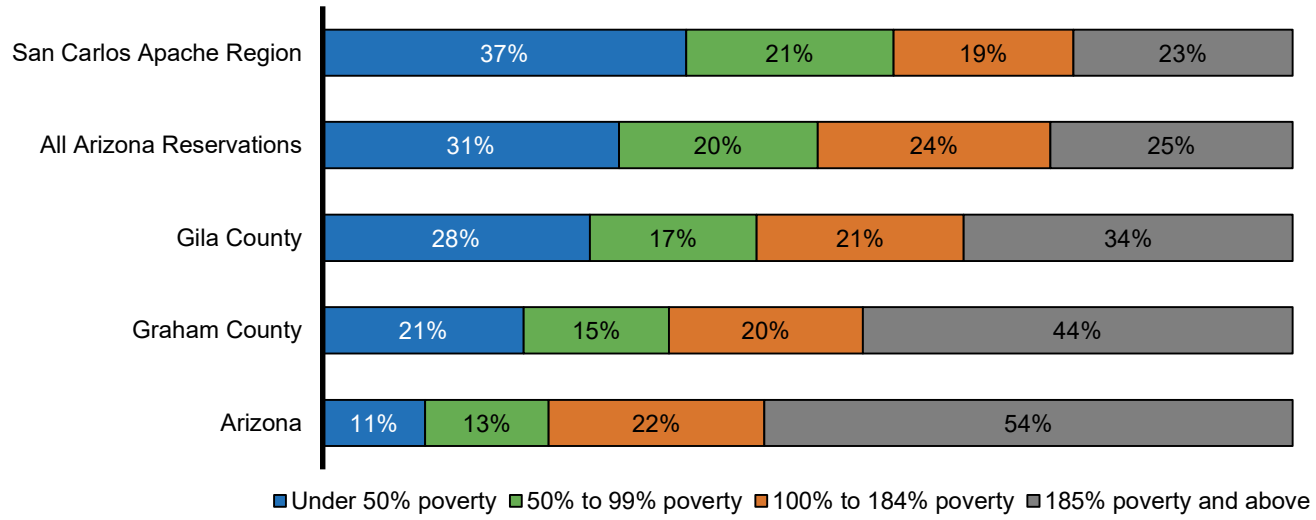


Source: U.S. Census Bureau. (2020). American Community Survey five-year estimates 2015-2019, Table B17001

Note: This graph includes only persons whose poverty status can be determined. Adults who live in group settings such as dormitories or institutions are not included. Children who live with unrelated persons are not included. In 2019, the poverty threshold for a family of two adults and two children was $25,926; for a single parent with one child, it was $17,622.

In the San Carlos Apache Region, an estimated three out of every four young children (75%) live in households with incomes under 185% of the poverty level, a commonly used threshold for safety net benefits such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and free or reduced-price school meals (Figure 10). This again matches the percentage seen across reservations in Arizona (75%) but exceeds the rate in Gila County (66%), Graham County (56%) or the state (46%).

Figure 10. Children ages birth to 5 living at selected poverty thresholds, 2015-2019 ACS



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

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

The poverty and income data presented above represent a five-year window of ACS data collection prior to 2020. The COVID-19 pandemic had a sudden and dramatic impact on income for many families nationwide, with about half of adults surveyed by the Census Bureau's Household Pulse Survey in Arizona reporting that someone in their household had lost employment income throughout 2020.[76] Local key informants indicated that the pandemic was also challenging for many families in the San Carlos Apache Region, taking both an emotional and physical toll on the community.

Nnee Bich'o Nii TANF program

Public assistance programs are one way of counteracting the effects of poverty and providing supports to children and families in need. The Temporary Assistance for Needy Families (TANF) Cash Assistance program provides temporary cash benefits and support services to children and families. Eligibility is based on citizenship or qualified resident status, Arizona residency, and limits on resources and monthly income. In recognition of tribal sovereignty, federally-recognized tribes have the option to administer their own TANF programs. Since tribes set their own priorities for their communities and many design their own social services, some Tribal TANF program requirements may differ from those in state programs (e.g., time limits on receipt of TANF cash assistance). Tribal TANF programs also have more flexibility in determining program requirements to meet the needs of their own communities. With a focus on self-sufficiency, Tribal TANF programs can include community and social programs that are unique to their spiritual and cultural traditions.[77]

Currently six tribes in Arizona manage their own Tribal TANF programs, including the San Carlos Apache Tribe. The San Carlos Apache Tribal TANF program (Nnee Bich'o Nii or "Helping the People") began operations in 2008. Nnee Bich'o Nii aims to move individuals and families toward self-sufficiency through temporary cash assistance, job training and education programs and customized support. Local key informants noted that the program is very strict in its eligibility requirements. Nnee Bich'o Nii staff conduct home visits with families receiving TANF, track school attendance for children and document children's immunization status, and regularly test participants for illicit substances. For participants who are found to be using illicit substances, Nnee Bich'o Nii has a substance counselor who can provide support.

Job training and work participation are major elements of Nnee Bich'o Nii. Local key informants noted that the work participation rate among Nnee Bich'o Nii participants is 55%, more than double the federally required 24% participation rate. Nnee Bich'o Nii has an in-house maintenance training program and works with many clients to train them in the construction trades. Nnee Bich'o Nii participants have built a classroom for Peridot-Our Savior's Lutheran School and were an integral part of the construction of a new skate park in late 2021 and early 2022. Job training participants also work to repair roofs and flooring for houses of Nnee Bich'o Nii families as well as elders, using supplies purchased by the tribe. Key informants identified lack of work experience and criminal histories as major barriers to employment for many community members. Nnee Bich'o Nii job training program helps give participants 1-3 years of job experience and skills training so that participants are prepared to enter the workforce. Nnee Bich'o Nii also employs an investigator who works with judges across the state to expunge participants' criminal records through paying fines, serving any required jail time or satisfying other court requirements. Staff from Nnee Bich'o Nii work one-on-one with clients to help them prepare their resumes and conduct job searches.

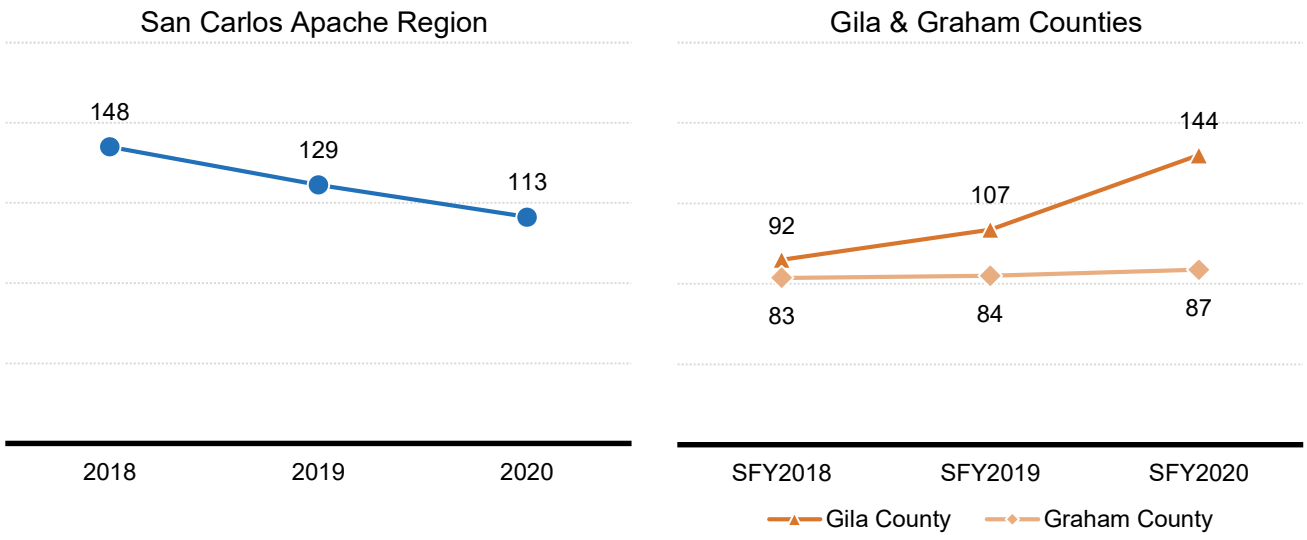
Nnee Bich'o Nii also provides many services for families with young children, including the Fatherhood is Sacred and Motherhood is Sacred parenting education programs. These programs are discussed further in the *Parenting Education, Family Involvement, and Early Literacy* section later in this report. Nnee Bich'o Nii also partners with First Things First to provide books to families with young children. Local key informants noted that Nnee Bich'o Nii works with many teen parents to keep them in high school and help them access child care subsidies through DES to get the care they need for their children while they attend school. Nnee Bich'o Nii also provides resources for families through many community events, including school supply giveaways.

Beyond TANF, Nnee Bich'o Nii also operates public transit in the San Carlos Apache Region with a fleet of 18 buses. These buses run from Globe to Safford every day, and typically have a ridership of about 20 individuals. Key informants indicated that transportation is a major challenge for many families in the region, especially very young parents, making access to public transit particularly important for enabling families to access services and programs. Nnee Bich'o Nii public transit can provide transportation for children and a responsible adult to child care facilities like Apache Kid Child Care in the region.

During the pandemic, Nnee Bich'o Nii checked on their clients weekly and gave out regular care packages with supplies like soap, diapers and PPE. Because the program had already set up remote access for staff several years before the COVID-19 pandemic, Nnee Bich'o Nii staff were able to rapidly transition to working from home and ensure that client payments went out on time. Local key informants noted that the department received an award from the tribe for their excellent service and performance during the pandemic. Over the 15 years since the San Carlos Apache Tribe launched Nnee Bich'o Nii, Nnee Bich'o Nii staff have had a strong relationship with state agency partners. Key informants also described how the program has brought administrators and staff from the Arizona Department of Economic Security (DES), Workforce Innovation Opportunity Act programs (also known as ARIZONA@WORK) and the Arizona Department of Transportation (ADOT) to the San Carlos Apache Region and had these partners go through cultural sensitivity training, including visits to the cultural center, Apache history lessons, tours of the community and introductions to traditional Apache foods. This process has helped state partners understand the background and history of the San Carlos Apache and strengthened the partnerships and trust between these programs.

According to data provided by Nnee Bich'o Nii, the number of young children birth to 5 participating in the program has declined steady over the past three years, from 148 in 2018 to 113 in 2020 (Figure 11). This trend runs counter to the trend seen in the surrounding counties; the number of children birth to 5 participating in state-run TANF has increased in Gila County and Graham County over the past three years, most notably in Gila County. According to local key informants, this decline is consistent with a steadily decreasing number of families in the program since 2008 due to the strict program requirements, including home visits and substance use testing.

Figure 11. Number of children ages birth to 5 receiving TANF, 2018 to 2020



Sources: Nnee Bich'o Nii Program (2021). [Tribal TANF dataset]. Unpublished tribal data received by request. Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

Comparing the number of young children participating in Nnee Bich'o Nii (n=113) to the estimated population of young children (n=1,435) shows that fewer than one in 10 young children (8%) were receiving TANF in 2020. However, more than three out of every four young children live in low-income households (Figure 10) and more than one in two live in poverty (Figure 9), indicating that there may be a more widespread need for the kinds of supports provided through Nnee Bich'o Nii.

Food Insecurity

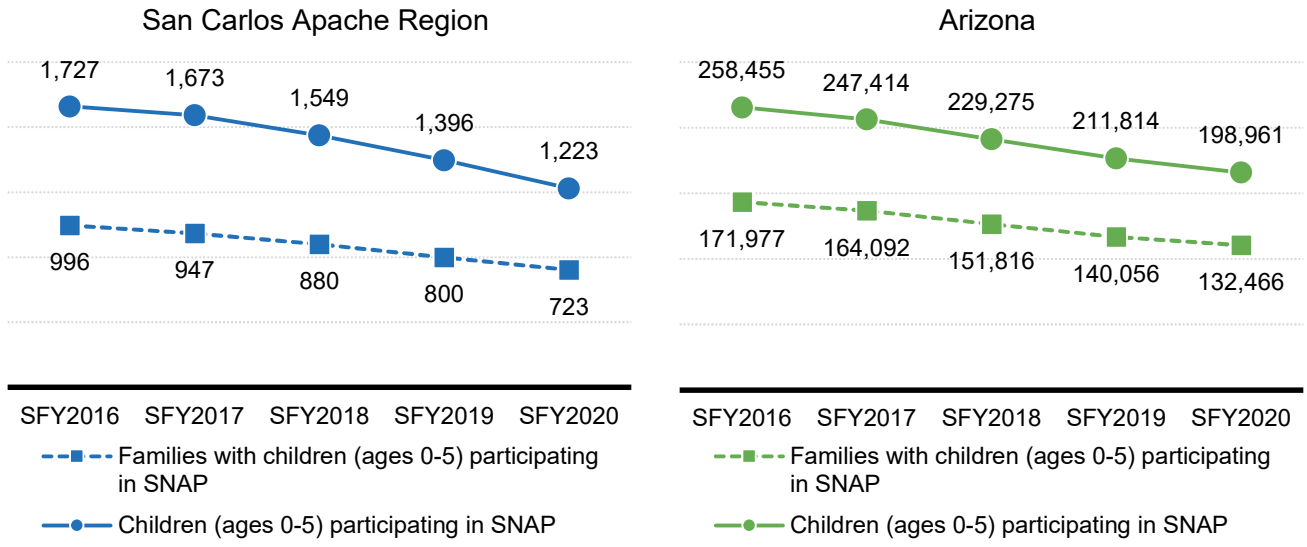
Many families struggle with consistent access to "enough food for an active, healthy life," a problem known as food insecurity.[78] This limited or uncertain availability of food is negatively associated with many markers of health and well-being for children, including heightened risks for developmental delays[79] and having obesity.[80] To help reduce food insecurity, there are a variety of federally-funded programs including the Supplemental Nutrition Assistance Program (SNAP),[81] the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC),[82] the National School Lunch Program (NSLP),[83] the School Breakfast Program,[84] the Summer Food Service Program (SFSP)[85] and the Child and Adult Care Food Program (CACFP).[86] These programs are outlined in the sections below. An additional food resource is the San Carlos Apache Food Distribution Program, a tribally-operated food program that distributes free food boxes through the Food Distribution Program on Indian Reservations, which is funded by the U.S. Department of Agriculture (USDA).

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] Arizona families with young children have been particularly vulnerable to being persistently food insecure and becoming food insecure during the pandemic. Furthermore, food insecurity tends to be worse for people of color. Nationally, Hispanic individuals are almost twice as likely (15.8%) as non-Hispanic White individuals (8.1%) to be food insecure, and Native Americans are three times as likely (23.5%) to be food insecure.[88] In this context, food distribution programs are particularly important in supporting families to meet their nutritional needs.

Supplemental Nutrition Assistance Program (SNAP)

Administered by the Arizona Department of Economic Security (DES) and also referred to as "Nutrition Assistance" and "food stamps," SNAP is designed to combat food insecurity. The program has been shown to help reduce hunger and improve access to healthier food.[89] In the years prior to the COVID-19 pandemic, the number of families with young children who participate in SNAP has steadily declined across both the San Carlos Apache Region and Arizona as a whole (Figure 12). The number of households with young children ages birth to 5 receiving SNAP fell from a high of 996 in SFY 2016 to 723 in SFY 2020, and the total number of young children receiving SNAP declined from 1,727 in SFY 2016 to 1,223 in SFY 2020.

Figure 12. Number of children ages birth to 5 and households with children birth to 5 participating in SNAP, state fiscal years 2016 to 2020



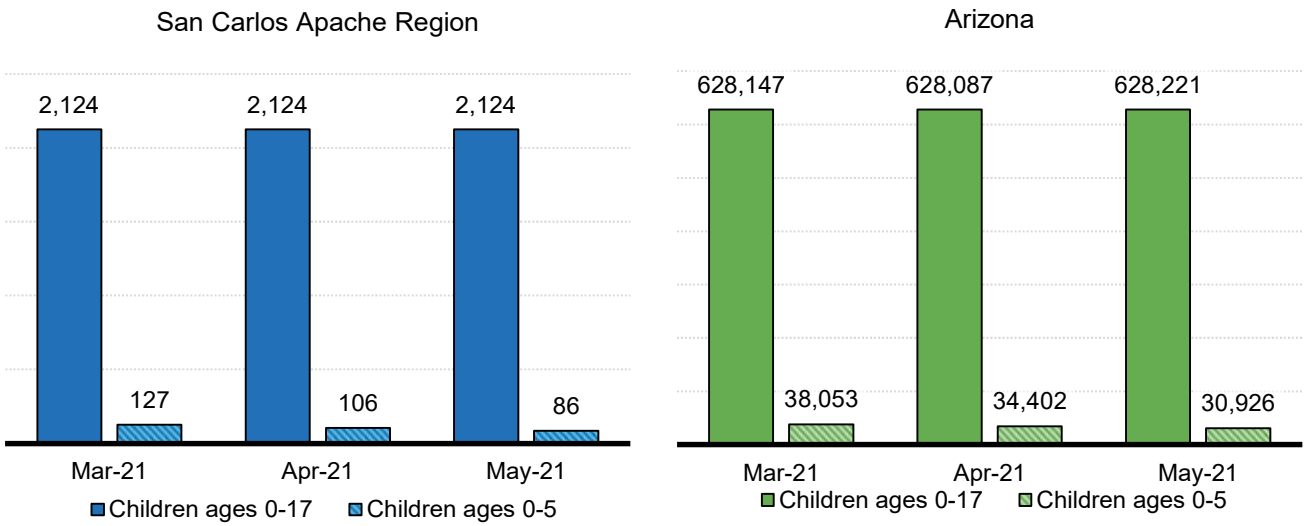
Sources: Arizona Department of Economic Security (2021). [Division of Benefits and Medical Eligibility dataset]. Unpublished data.

Pandemic Electronic Benefit Transfer Program (P-EBT)

The Pandemic Electronic Benefit Transfer Program (P-EBT), a collaboration between the Arizona Department of Education (ADE), DES 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 birth to 5 and those with a child who received free or reduced-price school lunch. Over 520,200 children were eligible for the program in Arizona, which ended on September 24, 2021.

The majority of the children who received P-EBT in the San Carlos Apache Region were above the age of 5, even though children birth to 5 who were receiving SNAP were eligible to receive P-EBT. For example, in March 2021, only 127 of the 2,124 children ages birth to 17 receiving P-EBT were under 6 years of age; similar patterns were seen statewide (Figure 13). In contrast, in 2020, over 1,200 children under the age of 6 were participating in SNAP in the region (Figure 12), suggesting less than one in 10 eligible young children were enrolled in P-EBT. In addition, while receipt of P-EBT remained constant across all children aged 0-17, receipt for children ages birth to 5 decreased between March and May 2021 in the region (Figure 13). A similar pattern was seen statewide, indicating that the San Carlos Apache Region was far from alone in seeing low uptake of P-EBT among young children.

Figure 13. 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 San Carlos 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.[xiii] Participation in WIC has been 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.[90]

In 2020, 1,544 individuals were enrolled in the San Carlos Apache WIC program, including 299 women, 340 infants and 905 children ages 1 to 4 (Table 10). WIC participation rates in the region, meaning the percent of women, infants and children who actively received benefits during the calendar year, were higher in the San Carlos Apache WIC program than in ITCA WIC programs overall for all eligible groups (Figure 14). Participation were highest among infants (100%), followed by children ages 1 to 4 (97%) and women (97%).

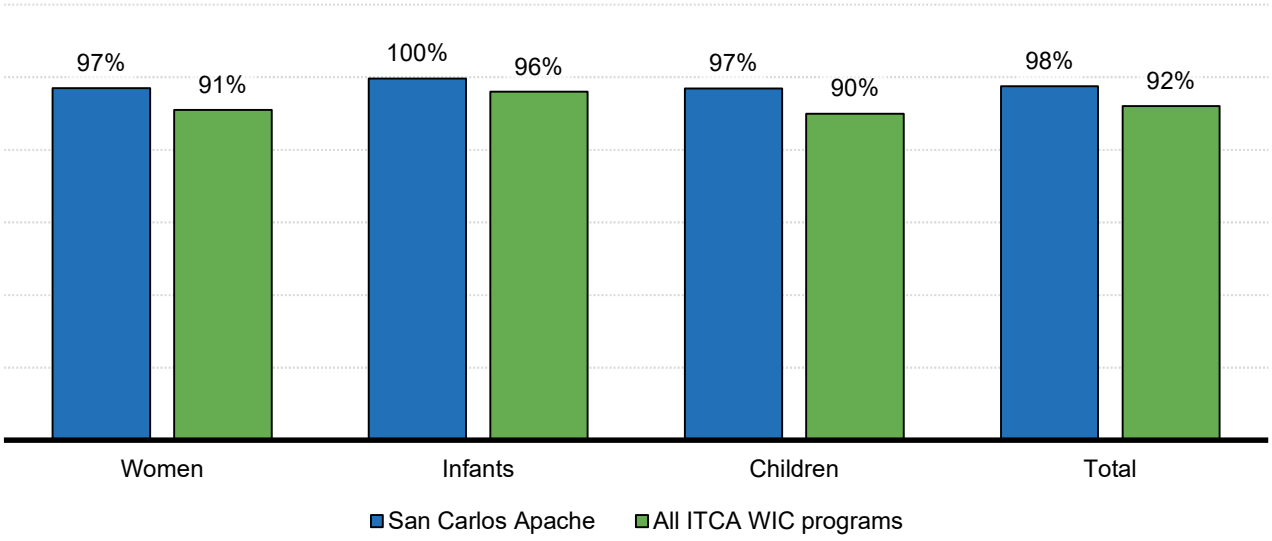
[xiii] *For more information on the ITCA WIC Program, visit https://itcaonline.com/programs/wic-program/*

Table 10. Enrollment in the San Carlos Apache WIC Program, 2020

	Women enrolled	Infants enrolled	Children enrolled	Total enrolled
San Carlos Apache Region	**299**	**340**	**905**	**1,544**
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.

Figure 14. Participation rates in the San Carlos Apache WIC Program by type, 2020



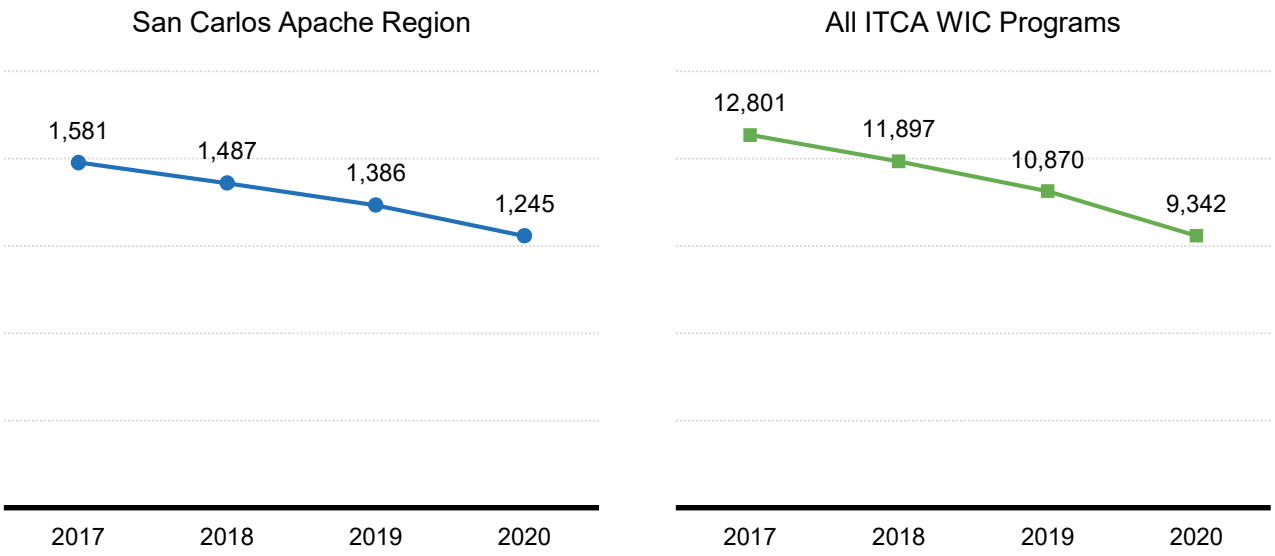
Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

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

Over the past four years, the number of children and infants enrolled in WIC has steadily declined, like trends seen across all ITCA WIC programs (Figure 15). The number of infants and children ages birth to 4 enrolled in WIC fell from 1,581 in 2017 to 1,245 in 2020. This decline also closely tracks with the drop in children participating in SNAP (see Figure 12). Despite the declines in the number of children enrolled, overall participation rates (for women, infants and children combined) in the San Carlos Apache WIC program have risen from 93% in 2017 to 98% in 2020, consistently exceeding the participation rate in all ITCA WIC programs (Figure 16). This is a highly positive trend indicating that women and children who are enrolled in WIC are regularly attending appointments and receiving the benefits the program provides. Changes in WIC policy may have contributed to ongoing high participation rates. The USDA required that all WIC programs transition to providing benefits through an electronic benefit transfer (EBT) card by October 1, 2020, and both ADHS and ITCA began transitioning WIC benefits from paper checks to an EBT card called "eWIC" in 2017.[91] National

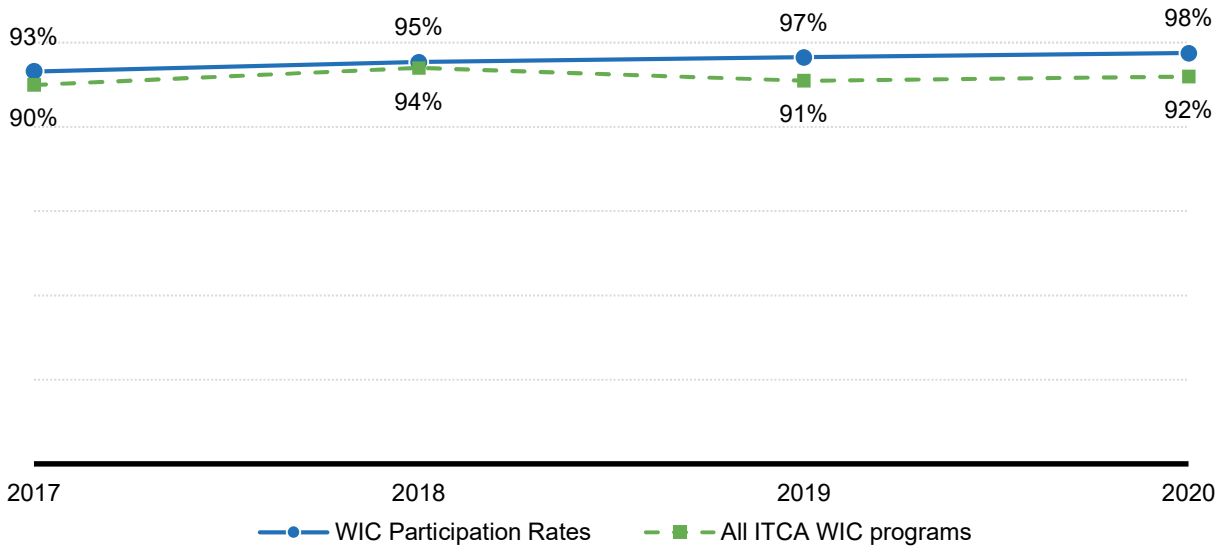
research has shown that providing WIC benefits through an EBT card instead of paper checks is associated with a sustained and significant increase in WIC participation rates for women, infants and children by making WIC benefits easier to access and use.[92]

Figure 15. Children birth to age 4 enrolled in the San Carlos Apache & All ITCA WIC Programs, 2017 to 2020



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

Figure 16. Yearly participation rates in the San Carlos Apache WIC Program, 2016 to 2020

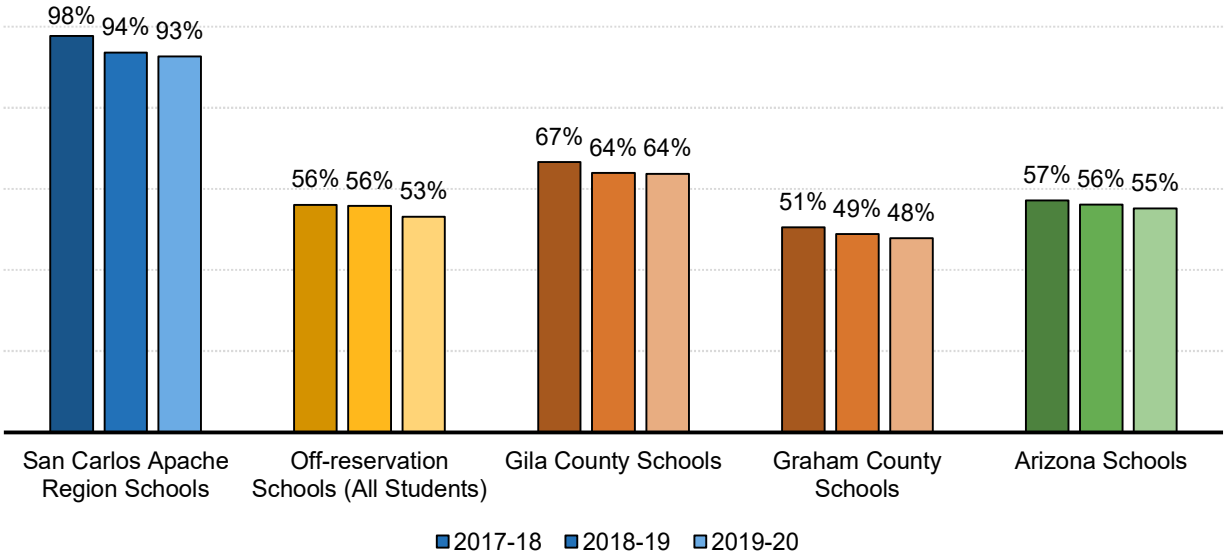


Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

School Meal Programs

Schools play an important role in the nutrition assistance system, especially for children who are food insecure. Administered by ADE, the National School Lunch Program (NSLP) provides free and reduced-price meals at school for students whose family incomes are at or less than 130% of the federal poverty level for free lunch, and 185% of the federal poverty level for reduced-price lunch. Most students (93%) in schools in the San Carlos Apache Region were eligible for free or reduced-price lunch in the 2019-20 school year (Figure 17). This greatly exceeded eligibility rates in schools in Gila County (64%), Graham County (48%) and statewide (55%), where only a half to two-thirds of students qualify for free or reduced-price lunch. The percent of students eligible for free or reduced-price lunch has fallen slightly in the region from 98% in 2017-18 to 93% in 2019-20.

Figure 17. Trends in eligibility for free or reduced-price lunch, 2017-18 to 2019-20



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

Nearly all students enrolled in San Carlos Middle School (>98%), Rice Elementary School (>98%), Mt. Turnbull Academy (>98%) and Mt. Turnbull Elementary School (>98%) were eligible for free or reduced-price lunch in the 2019-20 school year (Table 11). Rates of eligibility for free or reduced-price lunch were lowest for Peridot-Our Savior's Lutheran School (72%) and San Carlos High School (79%).

Schools in the San Carlos Apache Region served about 500,000 meals per school year through the National School Lunch Program (NSLP) in 2017-18 and 2018-19 (Figure 18). However, when the COVID-19 pandemic began, schools in the San Carlos Apache Region closed on March 16, 2020[93] and transitioned to remote learning. Due to this transition to remote learning, the number of meals served through the NSLP dropped in 2019-20 as schools pivoted to new meal delivery modalities in response.

Table 11. Percent of students eligible for free or reduced-price lunch, 2017-18 to 2019-20

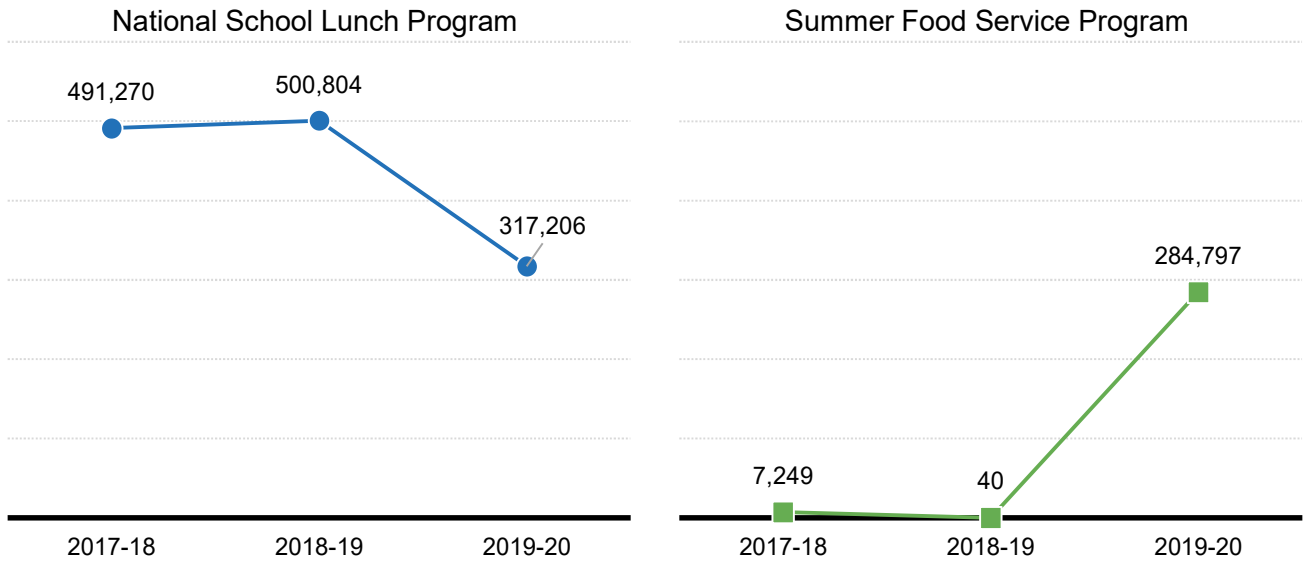
	Students (all grades) eligible for free or reduced-price lunch, 2017-18	Students (all grades) eligible for free or reduced-price lunch, 2018-19	Students (all grades) eligible for free or reduced-price lunch, 2019-20
San Carlos Apache Region schools	98%	94%	93%
San Carlos Middle School	>98%	>98%	>98%
San Carlos High School	>98%	79%	79%
Rice Elementary School	>98%	>98%	>98%
Peridot-Our Savior's Lutheran School	80%	72%	72%
St. Charles School	92%	>98%	86%
San Carlos Alternative High School	>98%	89%	89%
Mt. Turnbull Academy	77%	77%	>98%
Mt. Turnbull Elementary School	>98%	>98%	>98%
Off-reservation schools serving San Carlos Apache students (All Students)	56%	56%	53%
Gila County schools	67%	64%	64%
Graham County schools	51%	49%	48%
Arizona schools	57%	56%	55%

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

The Summer Food Service Program (SFSP)[xiv], also funded by the USDA, 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 and schools with sites like parks, libraries, community centers and apartment complexes in high-need areas to distribute food.[94] The number of meals served by schools in the San Carlos Apache Region through the Summer Food Service Program (SFSP) had been very low prior to the COVID-19 pandemic, with 7,249 meals served in the summer of 2018 and only 40 in the summer of 2019 (Figure 18).

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

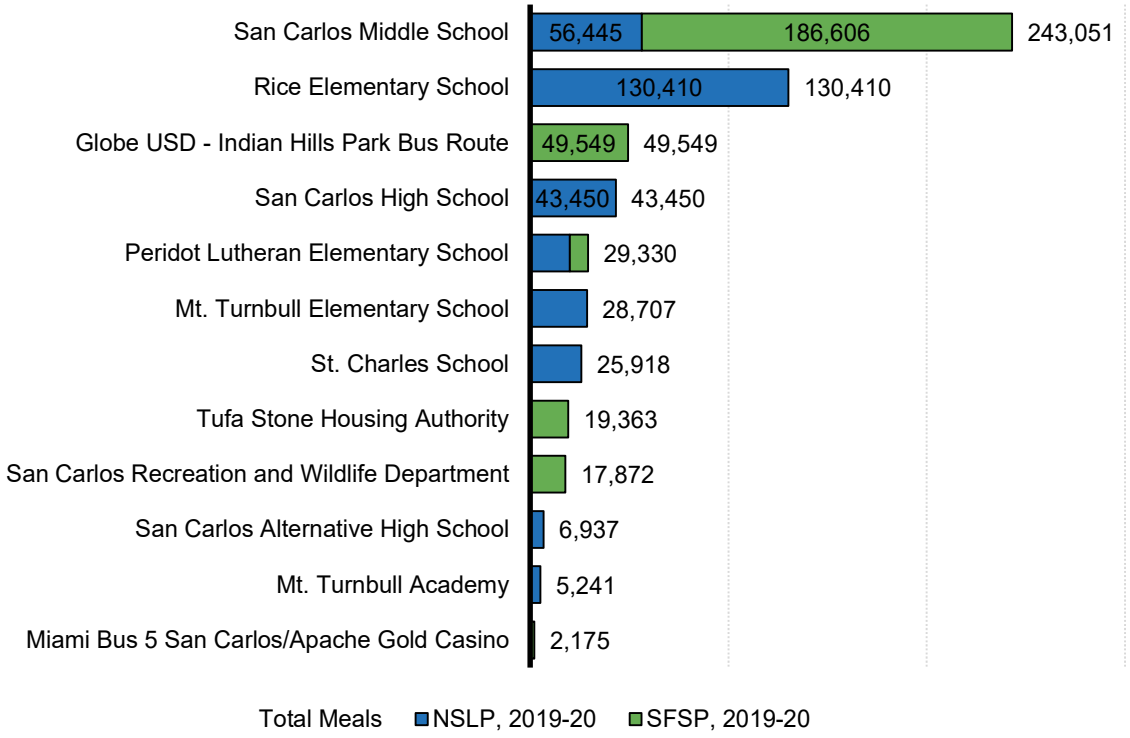
Figure 18. Meals served through the National School Lunch Program and the Summer Food Service Program, 2017-18 to 2019-20



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

However, in March 2020 in response to school closures, the USDA issued 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 schools to offer meals to all children ages birth to 18 and to receive more reimbursement funds for every meal served. The number of meals served through the SFSP mechanism jumped dramatically to 284,797 in the 2019-20 school year, more than making up for the decline of meals served through the NSLP mechanism to 317,206 (Figure 18). Taken together, 602,003 meals were served through both mechanisms in 2019-20, a total exceeding that of any prior year. The largest number of meals were served at San Carlos Middle School and Rice Elementary School, but meals were also served through bus routes, at housing complexes and through the San Carlos Recreation and Wildlife Department (Figure 19).

Figure 19. Meals served through the National School Lunch Program and through the Summer Food Service Program, 2019-20



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

Funded by the USDA, the Child and Adult Care Food Program (CACFP)[xv] gives reimbursements to participating child care centers, preschools, emergency centers and after-school programs for nutritious meals and snacks served to eligible children. Providers must complete a renewal each year. Eligible providers include for-profit child care centers serving at least 25% free or reduced-price lunch participants or any non-profit program.[95] Prior to 2019-20, no child care centers in the San Carlos Apache Region participated in CACFP. However, as of the 2019-20 school year, all Head Start and Apache Kid Child Care Center sites began participating in CACFP, and nearly 50,000 meals were served through the program in 2019-20 (Table 12). Local key informants indicated that these sites prepared meals for parents to pick up and take home for their children throughout the pandemic.

[xv] *For more information see: https://www.azed.gov/hns/cacfp*

Table 12. Meals served through the Child and Adult Care Feeding Program (CACFP), 2017-18 to 2019-20

	2017-18	2018-19	2019-20
San Carlos Apache Region Child Care Programs	0	0	49,233
Apache Kid Child Care Center	0	0	4,568
Bylas Early Head Start Toddler	0	0	2,318
Bylas I Head Start	0	0	13,089
Gilson Wash Head Start	0	0	8,691
Peridot I Head Start	0	0	12,471
Seven Mile Wash Head Start	0	0	8,096
Gila County Schools	25,652	21,723	48,280
Graham County Schools	71,930	83,528	70,636
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

Food Sovereignty

In addition to the many emergency food programs operating in the San Carlos Apache Region, the region also has significant strengths in the form of efforts to revitalize traditional foodways and foster food sovereignty for the San Carlos Apache. The San Carlos Apache Tribal Council established the Elders Cultural Advisory Council (ECAC) in the 1990s, and this council worked with the San Carlos Apache Forest Resources Program to document and map food resources in Western Apache territories. This laid the foundation for the Traditional Western Apache Diet Project, which compiled a database of Western Apache foods and recipes and developed educational programming for youth and families to nurture Apache language and cultural development, health literacy and gardening.[96] Ongoing efforts to grow traditional Apache crops, forage for traditional foods and support cultural, physical, mental and spiritual health continue under the Traditional Western Apache Diet Project, with the support of partners such as Nalwoodi Denzhone Community Center and the San Carlos Apache Tribal Extension program.

Employment

Unemployment and underemployment can affect a family's ability to meet the expenses of daily living, as well as their access to resources needed to support their children's well-being and healthy development. A parent's job loss can affect children's school performance, leading to poorer attendance, lower test scores, and higher risk of grade repetition, suspension or expulsion.[97] Unemployment can also put families at greater risk for stress, family conflict and homelessness. [98]

The unemployment rate is the proportion of the total number of people in the civilian labor force who are unemployed and looking for work. Note that unemployment rates do not include people who have dropped out of the labor force entirely, including those who wanted to work but could not find a suitable job and have stopped looking for employment.[99] 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 ACS estimates that the average unemployment rate for the San Carlos Apache Region over the five years from 2015 to 2019 is 27%. This exceeds the unemployment rate across all Arizona reservations (17%), as well as the unemployment rates in Gila County (9%), Graham County (8%) and Arizona overall (6%) (Table 13). However, the labor force participation rate in the region (51%) is higher than that seen across all Arizona reservations (45%). This means that about half of working-age teens and adults are working or actively looking for 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.[100] Local key informants identified lack of work experience and criminal histories as two barriers to employment affecting many community members. As discussed in the *Nnee Bich'o Nii TANF program* section, Nnee Bich'o Nii provides job training services that can support these community members in building skills and expunging criminal records to better prepare them for entering the workforce.

Table 13. 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
San Carlos Apache Region	**7,121**	**27%**	**51%**	**38%**	**14%**	**49%**
All Arizona Reservations	136,151	17%	45%	37%	8%	55%
Gila County	43,850	9%	47%	43%	4%	53%
Graham County	28,895	8%	49%	45%	4%	51%
Arizona	5,600,921	6%	60%	56%	3%	40%
United States	259,662,880	5%	63%	60%	3%	37%

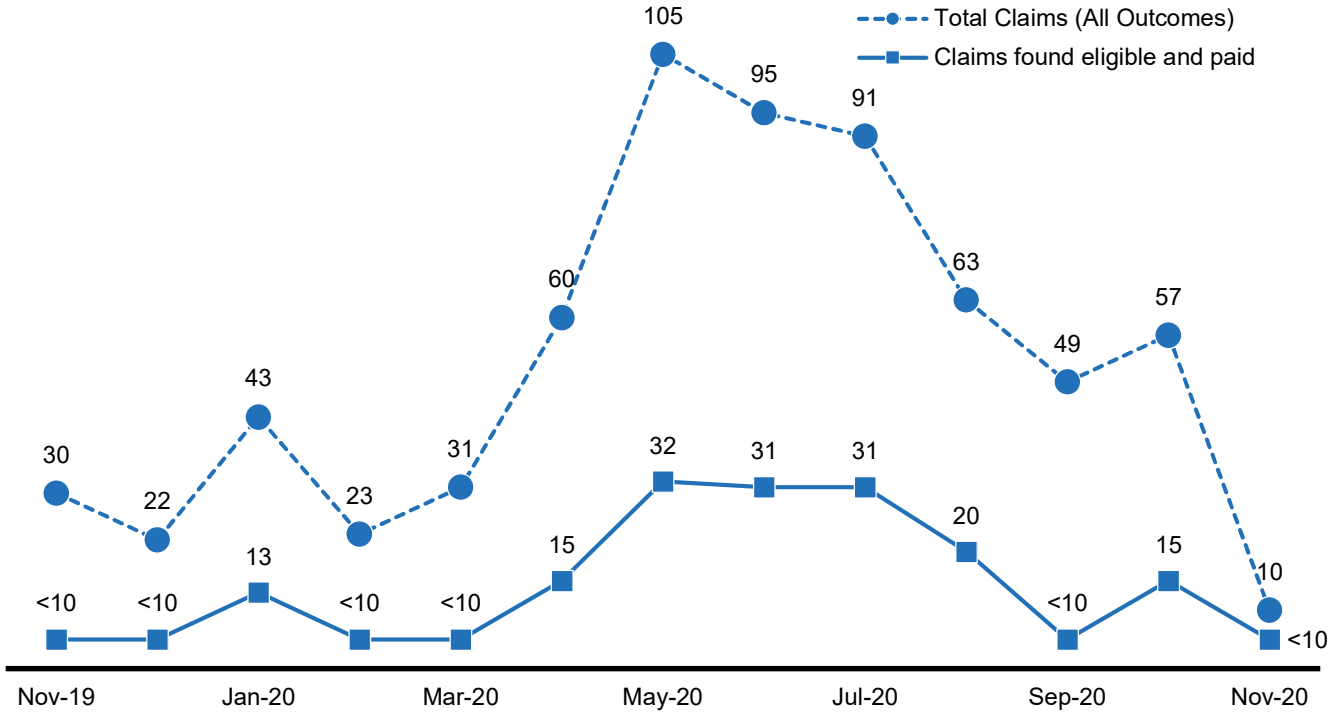
Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B23025

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.[101] 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.[102] 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.[103]

The demand for these programs in the San Carlos Apache Region is highlighted in Figure 20. The number of unemployment claims jumped substantially, from 20 to 40 in most months prior to March 2020, to a high of 105 in May 2020. Claims remained elevated above pre-pandemic levels until November 2020. Notably, even as claims surged during the pandemic, there was a consistent and wide gap between the number of claims filed and the number of claims found eligible and paid. At most, in July 2020, 34% of claims were found eligible and paid. This suggests there may be economic challenges for families with lost incomes who requested but did not receive unemployment benefits.

Figure 20. Monthly unemployment claims in the San Carlos Apache Region, Nov 2019 to Nov 2020

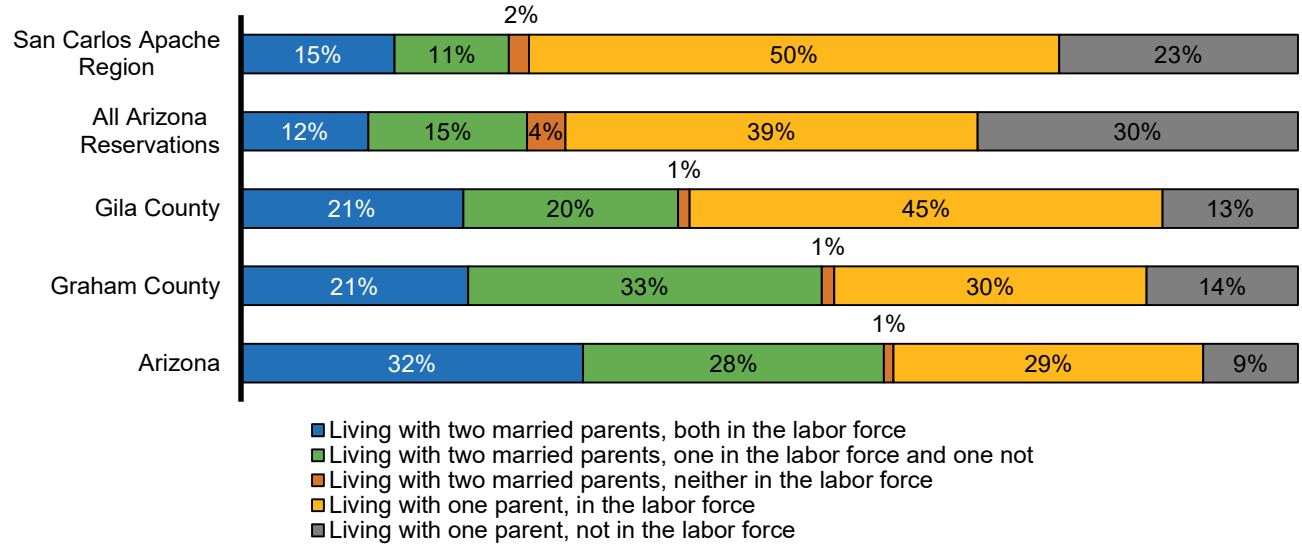


Source: Arizona Commerce Authority (2021), Office of Economic Opportunity, Local Area Unemployment Survey (LAUS)

For parents of young children, many employment decisions may be influenced by the availability and affordability of child care. Nearly two-thirds (65%) of children birth to 5 in the San Carlos Apache Region, more than 1,300 children in total, live in households where all present parents are in the workforce (that is, are employed, or actively seeking paying work) (Figure 21). This includes children in households with a single parent who is in the labor force (50%) and two-parent (married) households where both parents work (15%). In other words, the majority of households with young children likely require some form of child care, and the percent of young children living in households with all parents in the labor force is higher in the region than in Arizona overall (62%).

These working families may have faced particular challenges during the pandemic when local schools and early care and education centers, including the San Carlos Apache Head Start centers, transitioned to remote learning. The families may have needed to rely on extended family networks to help manage remote learning while also juggling employment. Local key informants noted that access to child care was a challenge for many working families even before the pandemic—local early care and education programs such as Apache Kid Child Care and Head Start regular maintained waitlists and operated at full capacity. Child care availability in the region is further discussed in the *Early Care and Education Enrollment* section of this report.

Figure 21. 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. The five percentages in each bar should sum to 100%, but may not because of rounding. Please note that due to the way the ACS asks about family relationships, children living with two unmarried, cohabitating parents are not counted as living with two parents (these children are counted in the 'one parent' category).

Housing Instability

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.[104]

Tribal communities have additionally experienced periods of forced relocation and assimilation as well as complex and changing policies of landownership that have significantly reduced the total amount of land under Tribal governance as well as the resources on these lands.[105] Beginning in 1948, most Tribal lands were held in trust by the federal government and managed by the Bureau of Indian Affairs (BIA) for the benefit of federally-recognized tribes.[106] In 1962, the U.S. Department of Housing and Urban Development (HUD) began funding Indian Housing Authorities (IHAs) in Tribal communities. However, this funding was inadequate and included restrictions on development and participation that inhibited Tribes' ability to provide and maintain healthy housing for the entire community. Since the passage of the Native American Housing Assistance and Self-Determination Act (NAHASDA) in 1996, Tribal governments have been able to design their own housing programs for members, leverage both

block grant funding and conventional private funding and provide services with fewer participation restrictions.[107] Through leaseholds and protections against foreclosure, Tribal homebuyers can apply for leasehold-backed mortgages, and Tribal housing authorities can focus their funds on the housing needs of lower-income members. Despite these gains, funding remains inadequate to address all housing needs, and other barriers exist including costly physical infrastructure development, poor credit history and low homebuyer readiness.[108]

The San Carlos Apache Housing Authority was established in 1961 and provides affordable housing in the San Carlos Apache Region.[xvi] The Housing Authority provides subsidized rental housing for low-income families under NAHASDA income guidelines as well as a homebuyer program. The goals of the Housing Authority are to remedy unsafe and unsanitary housing, address the shortage of affordable housing in the community, and provide employment opportunities in the construction and maintenance trades.[109]

According to data from the American Community Survey (ACS), from 2015 to 2019, there were 1,455 owner-occupied housing units and 938 renter-occupied housing units in the San Carlos Apache Region. Traditionally, housing has been deemed affordable for families if it costs less than 30% of annual household income.[110] Overall, 12% of households had housing costs that were 30% or more of household income, with rates slightly lower among homeowners (10%) and higher among renters (14%). These rates were lower than those seen in all Arizona reservations (14%) overall as well as Gila County (24%) and Graham County (23%), suggesting that housing is more affordable in the region than in the surrounding areas. However, local key informants emphasized that the safety and adequacy of housing stock in the region is a major concern. According to the ACS, 14% of housing units in the region lacked complete plumbing facilities and 10% lacked complete kitchen facilities.[111] Local key informants in the region also describe a severe shortage of safe and adequate housing stock in the region. Many families live in overcrowded housing, often exceeding five people per bedroom. This issue was particularly concerning during the pandemic when overcrowding put households at increased risk of spreading COVID-19 within their family. Key informants noted that, in part due to the problems of overcrowding in many households, the tribe opened an Alternative Care Site at the Apache Gold Casino Resort to provide a safe place for individuals who needed to isolate or quarantine away from their families.

[xvi] *For more information about the San Carlos Apache Housing Authority, visit https://sancarloshousingauthority.org/*

Table 14. 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
San Carlos Apache Region	**2,393**	**12%**	**1,455**	**10%**	**938**	**14%**
All Arizona Reservations	50,231	14%	34,358	12%	15,873	18%
Gila County	21,945	24%	16,581	21%	5,364	31%
Graham County	11,017	23%	7,741	18%	3,276	35%
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.

The lack of safe and adequate housing for families in the region can exacerbate other challenges. When families lack affordable or safe housing, they may choose to move in or 'double up' with other family members or friends, a practice that local key informants noted is common in the San Carlos Apache Region. However, under federal definitions, many of these 'doubled-up' families and their children count as homeless. The McKinney-Vento Act provides funding and supports to ensure that children and youth experiencing homelessness have access to education. Under the McKinney-Vento Act, children are defined as homeless if they lack a "fixed, regular, and adequate nighttime address." This includes children living in shelters, cars, transitional housing, campground, motels and trailer parks, as well as children who are living 'doubled up' with another family due to loss of housing or economic hardship.[112] According to McKinney-Vento Act definitions, 54 students in San Carlos Apache Region schools were experiencing homelessness in 2019-20, an increase from fewer than 11 in prior years. Identifying students who qualify as experiencing homelessness under the McKinney-Vento Act is particularly important for school districts, as this affects school funding and helps ensure that students have the resources they need to succeed in school. However, key informants indicated that the true number of students in 'doubled up' families may be even higher in the region. They noted that many families involved with Tribal Child Protective Services (Tribal CPS) are living 'doubled up' with other families in unstable arrangements that frequently change. These unstable housing arrangements can make it challenging for families to consistently receive services. Increasing the supply of safe and adequate housing through new construction or repair of existing structures remains a key need in the region.

Table 15. Students experiencing homelessness (McKinney-Vento Act definition), 2017-18 to 2019-20

Geography	Number of homeless students			Percent of students who were homeless		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
San Carlos Apache Region schools	**<11**	**<11**	**54**	**DS**	**DS**	**3%**
Off-reservation Schools (All students)	21	29	16	1%	1%	1%
Gila County	544	521	213	7%	7%	3%
Graham County	20	14	22	0%	0%	0%
Arizona Schools	15,923	12,931	11,538	1%	1%	1%

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

Note: The McKinney-Vento Act provides funding and supports to ensure that children and youth experiencing homelessness have access to education. Under the McKinney-Vento Act, children are defined as homeless if they lack a "fixed, regular, and adequate nighttime address." This includes children living in shelters, cars, transitional housing, campground, motels, and trailer parks, as well as children who are living 'doubled up' with another family due to loss of housing or economic hardship. More information can be found on the ADE website: https://www.azed.gov/homeless

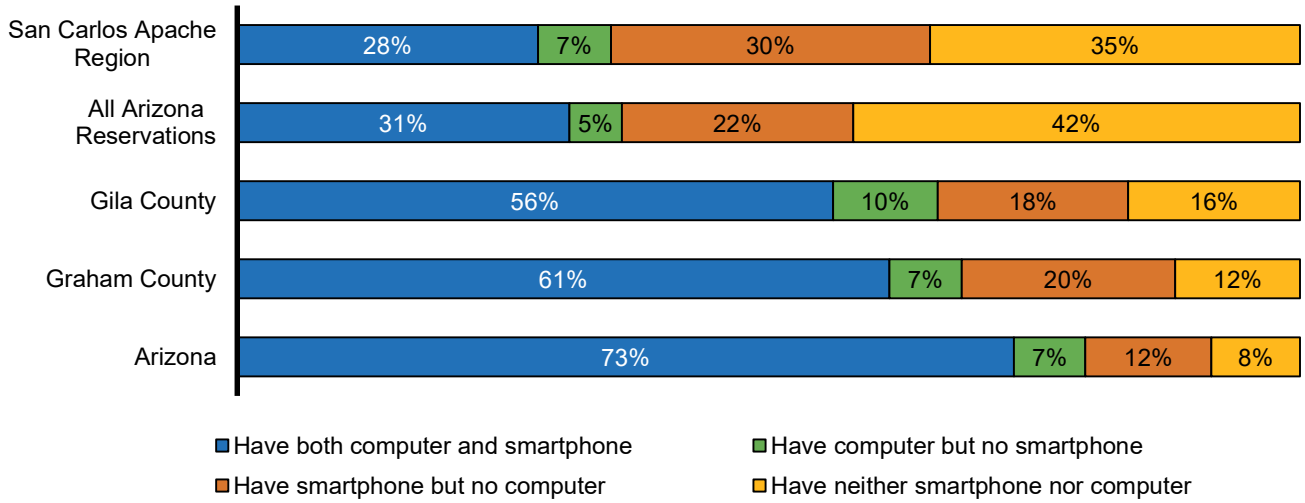
Information Access Through Computers and Internet

One increasingly critical need for modern homes is a reliable means of internet access. Families often rely on communication and information technologies to access information, connect socially, pursue an education and apply for employment opportunities. During the pandemic, a reliable internet connection was essential for a successful transition to remote work and school for many. Parents are also more likely to turn to online resources, rather than in-person resources, for information about obtaining health care and sensitive parenting topics including bonding, separation anxiety and managing parenting challenges.[113] The term "digital divide" refers to disparities in communication and information technologies,[114] and the lack of sustained access to information and communication technologies in low-income communities is associated with economic and social inequality.[115] 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).[116] Additionally, 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.[117]

According to the ACS, just over a quarter of households (28%) in the San Carlos Apache Region have both a computer and a smartphone in their home (Figure 22). An estimated 7% have a computer but no smartphone, 30% have a smartphone but no computer, and the remaining 35% have neither (Figure 22). Compared to all Arizona reservations, a lower percentage of households have both a computer and a smartphone, but a higher percentage have a smartphone but not a computer. Rates of computer and

smartphone ownership lag far behind rates in Gila County (56%), Graham County (61%) and the state (73%). The high prevalence of smartphone-only households points to the importance of texting and app-based communication methods for reaching families. local key informants echoed this point, noting that outreach through social media is one of the most effective ways to communicate with parents of young children.

Figure 22. 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

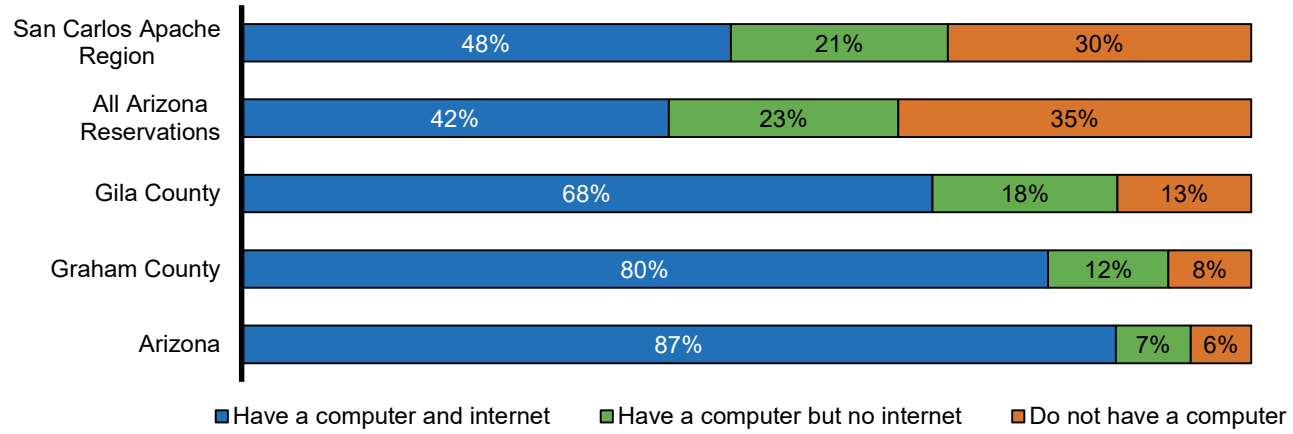
Note: In this table, "computer" includes both desktops and laptops; "smartphone" includes tablets and other portable wireless devices. The four percentages in each bar should sum to 100%, but may not because of rounding.

Looking at individuals rather than households, just under half of San Carlos Apache Region residents have access to a computer and the internet (48%) (Figure 23). About one in five (21%) have a computer but no internet, and 30% have no computer. Among children birth to 17, rates of computer and internet access at home were similar but slightly lower, with only 46% of children living in households with both a computer and internet access (Figure 24). This matched the rate of computer and internet access for children living in reservations across Arizona.

As schools transitioned to remote learning during the COVID-19 pandemic, access to a computing device and the internet became increasingly important for children to engage in educational activities and to connect socially with teachers or peers. With more than half of children in the San Carlos Apache Region lacking either a computer or access to the internet at home before the pandemic, staying connected with school during remote learning was particularly challenging for many families. Local key informants noted that the San Carlos Apache Department of Education and Department of Health and Human Services had already begun looking at laptops and online platforms for remote learning as soon as they started hearing about the pandemic. This meant that when schools closed for in-person learning in March 2020, departments were able to move quickly to purchase laptops and Wi-Fi hotspots for families who needed them. However, key informants also noted that many families had challenges

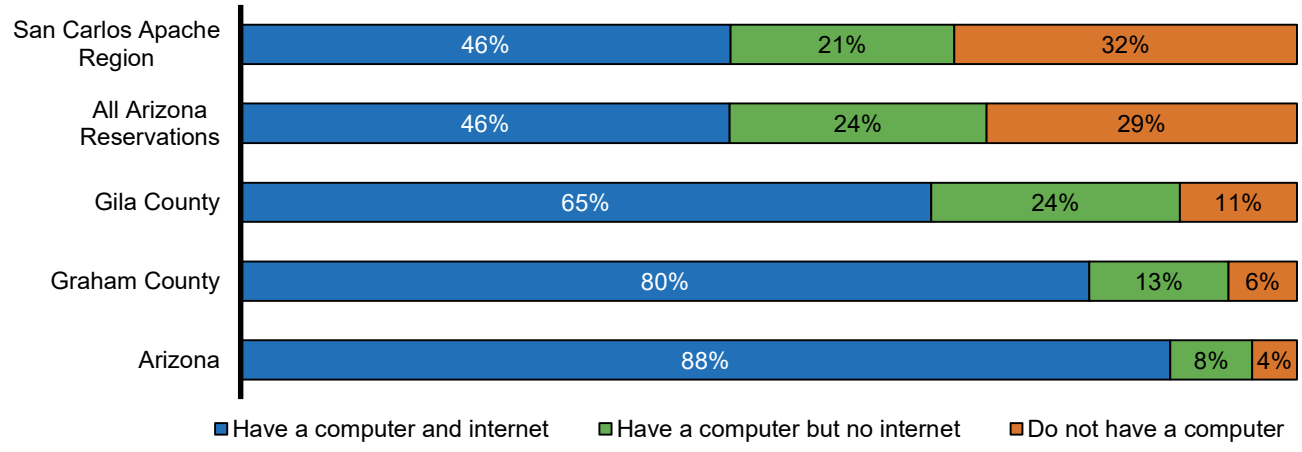
learning how to use the technology provided; they described a situation where about half of families were able to easily get their children set up for remote learning, but the other half of families struggled to adapt. Key informants also noted that the San Carlos Apache Tribe worked with a local telecommunications company to suspend internet payments for households in the region during the first 18 months of the pandemic. This suspension of payments was meant to help expand internet access in the region while services were being provided remotely.

Figure 23. 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

Figure 24. Children ages birth to 17 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

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.[118] 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.[119,120] Parents with more education are also more likely to have children who have more positive outcomes for school readiness and educational achievement, and; children whose parents have at least a high school diploma or GED score higher in reading, math and science in their first four years of school. [121,122] 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.[123] Participation in high-quality early education has been linked to better school performance in elementary and high school.[124] 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.[125] 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

Children in the San Carlos Apache Region attend school at public schools in the San Carlos Unified School District and the Fort Thomas Unified School District, private schools such as Peridot- Our Savior's Lutheran School and St. Charles Apache Mission School, and off-reservation schools including Globe Unified School District schools, Miami Unified School District #40 schools and Destiny Charter School in Globe. As of October 1, 2019, there were 564 children enrolled in preschool through 3rd grade in public schools in the San Carlos Apache Region. Most children in the region (n= 497) attended Rice Elementary School, with only 67 children enrolled at Mt. Turnbull Elementary School (Table 16). An additional 159 American Indian students were enrolled in kindergarten to 3rd grade in Globe Unified School District, specifically at Copper Rim Elementary School and Destiny Charter School.

Table 16. Preschool to 3rd grade students enrolled in public or charter schools, 2019-20

Geography	Preschool	Kindergarten	1st Grade	2nd Grade	3rd Grade
San Carlos Apache Region Schools	**16**	**157**	**116**	**140**	**135**
Rice Elementary School	16	137	99	126	119
Mt. Turnbull Elementary School	N/A	20	17	14	16
Off-reservation Schools (American Indian students)	DS	43	39	35	42
Gila County	130	589	527	500	527
Graham County	211	583	559	587	541
Arizona Schools	21,867	81,606	82,386	82,305	83,003

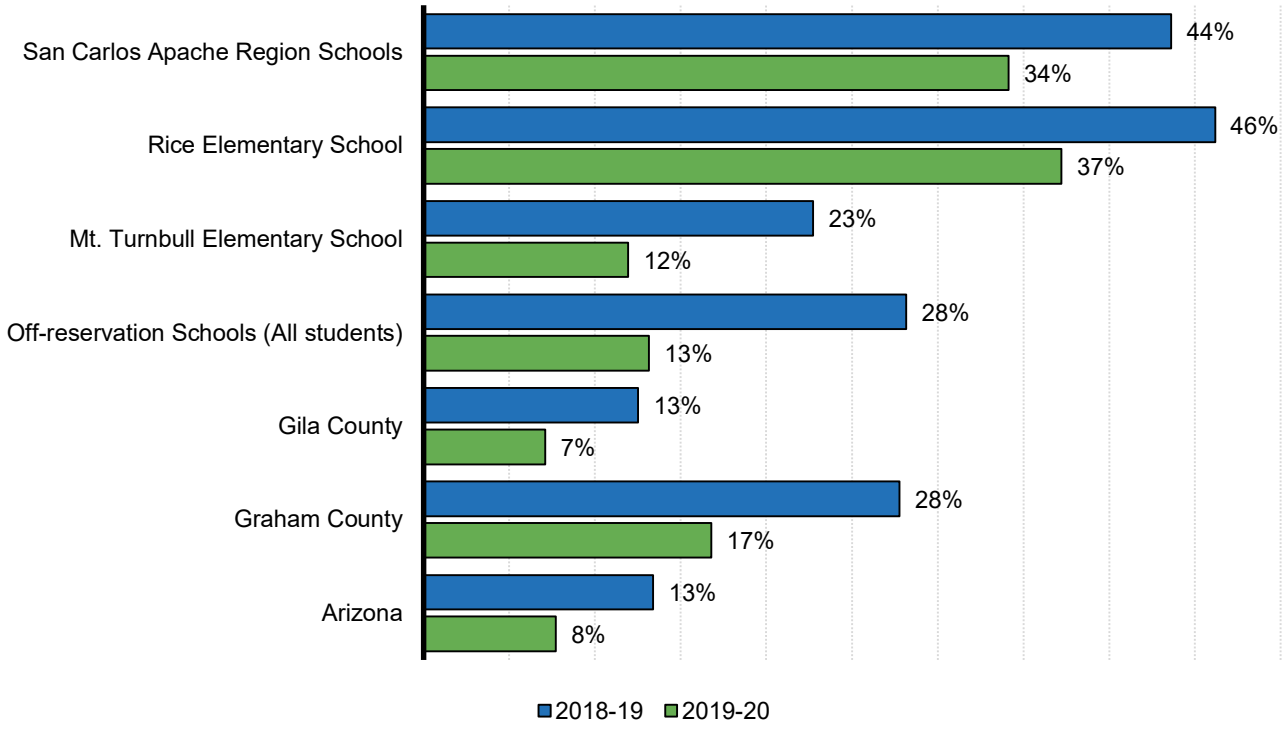
Source: Arizona Department of Education (2021). [Oct 1 Enrollment Dataset]. Custom tabulation of unpublished data by the UArizona CRED Team

Note: Schools included in 'Off-reservation Schools' include Copper Rim Elementary School and Destiny School, both located in Globe.

School attendance and academic engagement early in life can significantly impact the direction of a child's schooling. Chronic absenteeism is defined as missing more than 10% of the school days within a school year (including for reasons of chronic illness), and it affects even the youngest children, with more than 10% of U.S. kindergarteners and 1st graders considered chronically absent.[126] Chronic absences in children enrolled in grades K-3 in the San Carlos Apache Region in the 2018-19 school year (43%) were substantially higher than those seen across the state (13%), with substantial variability across school districts (Figure 25). In the 2019-20 school year, chronic absences dropped almost everywhere – all districts, the region overall, and the state overall. The drops in chronic absenteeism are likely driven by changes due to the COVID-19 pandemic including changes in how attendance was tracked by schools in the spring of 2020.

Looking to the 2018-19 year as the last "normal" school year, chronic absenteeism rates were much higher at Rice Elementary School (46%) than at Mt Turnbull Elementary School (23%). Rates of chronic absenteeism at off-reservation public and charter schools fell between the two at 28%. 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.[127] Chronic absenteeism also negatively impacts the development of key social-emotional skills, including self-management, self-efficacy, and social awareness.[128] These pre-pandemic rates of absences indicate that students, particularly those at Rice Elementary, may need additional support upon returning to in-person schooling.

Figure 25. Chronic absenteeism rates for K-3 students, 2018-19 to 2019-20



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

Note: Schools included in 'Off-reservation Schools' include Copper Rim Elementary School and Destiny School, both located in Globe. Please note that the transition to remote learning substantially changed the ways schools track attendance and likely affected absenteeism rates in the 2019-20 school year.

Achievement on Standardized Testing

A child's 3rd grade reading skills have been identified as a critical indicator of future academic success.[129] 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.[130] 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 live in poverty and do not read proficiently in 3rd grade do not finish high school. This is more than six times the high school dropout rate of proficient readers.[131]

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).[xvii,132,133] In March 2020, Arizona cancelled statewide AzM2 testing and other statewide assessments for the 2019-20 school year due to the pandemic.[134] 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 7% percent of 3rd grade students attending school in the San Carlos Apache Region achieved passing scores on the 3rd grade ELA assessment, which was lower than across Arizona as a whole (46%) (Table 17; Figure 26). Only 5% of 3rd grade students at Rice Elementary met or exceeded expectations for English Language Arts, while the same was true of 20% of students at Mt. Turnbull Elementary School. In off-reservation public and charter schools in Globe, 17% of American Indian 3rd grade students achieved passing scores on the ELA assessment. Local key informants in the region noted that many early elementary students in the region face challenges regarding speech and language development. Especially after the difficulties of transitioning to remote learning during the COVID-19 pandemic, young students in the region may need additional support in reading and language development to lay a strong foundation for future learning.

Table 17. AzMERIT assessment results: 3rd Grade English Language Arts, 2018-19

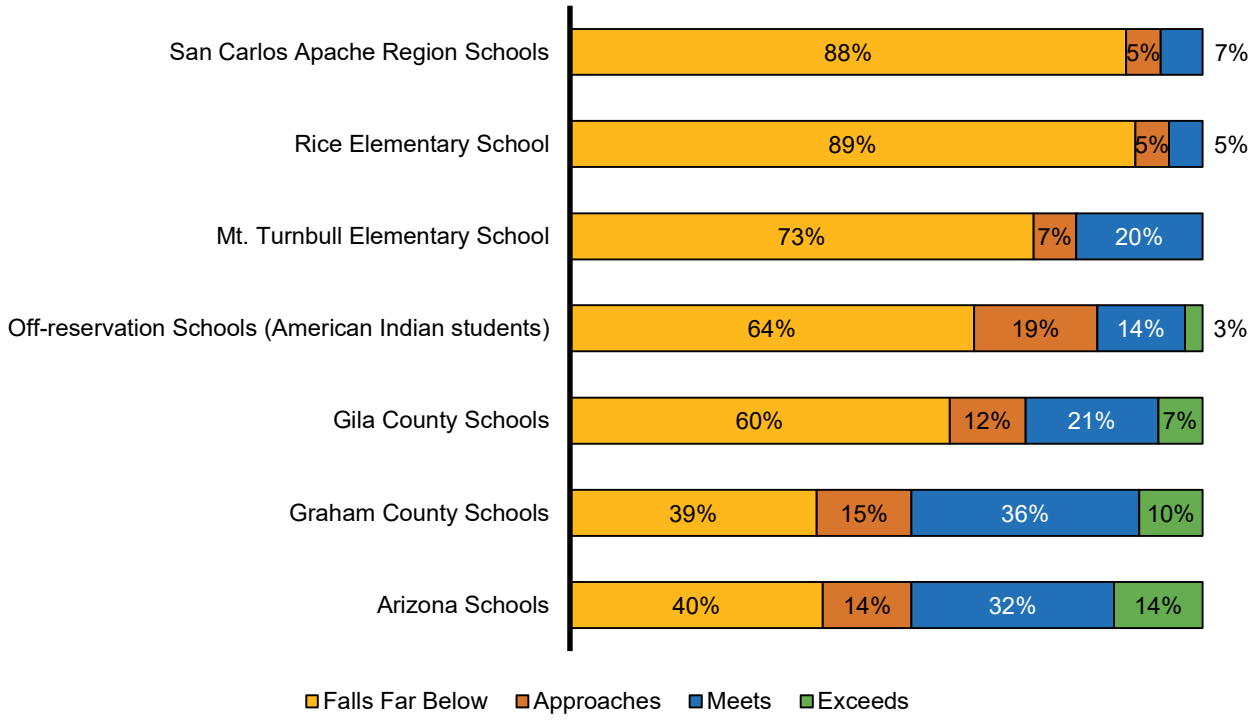
Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
San Carlos Apache Region Schools	DS	88%	5%	7%	<2%	7%
Rice Elementary School	DS	89%	5%	5%	<2%	5%
Mt. Turnbull Elementary School	DS	73%	7%	20%	<2%	20%
Off-reservation Schools (American Indian students)	DS	64%	19%	14%	3%	17%
Gila County Schools	581	60%	12%	21%	7%	28%
Graham County Schools	554	39%	15%	36%	10%	46%
Arizona Schools	82,653	40%	14%	32%	14%	46%

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

Note: Schools included in 'Off-reservation Schools' include Copper Rim Elementary School and Destiny School, both located in Globe.

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

Figure 26. AzMERIT Assessment Results: 3rd Grade English Language Arts, 2018-19

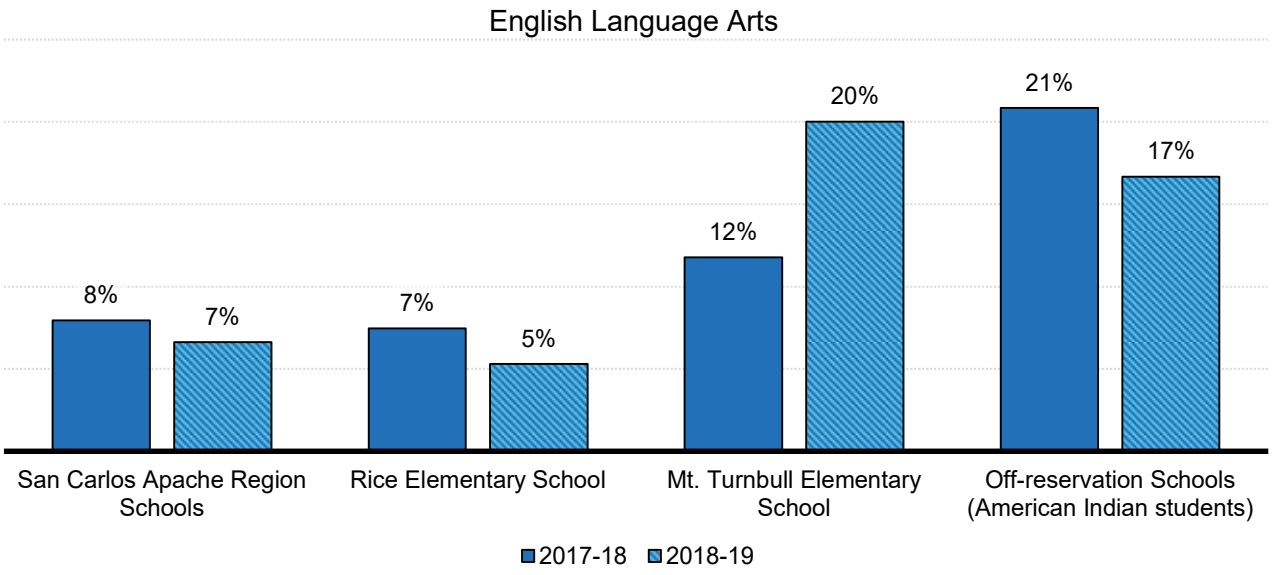


Source: Arizona Department of Education (2021). [AzMERIT dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Note: Schools included in 'Off-reservation Schools' include Copper Rim Elementary School and Destiny School, both located in Globe.

Comparing 2017-18 and 2018-19 AzMERIT ELA passing rates shows that in the two years before the pandemic, the percent of 3rd grade students achieve passing scores had fallen at both Rice Elementary and in off-reservation public schools for American Indian 3rd grade students (Figure 27). However, the percent of students passing the ELA assessment at Mt. Turnbull Elementary School nearly doubled in the same period. Local key informants indicated that concern about school quality and standards was one of the commonly-cited reasons for families sending their children outside the region to schools in the Globe area.

Figure 27. Trends in passing rates for 3rd-grade English Language Arts AzMERIT, 2017-18 to 2018-19



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

Note: Schools included in 'Off-reservation Schools' include Copper Rim Elementary School and Destiny School, both located in Globe.

Performance on the AzMERIT math test in the region was slightly better than ELA performance, with 11% of San Carlos Apache Region 3rd grade students achieving passing scores in the 2018-19 school year (Table 18; Figure 28). This was still much lower than the passing rate across the state (51%). At Rice Elementary School, 3rd grade students achieved passing scores on the math assessment (11%) at more than double the rate of the ELA assessment (5%). Mt. Turnbull Elementary students passed the math assessment at a slightly higher rate (13%), and one in four off-reservation American Indian students (25%) achieved passing scores on the 3rd grade assessment.

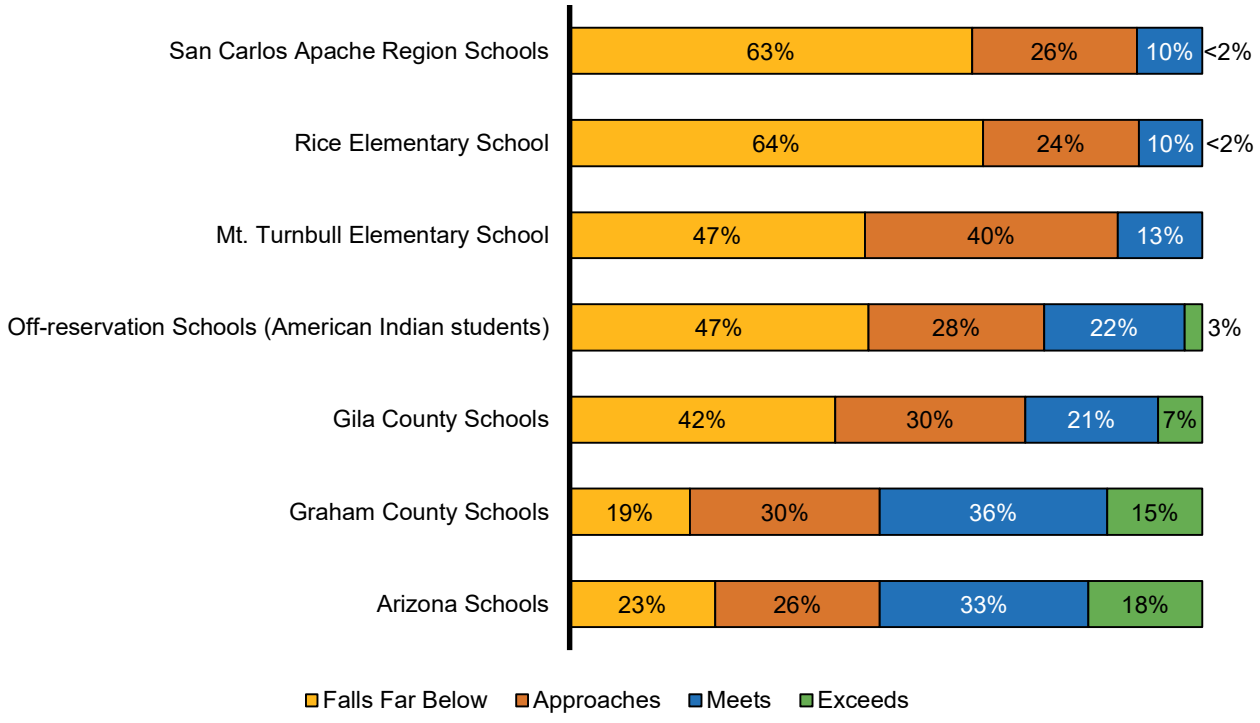
Table 18. AzMERIT assessment results: 3rd Grade Math, 2018-19

Geography	Students Tested	Falls Far Below	Approaches	Meets	Exceeds	Passing
San Carlos Apache Region Schools	DS	63%	26%	10%	<2%	11%
Rice Elementary School	DS	64%	24%	10%	<2%	11%
Mt. Turnbull Elementary School	DS	47%	40%	13%	<2%	13%
Off-reservation Schools (American Indian students)	DS	47%	28%	22%	3%	25%
Gila County Schools	584	42%	30%	21%	7%	28%
Graham County Schools	553	19%	30%	36%	15%	52%
Arizona Schools	83,042	23%	26%	33%	18%	51%

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

Note: Schools included in 'Off-reservation Schools' include Copper Rim Elementary School and Destiny School, both located in Globe.

Figure 28. AzMERIT assessment results: 3rd Grade Math, 2018-19

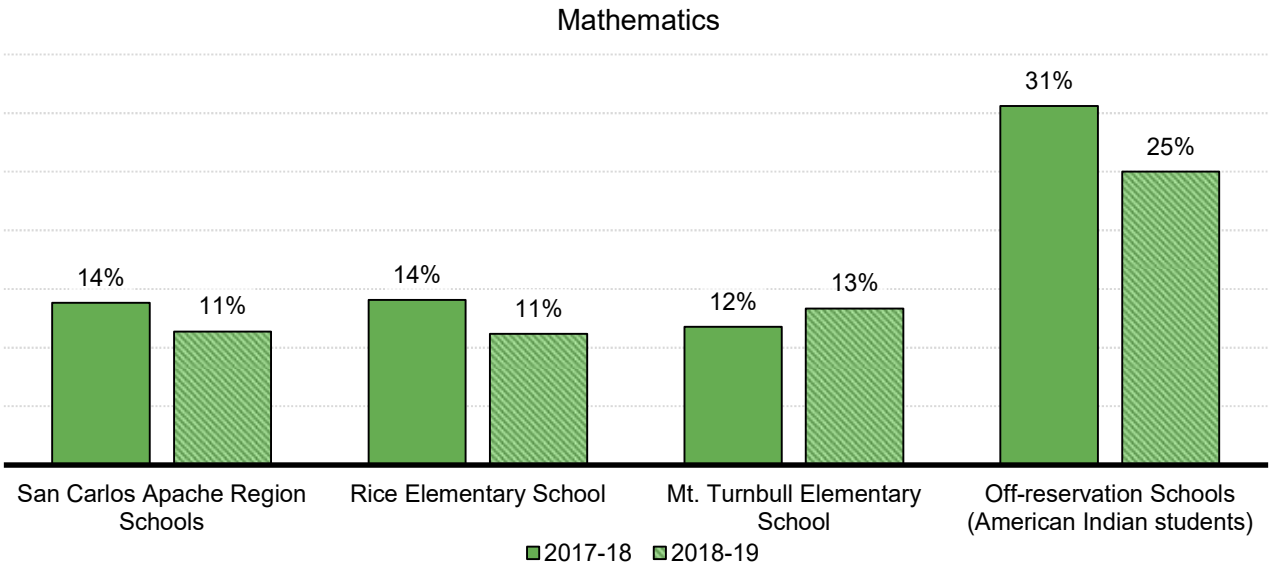


Source: Arizona Department of Education (2021). [AzMERIT dataset]. Custom tabulation by the Community Research, Evaluation, & Development (CRED) team

Note: Schools included in 'Off-reservation Schools' include Copper Rim Elementary School and Destiny School, both located in Globe.

Similar to trends seen in ELA assessments, the percent of 3rd grade students achieving passing scores on the math assessment declined for all schools both in and out of the region except for Mt. Turnbull Elementary (Figure 29). Passing rates fell by three percentage points at Rice Elementary and by six percentage points for American Indian 3rd grade students in public and charter schools in the Globe area.

Figure 29. Trends in passing rates for 3rd-grade Math AzMERIT, 2017-18 to 2018-19



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

Note: Schools included in 'Off-reservation Schools' include Copper Rim Elementary School and Destiny School, both located in Globe.

Local key informants raised concerns about the toll that the COVID-19 pandemic took on the local education system. While the San Carlos Unified School District was able to purchase laptops and Wi-Fi hotspots for families who needed them, key informants estimate that only about half of children in the region were able to stay consistently engaged with school during remote learning. Additionally, the pandemic took a heavy toll on many families both economically and emotionally due to loss of loved ones. Key informants noted that in the last couple of years, San Carlos Unified School District has trained staff and transitioned to being trauma-informed. This trauma-informed approach will be particularly important to support students as they return to classroom and recover unfinished learning.

Graduation Rates and Adult Educational Attainment

Understanding current high school graduation and dropout rates provides insight into the assets and challenges faced by a community and its future workforce. Adults who graduated from high school have better health and financial stability, lower risk for incarceration and better socio-emotional outcomes compared to adults who dropped out of high school.[135,136] 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.[137] Adults with lower educational attainment also tended to experience more

economic challenges during the pandemic, with adults with less than a high school diploma experiencing more than twice the unemployment rate of adults with a bachelor's degree or higher.[138]

The 4-year and 5-year graduation rates in the San Carlos Apache Region overall in 2019 (76% and 77%) were lower than across Arizona as whole (79% and 83%) but exceeded those seen for all American Indian students enrolled in Arizona public and charter schools (Table 19). These lower overall regional rates, however, are driven by low graduation rates at San Carlos Alternative High School, which is to be expected as the Alternative High School serves students who are already behind on credits and trying to complete their high school diploma. Graduation rates at San Carlos High School (96% for both 4- and 5-year) in 2019 exceeded state rates and the graduation rates in surrounding counties. American Indian students enrolled at Globe High School also graduated at higher rates than all students in Gila and Graham County public and charter schools.

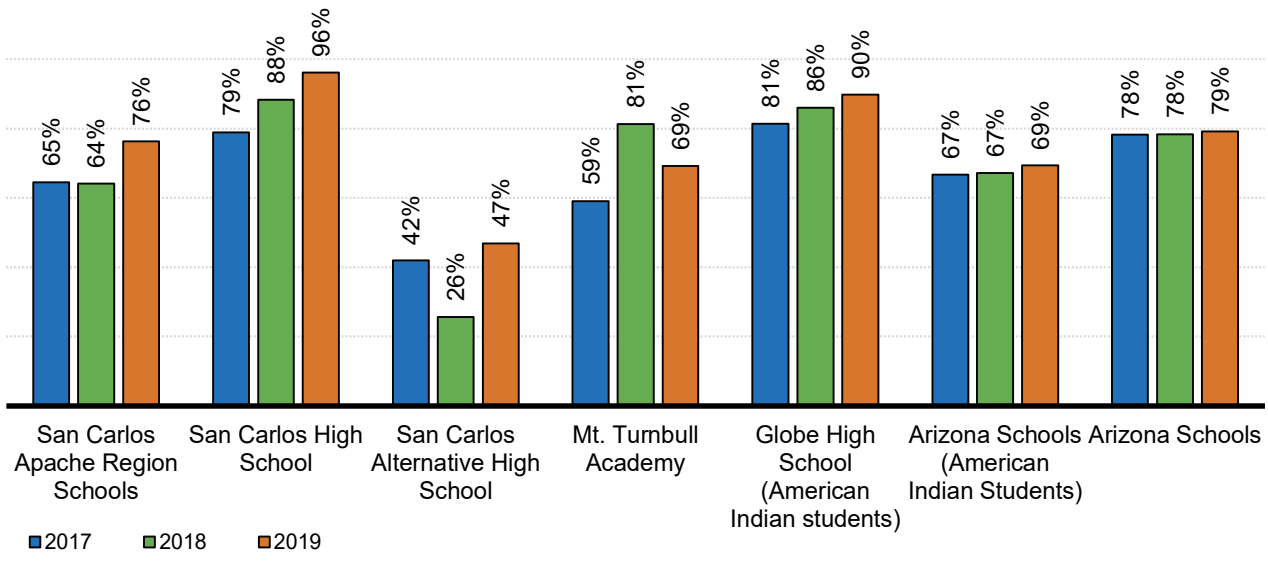
Table 19. 4-year and 5-year graduation rates, 2019

Geography	4-Year Senior Cohort (2019)	4-Year Graduates (2019)	4-Year Graduation Rate (2019)	5-Year Graduates (2019)	5-Year Graduation Rate (2019)
San Carlos Apache Region Schools	97	74	76%	75	77%
San Carlos High School	52	50	96%	50	96%
San Carlos Alternative High School	32	15	47%	16	48%
Mt. Turnbull Academy	13	DS	69%	DS	69%
Globe High School (American Indian students)	137	123	90%	123	90%
Gila County Schools	510	399	78%	415	81%
Graham County Schools	474	422	89%	435	91%
Arizona Schools (American Indian Students)	2,796	4,175	67%	3,056	72%
Arizona Schools	86,355	68,393	79%	71,610	83%

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

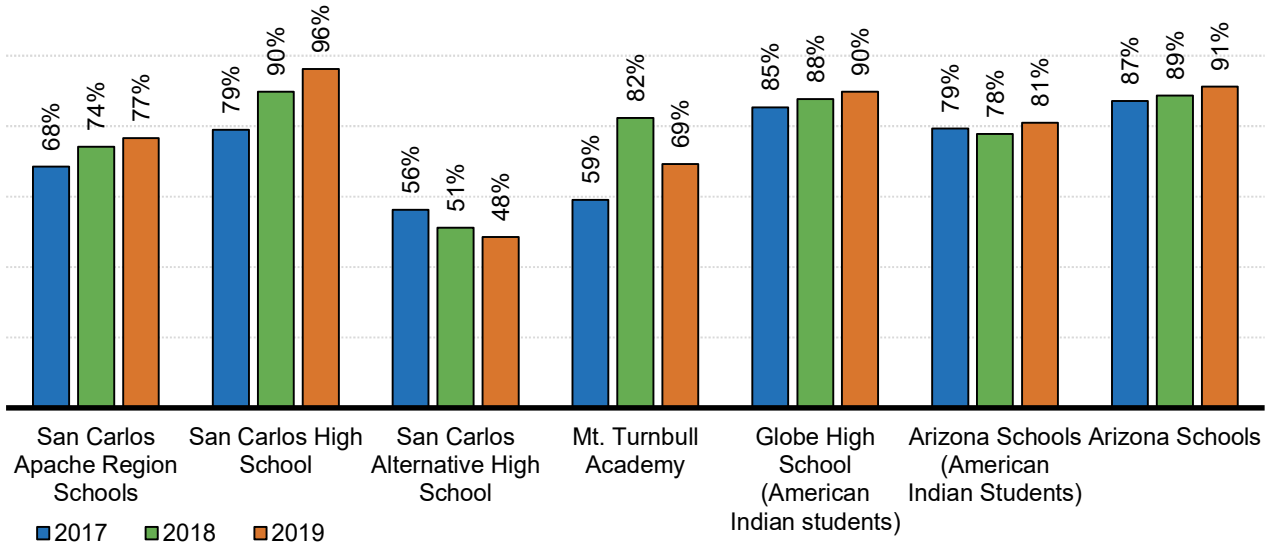
Examining trends in 4- and 5-year graduation rates shows that graduation rates have been steadily rising at both San Carlos High School and for American Indian Students enrolled in Globe area schools (Figure 30; Figure 31). In 2017, about four out of five high school students (89%) graduated in 4-years at San Carlos High School, and this rose to more than 19 out of 20 high school students (96%) by 2019. This increase is a very positive development for the region. Similarly, 4-year graduation rates increased from 81% in 2017 to 90% in 2019 for American Indian students attending Globe area schools. Graduation rates at San Carlos Alternative High School and Mt. Turnbull Academy were more variable. At the Alternative High School, 4-year graduation rates dipped in 2018 before rebounding to 47% in 2019, while 4-year graduation rates at Mt. Turnbull peaked in 2018 at 81% before falling to 69% in 2019.

Figure 30. Trends in 4-year graduation rates, 2017 to 2019



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

Figure 31. Trends in 5-year graduation rates, 2017 to 2019



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

Consistent with the rising graduation rates across the region, dropout rates for 7th to 12th grade students have been dropping over the past three years, falling from 15% in 2017-18 to 8% in 2019-20 (Table 20; Figure 32). However, looking at individual schools shows varying trajectories over recent years. At San

Carlos High School, dropout rates increased from 12% in 2017-18 to 17% in 2018-19, before dropping dramatically to 2% in 2019-20. Dropout rates showed a steady decline over the past three years at Mt. Turnbull academy, falling from 33% in 2017-18 to 26% in 2019-20. At San Carlos Alternative School, dropout rates have fallen by more than half, declining from 43% in 2017-18 to only 17% in 2019-20. However, dropout rates at San Carlos Middle School dramatically increased in 2019-20 to 11%, a rate five times that of the 2% seen in 2018-19. This may reflect students lost to contact during the transition to remote learning during the COVID-19 pandemic and points to a need for additional support for students to re-engage with school now that schools have returned to face-to-face learning.

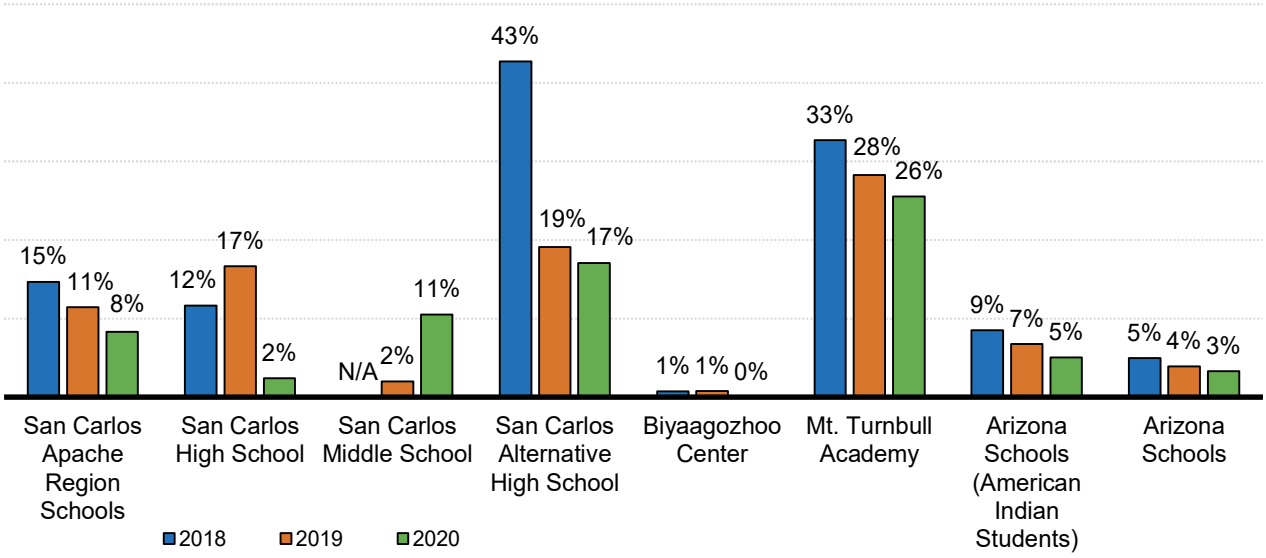
Table 20. Trends in 7th-12th grade dropout rates, 2017-18 to 2019-20

Geography	Dropout Rate, 2017-18	Dropout Rate, 2018-19	Dropout Rate, 2019-20
San Carlos Apache Region Schools	15%	11%	8%
San Carlos High School	12%	17%	2%
San Carlos Middle School	N/A	2%	11%
San Carlos Alternative High School	43%	19%	17%
Biyaagozhoo Center	1%	1%	0%
Mt. Turnbull Academy	33%	28%	26%
Off-reservation Schools (All students)*	4%	3%	1%
Gila County	6%	5%	3%
Graham County	4%	4%	3%
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

Note: Dropout rates for middle school students, particularly in 2019-20, likely reflect students lost to follow-up rather than students who stop attending school altogether.

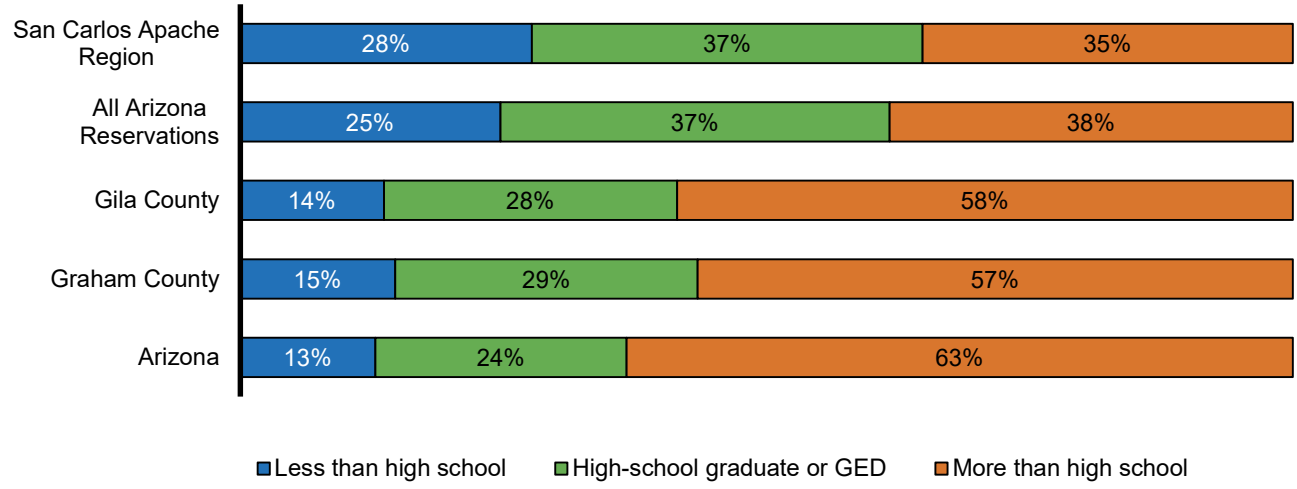
Figure 32. Trends in 7th-12th grade dropout rates, 2015-16 to 2019-20



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

According to American Community Survey estimates, adult educational attainment in the San Carlos Apache Region is similar to that across all Arizona reservations. Over a quarter of adults in the region (28%) have less than a high school education, over a third (37%) have a high school diploma with no further education, and the remaining 35% have more than a high school education (Figure 33).

Figure 33. 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.

Educational attainment tends to be lower among mothers giving birth in the region. Babies in the region in 2018 (37%) and 2019 (33%) were born to mothers who had less than a high-school education at nearly twice the rate seen statewide (17% in 2018 and 16% in 2019) (Table 21). These low rates of maternal educational attainment suggest that the region may especially 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.[139,140] Providing resources and programming to support parental and youth education can help grow the human capital of both. [141,142]

Table 21. 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
San Carlos Apache Region	**2018**	**199**	**37%**	**40%**	**23%**
	2019	**195**	**33%**	**44%**	**[20% to 22%]**
All Arizona Reservations	2018	1,990	N/A	N/A	N/A
	2019	2,180	N/A	N/A	N/A
Gila County	2018	497	26%	33%	41%
	2019	473	21%	34%	44%
Graham County	2018	513	17%	33%	50%
	2019	493	18%	33%	49%
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. 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.

Additional 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. [143,144] 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;[145] those disparities that persist until kindergarten tend to predict later academic problems.[146]

Quality early care and education can positively influence children's overall development.[147,148] This is particularly true for children in poverty.[149] 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.[150] 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.[151, 152] Children with special health care needs may particularly benefits from high quality teacher-child interactions in classrooms,[153,154] as they are more likely to experience more adverse childhood experiences than typically developing children,[155] and are at an increased risk for maltreatment and neglect.[156,157]

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.[158] Investment in programs for young children leads to increased education and employment, reduced crime and better overall health.[159,160] 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.[161]

What the Data Tell Us

Early Care and Education Enrollment

Families in the San Carlos Apache Region can access early childhood education and child care services through the Apache Kid Child Care Center, San Carlos Apache Head Start Program, San Carlos Apache Early Head Start Program and the school-based preschool at Rice Elementary, a local public school in the San Carlos Unified School District. Apache Kid Child Care Center and the San Carlos Apache Head Start and Early Head Start programs are all tribally-operated under the San Carlos Apache Education Department.

Apache Kid Child Care Center

The tribally-operated Apache Kid Child Care Center serves children in the region on Monday through Friday at two sites located in San Carlos and Bylas (the Bylas site shares buildings with the San Carlos Apache Head Start and Early Head Start Programs). Eligibility criteria for services include income (with preference for low-income families), teen parents enrolled in high school, Tribal TANF clients, and parents in the workforce. Pre-pandemic, Apache Kid Child Care Center had the capacity to serve 64 children birth to 12 at their San Carlos location and 20 children birth to 12 at the Bylas location. Apache Kid Child Care Center has a 2-star rating from Quality First at their San Carlos location and a 5-star rating at the Bylas location, the highest possible quality rating.

However, the pandemic has greatly affected operations at both Apache Kid Child Care Center locations. From the start of the pandemic through most of 2021, the center closed both locations for in-person care for the safety of children and staff. Teachers and staff interacted with families of young children through packets of learning materials sent home weekly to children's homes and through Zoom meetings and phone calls with families. In December 2021, Apache Kid Child Care Center re-opened a preschool classroom, but fewer than 10 preschool-age children have been regularly attending since this classroom re-opened. In February 2022, Apache Kid Child Care Center opened an afternoon child care classroom for children ages 5 to 12. This class has regularly been attended by about 12 children each day. Staffing challenges and space constraints have meant that the child care center is not able to operate anywhere near their licensed capacity, with a current capacity to only serve 40 children total across both centers.

San Carlos Apache Head Start and Early Head Start

San Carlos Apache Head Start is a comprehensive early childhood education program for pre-school aged children whose families meet income eligibility criteria. The program operates four facilities, one in each district of the reservation: Gilson Wash, Peridot, Seven Mile Wash and Bylas. The San Carlos Apache Head Start program has a funded enrollment of 233 children ages 3 to 4, which means that at any point during the year the program can serve up to 233 children. Because some children may leave the program and others are enrolled in their place, in school year 2018-19 the program served 251 children overall. Of the children served by San Carlos Apache Head Start in 2018-19, about two-thirds (65%) were age 4 and the rest were age 3 (35%). San Carlos Apache Head Start participates in Quality First, and the star ratings of Head Start facilities range from 2-stars at Gilson Wash Center to 4-stars at Seven Mile Wash Center. Head Start partners with the Apache Language Preservation Program to train staff to provide Apache Language instruction for students.

In 2017, the San Carlos Apache Education Department received funding to start the San Carlos Apache Early Head Start Program. The program has a funded enrollment of 75 children ages birth to 2 and is co-located with Apache Kid Child Care Center in San Carlos and Bylas. However, in the 2018-19 school year, the program only served 68 children, meaning that they did not meet full enrollment that year. Of these 68 children, nearly half were age 2 (49%), over a third were age 1 (37%), and the rest were infants under age 1 (15%).

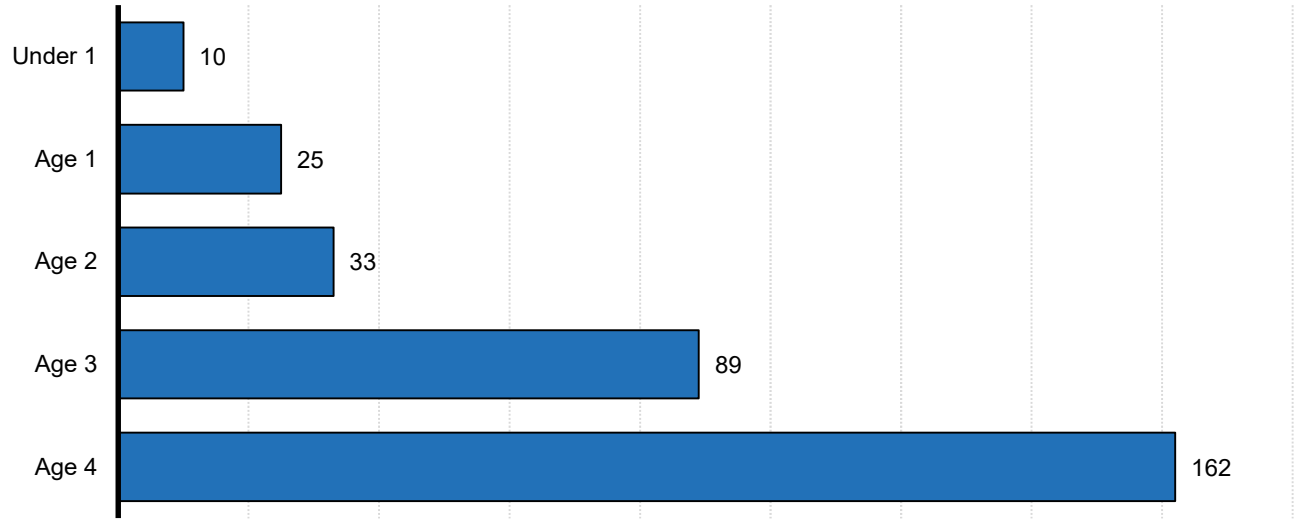
Table 22. San Carlos Apache Head Start Enrollment, 2018-19

	Funded Enrollment	Cumulative Enrollment
Head Start	233	251
Early Head Start	75	68

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

Note: Funded enrollment is the number of children that Head Start or Early Head Start can serve at any given time. Cumulative enrollment is the total number of children served throughout the school year as children may leave the program and other children may be enrolled in their place.

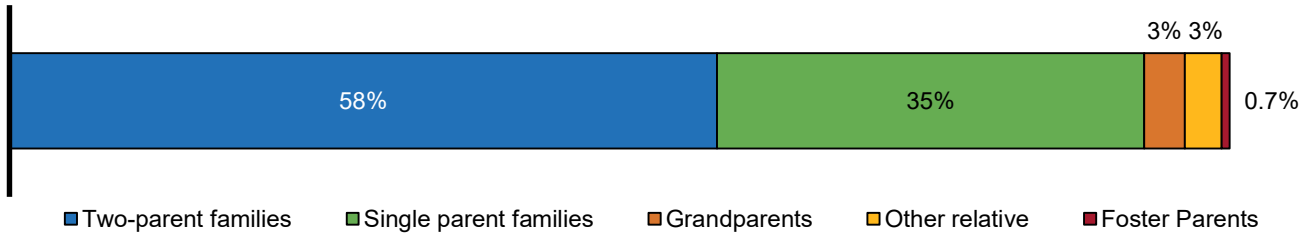
Figure 34. San Carlos Apache Head Start and Early Head Start enrollment by age, 2018-19



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

There were 300 children participating in Head Start and Early Head Start for which family data were available in 2018-19, 237 in Head Start and 63 in Early Head Start. Of these children, nearly six in 10 (58%) lived in families with two parents present, while 35% lived with single parents (Figure 35). This family composition profile is different from that in the region as reported by the ACS, where only 23% of young children live in two-parent families, and the majority (63%) live with a single parent (Figure 7). Part of this difference is likely driven by differences in how the ACS and Head Start ask about family living arrangements. The Head Start application form only asks whether the family is a "one-parent family" or a "two-parent family," making it easier for parents who are cohabitating to indicate that theirs is a "two-parent family," regardless of the legal status of their relationship. By contrast, the ACS only records families as two-parent families if the parents of a child are married and does not capture unmarried, cohabitating parents.[162]

Figure 35. Living arrangements for children in San Carlos Apache Head Start and Early Head Start, 2018-19



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

According to local key informants, the Early Head Start program has had a difficult time meeting full enrollment over the past few years. In the first two years that the program existed (2017-18 and 2018-19), enrollment in the program grew from about 40 children to the 68 served in 2018-19, and according to key informants, the program finally reached full enrollment at 75 children before the COVID-19 pandemic during the 2019-20 school year. However, at the onset of the pandemic in March 2020, both Head Start and Early Head Start transitioned to remote learning, with contact with families maintained through distribution of learning material packets and Zoom meetings and phone calls. Head Start facilities also prepared meals for children that parents could pick up and take home. Local key informants also noted that Head Start and Early Head Start were able to provide laptops and tablets for children who needed them. They highlighted the resourcefulness of staff in learning new platforms and adjusting to working remotely as a strength during the pandemic.

Head Start and Early Head Start resumed in-person classes during the 2020-21 school year, but both programs had enrollments below their funded capacity. In Head Start, local key informants noted that spring 2022 enrollment was at 191, below the 233 funded slots, and attributed this to families' hesitation to send their young children to out-of-home programs given the ongoing pandemic. Staffing challenges have affected the ability of the Early Head Start program to operate at full capacity. According to key informants, as of February 2022, Early Head Start only had about half of the 24 teachers they would need to operate at full capacity. Some Head Start and Early Head Start staff left during the pandemic for better job opportunities, which led to Head Start and Early Head Start tapping some of the Apache Kid Child Care teachers with the required credentials to step in and teach Early Head Start or Head Start classes. This movement of staff has meant that Early Head Start has been able to serve about 47 children in spring 2022; however, it also has meant that Apache Kid Child Care cannot currently serve all the young children that they are licensed to care for because of the lack of staff. High staff turnover was highlighted as a major challenge facing Head Start, Early Head Start and Apache Kid Child Care. Local key informants indicated that there is a high demand for care and education, particularly for Early Head Start, with families frequently calling about enrolling children, but without more staff, the program cannot currently enroll any more children.

During the COVID-19 pandemic in 2020 and 2021, the San Carlos Apache Education Department was able to buy two modular buildings to provide more space for the Head Start and Early Head Start programs. While these new buildings have helped with space constraints, allowing the opening of four additional classrooms, both the Head Start and Early Head Start programs and Apache Kid Child Care Center still need more space to operate effectively. The Education Department hopes to expand Head Start facilities and add more buildings with federal COVID relief funds likes those from the Coronavirus Aid, Relief, and Economic Security (CARES) Act and American Rescue Plan Act.

Rice Elementary Inclusive Preschool

At Rice Elementary School, the San Carlos Unified School District launched an inclusive preschool in the 2021-22 school year. This effort expanded the existing special needs preschool program with the addition of one general education classroom for preschool students and also expanded the program from half-day to full-day preschool. The district had hoped to open the inclusive preschool in the 2020-21 school year, but with school operating through remote learning, the preschool program launch was delayed. The new classroom has the licensed capacity to serve up to 20 students. The goal of the inclusive preschool is to expand the early education opportunities for preschool-age children in the community that Head Start may not be able to serve due to capacity limitations and eligibility criteria (such as income eligibility). Local key informants noted that teachers and staff at Rice Elementary School see many children entering kindergarten and 1st grade with communication disorders and needing substantial support in their language development. They hope that the inclusive preschool will provide a rich and nurturing space to support early language development. Under the inclusive preschool model, both typically-developing children as well as children with speech and language delays attend the same preschool classroom with a general preschool teacher, and those children with delays are supported by a speech and language pathologist. Special needs preschool teachers still teach those children who need more wraparound support. The preschool program at Rice Elementary is a 3-star Quality First program.

Overall Early Care and Education Capacity

The early care and education options available to families in the San Carlos Apache Region are a major asset. As shown in Table 23, these programs have a combined capacity to serve 412 children birth to 5, at least pre-pandemic. According to the 2010 U.S. Census there were 1,435 children ages birth to 5 residing in the region (Table 1). Based on this number, the slots currently available would provide services to just over one in four young children (29%) in the region. This indicates that there is still substantial unmet need for early care and education in the region. According to the American Community Survey, there are 855 children ages birth to 5 who have all parents in the labor force (either working or seeking work) and likely need some form of care while their parents work (Figure 21). Currently, there are only slots to serve about half of these young children if all programs are fully enrolled and operating at capacity. However, most programs are currently not fully enrolled due to staffing shortages.

The availability of early care and education opportunities also vary greatly by age—the majority of slots in the region (more than 61%) are those for preschool-age children (ages 3 to 4) in Head Start, Apache Kid Child Care preschool classrooms, and the inclusive preschool at Rice Elementary School. This means that early care and education providers in the region have the capacity to serve more than half of all 3- and 4-year-olds in the region (57%); there were 444 estimated children ages 3 to 4 in the region according to the 2010 Census and there are at least 253 slots in the region only for children ages 3 to 4. By contrast, even if Apache Kid Child Care and Early Head Start were fully enrolled, these approximately 100 slots would serve only about 13% of the estimated 762 children birth to 2 in the region, according to the 2010 Census. However, this is a substantial improvement over capacity available before Early Head Start opened. According to the 2018 First Thing First San Carlos Apache Regional Needs and Assets Report, there were only 28 slots available for children birth to 2 in 2016 with the capacity to serve only 4% of children birth to 2 in the region.[163]

Local key informants across multiple programs echoed this need for additional early care and education capacity. Multiple programs in the region currently have waitlists despite not operating at full capacity due to shortages of qualified staff. Key informants also noted that some families are still waiting to send their children to out-of-home care due to fears of their children contracting COVID-19, which means that demand in the future may be even higher. The San Carlos Apache Region has quality early care and education programs located throughout the region; however, these programs need more staff and more space in order to provide sufficient care and education services for all interested families in the region. Without the expansion of early care and education capacity, or at least recovery to pre-pandemic levels of operation, many young children may not have the opportunity to reap the benefits that high quality early education can provide.

Table 23. Total Capacity in Early Care and Education Programs, 2018-19*

	Ages served	Capacity	Cumulative Enrollment
Head Start	Ages 3-4	233	251
Early Head Start	Ages 0-2	75	68
Apache Kid Child Care	Ages 0-5	84	N/A
Rice Inclusive Preschool*	Age 3-4	20	14
Total	Ages 0-5	412	N/A

Source: Office of Head Start (2020). 2019 Program Information Report. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/data/pir. First Things First (2021) Quality First Data Center [Dataset]. Arizona Department of Education (2021). [Enrollment dataset]. Personal correspondence with Apache Kid Child Care and Rice Elementary School staff.

*Note: *This program opened during the 2021-22 school year and data here reflect enrollment and capacity from that year. Head Start, Early Head Start, and Apache Kid Child Care data reflect pre-pandemic enrollment and capacity. As of 2022, Apache Kid Child Care currently is operating at approximately half the capacity compared to their pre-pandemic capacity, with the ability to enroll up to 40 children.*

Early Care and Education Affordability

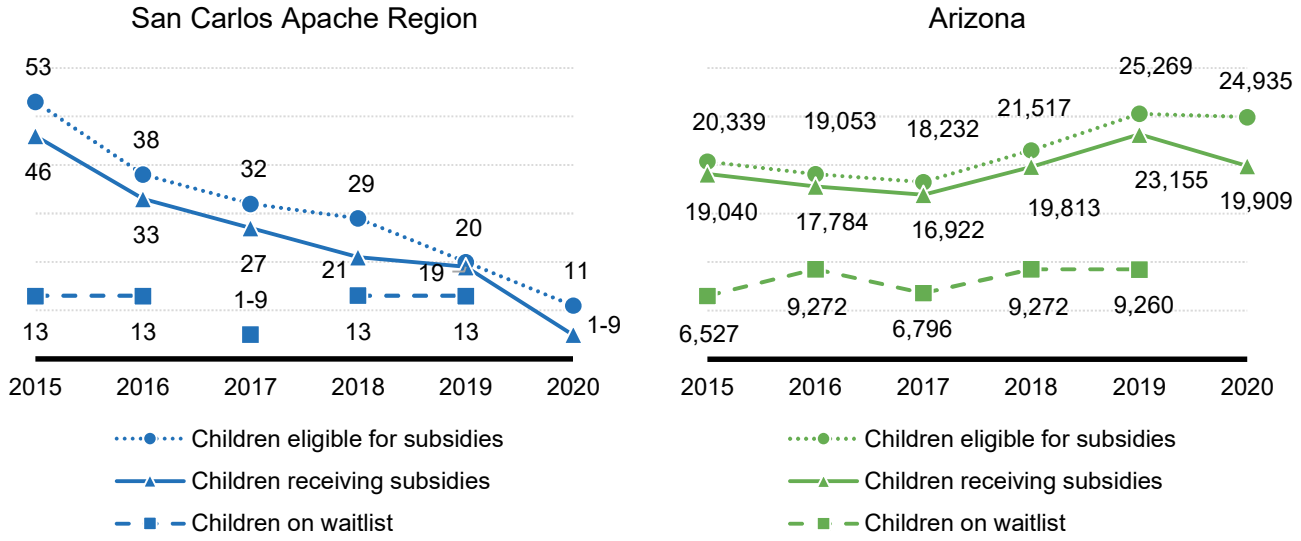
Early care and education programs in the San Carlos Apache Region provide services at low- or no-cost to most families. Apache Kid Child Care charges families a sliding scale fee ranging from $5 to $15 per day depending on family income. Participation in Head Start, Early Head Start and the inclusive preschool program at Rice Elementary are all free-of-cost for families.

However, as noted above, capacity in early care and education programs in the region is currently not sufficient to serve all young children potentially needing this care. Families who seek care at child care providers outside the region in Globe and Safford can receive subsidies from the Arizona Department of Economic Security (DES) to help pay for care, depending on income eligibility, and local key informants noted that some families had success finding suitable and affordable care using subsidies at these providers outside the region.

Figure 36 shows the number of young children receiving child care subsidies from DES in the region. Mirroring trends seen in declining participation numbers in both SNAP and TANF (Figure 11; Figure 12), the number of children receiving child care subsidies fell from a high of 46 in 2015 to fewer than 10 in 2020. In June 2019, 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 waitlist for DES child care subsidies was suspended for the first time since 2009 during the Great Recession.[164, 165] From July 2019 onwards, all children who qualify for DES child care subsidies can receive them without being put on a waiting list. This is reflected in the data for the region, with 19 out of 20 eligible children, or 95%, receiving subsidies in 2019 (Table 24). However, with the onset of the COVID-19 pandemic,

both the number of eligible children and the number of children receiving subsidies fell substantially, likely due to families not seeking out of home care. Children who are involved with the Department of Child Safety (DCS) are also eligible to receive DES child care subsidies; however, over the past six years, no DCS-involved children have received child care subsidies in the region (Table 25).

Figure 36. Children eligible for, receiving, and on waitlist for DES child care subsidies, 2015 to 2019



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

Note: The DES child care waitlist was suspended in June 2019, so there are no waitlist numbers for 2020.

Table 24. Children receiving DES child care subsidies

	Number of children receiving subsidy						Percent of eligible children receiving subsidy					
Geography	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
San Carlos Apache Region	**46**	**33**	**27**	**21**	**19**	**[1-9]**	**87%**	**87%**	**84%**	**72%**	**95%**	**DS**
Gila County	105	91	72	57	50	64	91%	93%	91%	83%	94%	77%
Graham County	67	48	49	55	46	32	91%	96%	94%	93%	87%	80%
Arizona	19,040	17,784	16,922	19,813	23,155	19,909	94%	93%	93%	92%	92%	80%

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

Table 25. DCS-involved children receiving DES child care subsidies

	Number of DCS children receiving subsidy						Percent of DCS eligible children receiving subsidy					
Geography	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
San Carlos Apache Region	**0**	**0**	**0**	**0**	**0**	**0**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Gila County	54	54	33	21	37	34	87%	86%	85%	70%	76%	52%
Graham County	25	32	26	14	18	[1-17]	81%	94%	90%	67%	72%	N/A
Arizona	13,098	13,352	12,201	12,219	11,808	7,137	91%	89%	88%	82%	82%	59%

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

Young Children with Special Needs

Timely and appropriate developmental screenings can help to identify children who may have special needs. By identifying these children early, intervention can help young children with, or at risk for, developmental delays to improve language, cognitive and socio-emotional development.[166,167] It also reduces educational costs by decreasing the need for special education.[168]

The Arizona Early Intervention Program (AzEIP)[xviii] is an interagency system of services and supports for families of young children (birth to 2) with disabilities or developmental delays in Arizona. There are two contracted agencies who provide services to children in the San Carlos Apache Region. The number of children referred to AzEIP in recent years has varied, from as high as 33 in federal fiscal year (FFY) 2019 to a low of 17 in FFY 2020 (Table 26). This drop in referrals likely reflects the disruptions of the COVID-19 pandemic. With children attending Head Start and Early Head Start remotely and most community activities being held online, young children may have had less interaction with early childhood professionals who might normally make referrals. The community was also closed for most of 2020, which may have reduced the number of developmental and sensory screenings conducted by University of Arizona Cooperative Extension as part of the funded strategy from the First Things First San Carlos Apache Regional Partnership Council. Additionally, AzEIP transitioned to only virtual services through most of 2020, which may have made accessing services difficult for families with limited internet access. [169] Fewer than 10 children received AzEIP services each year between FFY 2018 and 2020

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

Table 26. 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
San Carlos Apache Region	**22**	**33**	**17**	**[1-9]**	**[1-9]**	**[1-9]**	**DS**	**DS**	**DS**
Graham County	74	65	68	38	36	34	51%	55%	50%
Gila County	98	102	96	30	39	32	31%	38%	33%
Arizona	13,803	14,692	13,615	5,372	5,225	4,675	39%	36%	34%

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

AzEIP may refer families to the Division of Developmental Disabilities (DDD) [xix] 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.[xx] DDD can also provide services to individuals with qualifying disabilities through adulthood. In addition, qualifying children may receive services from both AzEIP and DDD. The number of children who received services from DDD in the region fell from 12 to fewer than 10 between state fiscal year (SFY) 2017 and 2020, mirroring declines in Graham and Gila Counties (Table 27).

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

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

Table 27. 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
San Carlos Apache Region	**12**	**11**	**[1-9]**	**[1-9]**	**DS**
Graham County	25	19	10	15	-40%
Gila County	20	25	11	[1-9]	-29%
Arizona	5,520	6,123	4,005	4,078	-26%

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

Overall, 12 children ages birth to 2 in SFY 2019 and fewer than 10 in SFY 2020 received services from AzEIP, DDD or both programs (Table 28). A 2008 study using nationally representative data estimates that approximately 13% of children ages 0-2 in the U.S. have developmental delays that could benefit from early intervention services, but only about 3% of children actually receive services.[170] Given the population of young children in the San Carlos Apache Region (see Table 1), this research would suggest that about 100 children birth to 2 could benefit from early intervention services in the region. Even if only 3% of children received services, this would still translate to about 23 children. While at least this number of children are being referred to AzEIP in most years, nowhere near this number of children are being found eligible and receiving services. The state of Arizona has some of the strictest eligibility requirements for early intervention services of any state in the U.S.[171] Furthermore, Arizona has been among the bottom five states in terms of young children receiving early intervention services.[172] Providing early intervention services for young children has been shown to reduce the need for special education services later in childhood.[173] Assuring that children have access to timely and adequate screening and intervention services from birth to 5 can be key for helping children be ready for kindergarten, indicating that the low number of young children in the San Carlos Apache Region who qualify for these services may be a cause for concern.

Table 28. 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 2019
San Carlos Apache Region	**12**	**[1-9]**	**N/A**	**762**	1.6%
Graham County	41	39	-5%	1,963	2.1%
Gila County	41	40	-2%	1,891	2.2%
Arizona	6,376	5,721	-10%	270,519	2.4%

Source: Arizona Department of Economic Security (2021). [Arizona Early Intervention Program 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. Each Arizona school district is mandated to participate in Child Find and to provide preschool services to children with special needs either though their own schools or through agreements with other programs such as Head Start. In the San Carlos Apache Region, Child Find services are provided through San Carlos Unified School District. As indicated above, Rice Elementary School provides preschool services to both typically-developing children and children with special needs in the region in a full-day preschool program.

From the 2017-18 to 2019-20 school years, the number of preschoolers with disabilities enrolled in Rice Elementary School decreased from 36 in 2017-18 to 16 in 2018-19 (Table 29). During the same period, the number of preschoolers with disabilities enrolled in off-reservation schools in the Globe area increased, as did enrollment of preschoolers with disabilities statewide. It is important to note that the number of preschoolers and kindergarteners with disabilities tracks closely with the number of children ages birth to 2 referred to AzEIP in the region but the number of children in these grades receiving services in schools is much higher (see Table 26) than receiving services through AzEIP. This again suggests that there may be children ages birth to 2 in the region who could benefit from early intervention but who are not qualifying for services from AzEIP.

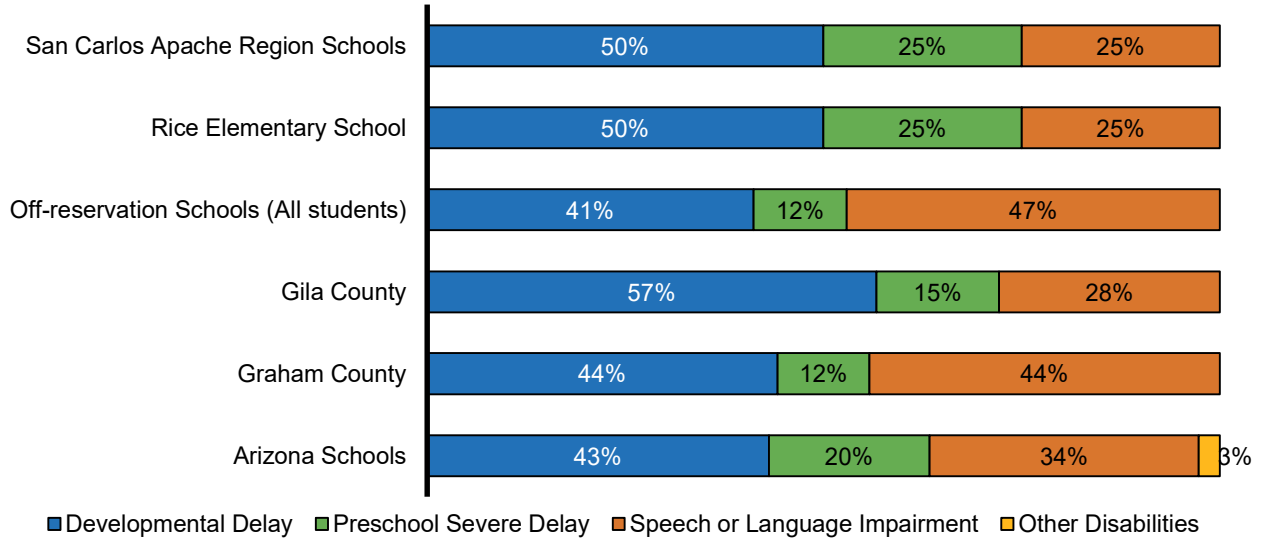
Table 29. Preschoolers with a disability receiving services from Local Education Agencies, 2017-2018 to 2019-2020

Geography	Preschoolers enrolled in special education, 2017-18	Preschoolers enrolled in special education, 2018-19	Preschoolers enrolled in special education, 2019-20
San Carlos Apache Region Schools	36	22	16
Rice Elementary School	36	22	16
Mt. Turnbull Elementary School	DS	DS	DS
Off-reservation Schools (all students)	DS	DS	17
Gila County	102	105	97
Graham County	99	88	95
Arizona Schools	10,123	10,314	10,521

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

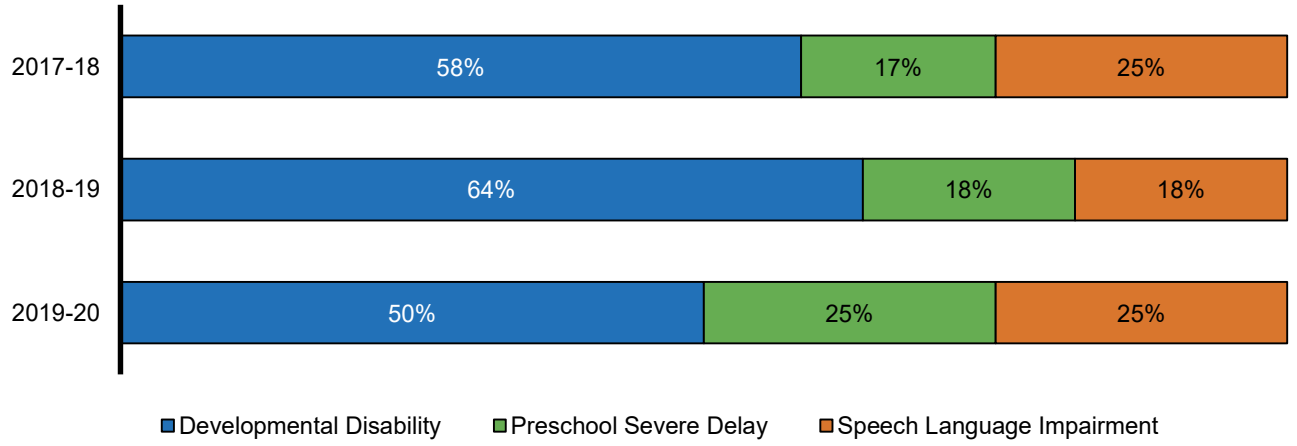
Figure 37 shows the type of disabilities with which preschoolers in the region were diagnosed in 2019-20. The majority of preschoolers with a disability enrolled at Rice Elementary had a developmental delay (50%), followed by speech or language impairments (25%) and preschool severe delays (25%). The preschool severe delay category is defined by Arizona as a very low score on assessments in one or more of these areas: cognitive development, physical development, communication development, social or emotional development, or adaptive development.[174] The percent of preschoolers enrolled at Rice Elementary School with a preschool severe delay has increased over the past few years, from 17% in 2017-18 to 25% in 2018-19 (Figure 38). This increase has occurred while the number of preschoolers with disabilities enrolled at Rice Elementary fell by nearly half. Taken together, this may suggest that preschool-age children with more severe delays are receiving services at Rice Elementary, but young children with less severe delays may not enrolling at the same rates.

Figure 37. Preschoolers with disabilities enrolled in special education in public and charter schools by disability type, 2019-20



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

Figure 38. Preschoolers with a disability enrolled at Rice Elementary School 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

Preschool-age children with special needs may also be enrolled in San Carlos Apache Head Start. In the 2018-19 school year, 24 children ages 3 to 4 enrolled in Head Start had special needs (Table 30). Of these 24 children, nearly all (92%) had a speech or language impairment while the remaining 8% had other disabilities. Early Head Start also enrolls children with special needs; however, fewer than 10

children enrolled in Early Head Start had an Individualized Family Service Plan (ISFP), so no data on disability types can be reported to protect individual privacy.

According to local key informants, prior to the 2021-22 school year, the Rice Elementary School inclusive preschool program only operated as a half-day program. Thus in 2018-19, children with Individualized Education Plans (IEPs) for a disability could attend both the inclusive preschool program at Rice Elementary School and Head Start, going to one program in the morning and the other program in the afternoon. However, starting in the 2021-22 school year, the inclusive preschool program now provides full-day services, meaning that children with IEPs receiving services at Rice Elementary School no longer attend Head Start. Parents, however, may still choose to enroll their children with special needs at Head Start if they choose not to go through the IEP process and enroll their children at Rice Elementary.

Table 30. Preschoolers with disabilities enrolled in the San Carlos Apache Head Start, 2018-19

	Children (ages 3-4) enrolled in Head Start (Cumulative)	Children with a disability	Children with speech or language impairment	Children with other disabilities
San Carlos Apache Head Start	251	24	92%	8%

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

Note: Cumulative enrollment is the total number of children served throughout the school year as children may leave the program and other children may be enrolled in their place. San Carlos Apache Head Start has a funded enrollment of 233 children.

For older children in the region (enrolled in kindergarten through 3rd grade), the number of children enrolled in special education services in public or charter has remained steady over the past three years. As of October 1 in the 2019-2020 school year, there were 100 kindergarten to 3rd grade students enrolled in special education in Rice Elementary School and Mt. Turnbull Elementary School in the San Carlos Apache Region (Table 31). Most of these students were enrolled at Rice Elementary School. This is more than 10 times the number of children birth to 2 in the region being served by early intervention services (fewer than 10 served by AzEIP and DDD in 2020). Even accounting for the wider age range served in elementary school, there are relatively more students being served through schools than early intervention programs. Additionally, the number of children in elementary schools receiving special education services has remained constant while the number of preschool-age children receiving services has fallen by half in recent years. Some of the drop in 2020 may be due to parents' hesitancy to send their children to out-of-home care during the pandemic due to safety concerns. However, this downward trend began even before the COVID-19 pandemic and may indicate that children with delays are being identified and diagnosed when they are older, potentially missing the opportunity for earlier intervention that can be more effective and less costly. Local key informants noted that teachers and staff at Rice Elementary School frequently refer kindergarten and 1st grade students for services with communication disorders and delays. Young children with communication difficulties could benefit from earlier intervention before reaching elementary school.

Of those kindergarten through 3rd grade students enrolled in special education in the San Carlos Apache Region, most have a primary disability of a developmental delay (52%) or a speech/language impairment (25%) (Figure 39). Less often these children have a primary disability of specific learning disability (10%), autism (10%) or other disability (3%). Compared to the state, there is a smaller proportion of children with autism as a primary disability (6% vs. 11%), and a much higher proportion of children with developmental delays.

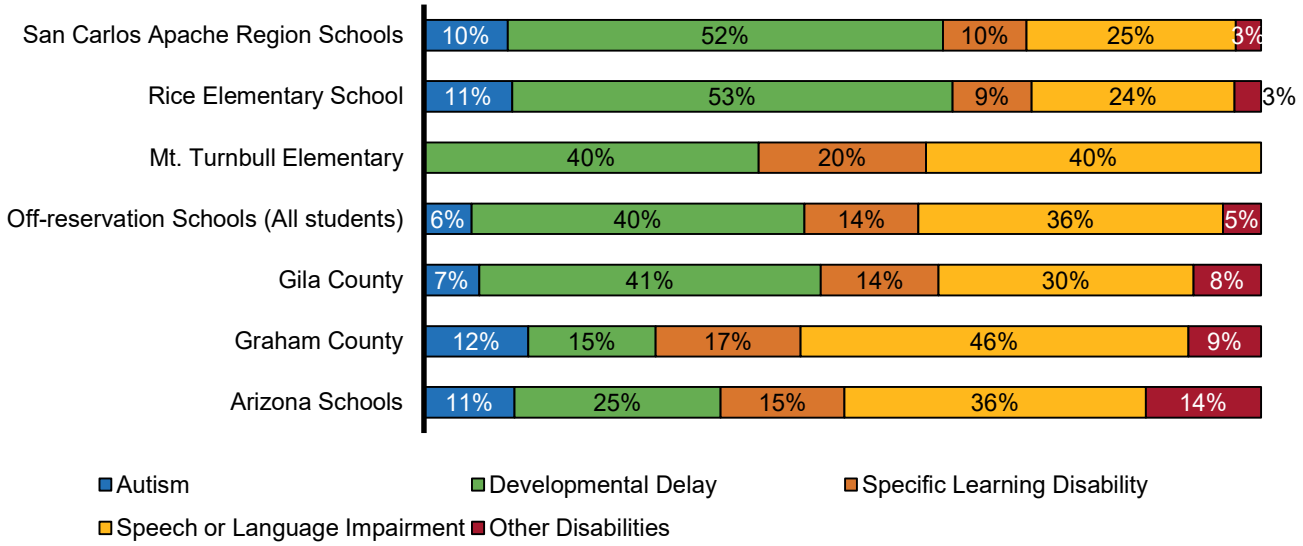
Table 31. Kindergarten to 3rd grade students with disabilities enrolled in special education in public and charter schools, 2017-18 to 2019-20

	K-3 students enrolled in special education, 2017-18	K-3 students enrolled in special education, 2018-19	K-3 students enrolled in special education, 2019-20
San Carlos Apache Region Schools	104	109	100
Rice Elementary School	DS	DS	DS
Mt. Turnbull Elementary School	DS	DS	DS
Off-reservation Schools (All students)	[68-78]	[64-74]	72
Gila County schools	334	333	348
Graham County schools	263	290	289
Arizona schools	36,807	38,115	39,071

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

Note: Fewer than 10 students were enrolled in special education at Mt. Turnbull Elementary in any given year, so school level totals cannot be shown for either school when displaying regional totals in order to protect student privacy.

Figure 39. Kindergarten to 3rd grade students with disabilities enrolled in special education in public and charter schools by disability type, 2019-20



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

School-based services for both preschool-age and early elementary school children with special needs were significantly impacted by the COVID-19 pandemic, with remote learning creating barriers to fulfilling students' IEPs resulting, for some, in a loss of academic, social and physical skills that will require targeted support to address.[175] As early education centers and schools return to in-person learning, students with special needs may need additional supports to build skills and recover unfinished learning over the past year and a half. Additionally, ongoing work to identify children with developmental delays and other special needs as well as to refer them to appropriate services will be key to ensuring that children can access and benefit from early intervention services before reaching kindergarten.

Additional 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.[176,177] Experiences during the prenatal and early childhood period can result in lifelong impacts on immune functioning, brain development, and risk for chronic diseases.[178,179] Early health also has lasting impacts on long-term economic well-being and the well-being of future children, with poor childhood health potentially perpetuating the harmful cycle of intergenerational poverty.[180,181] 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.[182,183,184]

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)[xxi,xxii] 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.[185]

What the Data Tell Us

Access to care

The ability to obtain health care is critical for supporting the health of pregnant mothers and young children. Health care during pregnancy, i.e., prenatal care, can reduce maternal and infant mortality and complications during pregnancy.[186,187] 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.[188] 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.[189,190] 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.[191, 192]

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

[xxii] *For more information about the Healthy People 2020 objectives, visit https://www.healthypeople.gov/2020/*

Due to the Indian Self-Determination and Education Assistance Act (P.L. 93-638) (ISDEAA), federally recognized tribes have the option to receive the funds that the Indian Health Service (IHS) would have used to provide health care services to tribal members. The tribes can then utilize these funds to directly provide services to tribal members (they can also opt to take the funds from IHS and provide the services through another entity). This process is commonly known as utilizing "638 contracts" and means that tribes can take over responsibility of some or all health services. Through this process, ISDEAA enables tribes more control over the federal funds that are allotted to the IHS for health care, allowing tribes to self-determine how funding will be distributed based on their own identified needs and priorities.

In 2015, the San Carlos Apache Tribe received approval from IHS to take over management and operation of the IHS San Carlos Service Unit under a 638 contract. The Tribe opened a new 180,000-square-foot health care campus in Peridot to house Izee Baa' Gowąh San Carlos Apache Healthcare Corporation. This campus also co-locates emergency services, public health nursing, and behavioral health services, all departments housed under the San Carlos Apache Department of Health and Human Services (DHHS), on the hospital campus. This co-location of services helps facilitate referrals for patients between service providers.

Healthcare services offered through Izee Baa' Gowąh include internal medicine, obstetrics and gynecology, pediatrics, surgery, emergency medicine, radiology, podiatry, specialty health services, nutrition and dietetics, physical therapy and dental care. The hospital is also a level IV trauma center, one of only two tribally-operated trauma centers in the state of Arizona. Izee Baa' Gowąh aims to provide care that is compassionate and culturally-respectful, and toward that goal, they employ patient ambassadors who can provide translation assistance to those who would prefer to speak Apache. Izee Baa' Gowąh also operates the Clarence Wesley Health Center (CWHC) in Bylas. Services available at CWHC include outpatient clinics for women's health, pediatrics, podiatry, diabetes, nutrition and dietetics, dental care, optometry, physical therapy and wound care.

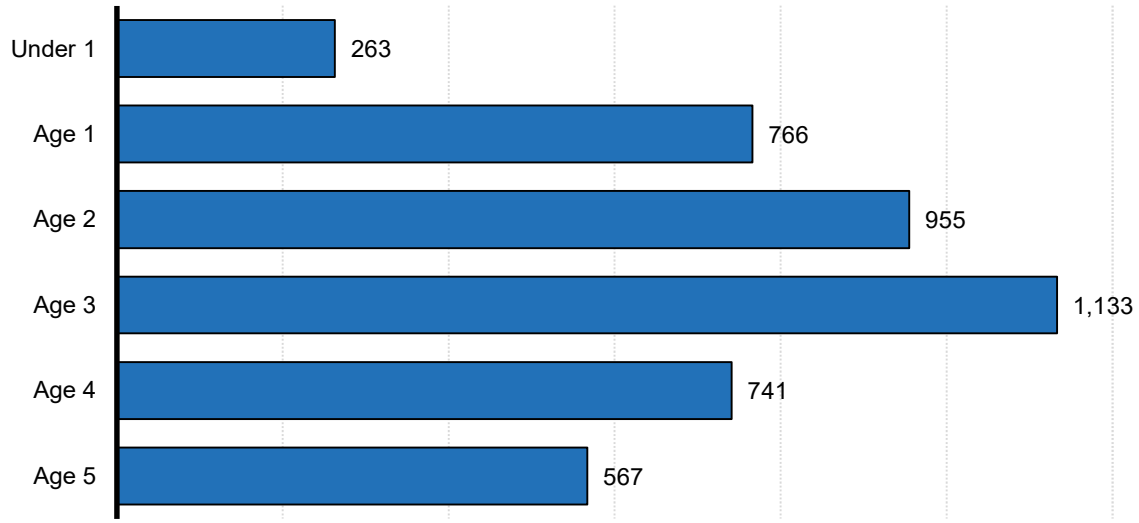
According to data provided by Izee Baa' Gowąh, there were 17,053 active users who received services through the Healthcare Corporation between January 2018 and April 2021 (Table 32). This included 1,595 children ages birth to 5. Comparing these counts to population data from the 2010 Census (see Table 1) suggests that nearly all community members receive care at the Healthcare Corporation, pointing to the asset that a tribally-operated and culturally-respectful healthcare facility is for the community. Figure 40 shows the number of well-child visits for children birth to 5 by age at Izee Baa' Gowąh from January 2018 to April 2021.

Table 32. Number of Active Users at Izee Baa' Gowąh (San Carlos Apache Healthcare Corporation), Jan 2018- Apr 2021

	Young Children (ages 0-5)	All ages
San Carlos Apache Healthcare	1,595	17,053

Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

Figure 40. Number of well-child visits for children birth to 5 at Izee Baa' Gowąh (San Carlos Apache Healthcare Corporation), Jan 2018- Apr 2021



Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

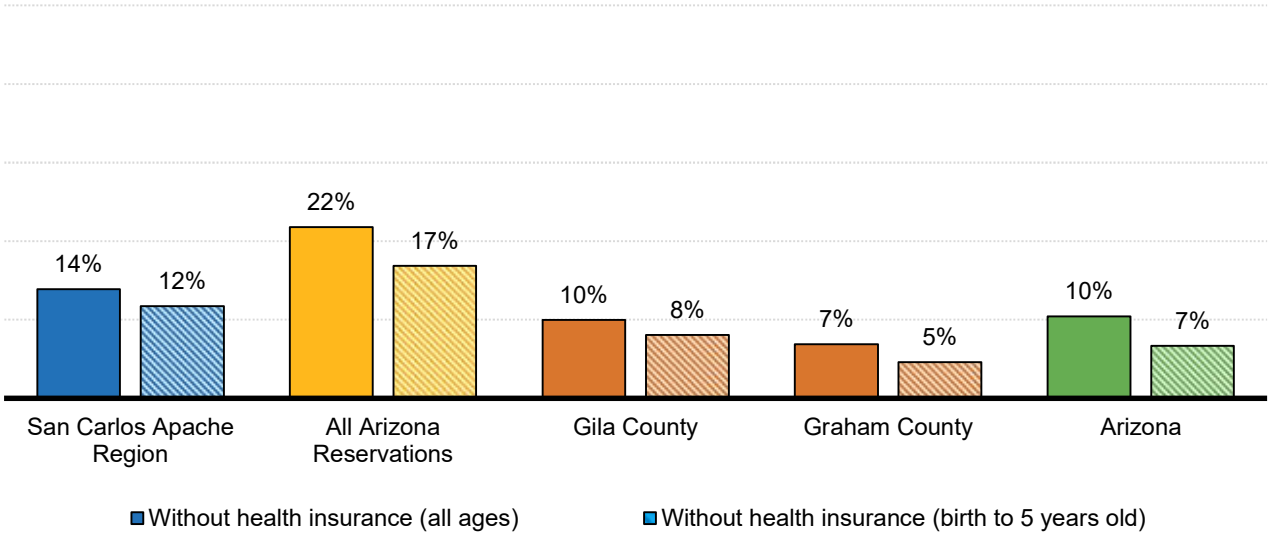
Note: Please note that due to the time period over which the data covers, children ages 2-3 may be over-represented in the number of visits and both older and young children under-represented.

Along with the pediatric services available at the new hospital, health care services for young children are also provided through the Maternal and Child Health Clinic (under DHHS). Services include routine care, well child visits and immunizations appointments. The Public Health Nurses program conducts health screenings for the children enrolled in the San Carlos Apache Head Start program, as well as children enrolled in all other schools within the region. Community Health Representatives also work with families in the region, particularly young mothers to ensure that they receive adequate prenatal care. Community Health Representatives provide both home visits and phone visits to mothers to provide education on prenatal health.

A key factor in accessing health care is health insurance. In the San Carlos Apache Region, according to American Community Survey (ACS) data averaged over the five years from 2015 to 2019, an estimated 14% of the population do not have health insurance coverage, a lower percentage than seen across all

Arizona reservations (Figure 41). Coverage is, however, higher for young children birth to 5, with only 12% of young children in the region uninsured, again a lower rate than that across all Arizona reservations combined (17%) (Figure 41). It is important to note that the U.S. Census Bureau does not consider coverage by IHS, including care at 638 facilities, to be insurance coverage, so many of the people without health insurance may still access healthcare at Izee Baa' Gowąh without charge.

Figure 41. Health insurance coverage, 2015-2019 ACS

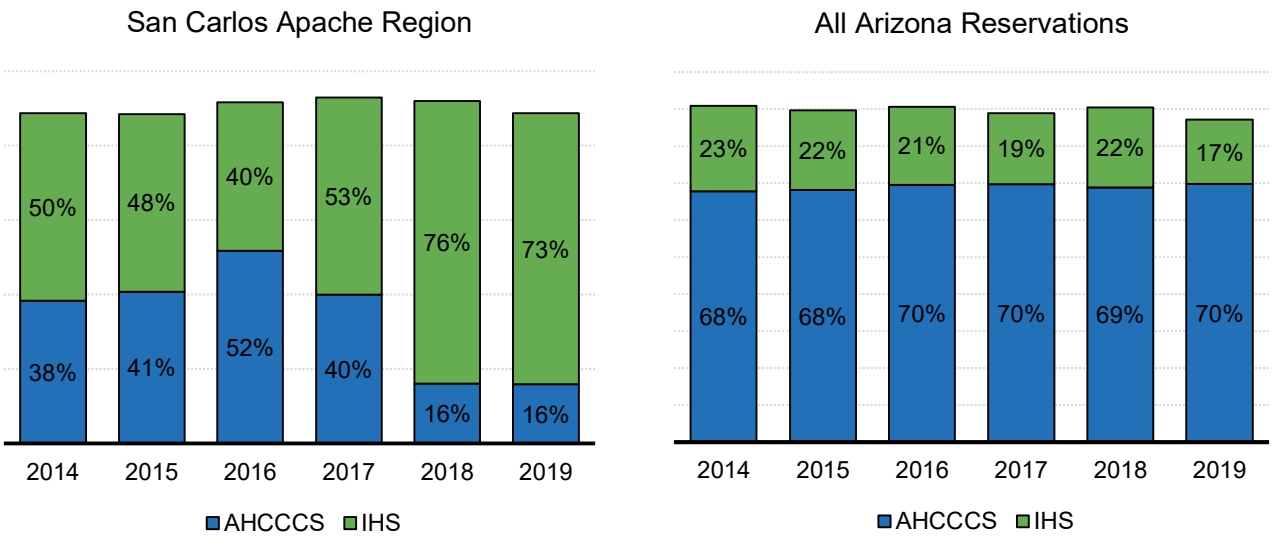


Source: U.S. Census Bureau. (2021). American Community Survey five-year estimates 2015-2019, Table B27001

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.

Data from ADHS on the payor for births in the region can provide further information about health insurance coverage. The proportion of births in the region that were paid for by the Arizona Health Care Cost Containment System (AHCCCS, or Arizona's Medicaid) has substantially decreased in the region from a high of 52% of births in 2016 to only 16% in 2019 (Figure 42). This runs counter to trends seen across all Arizona reservations, were most births are covered by AHCCCS (68-70% each year). Nearly three out of every four births (73%) were paid for by IHS in the region in 2019, suggesting that most expectant mothers are not accessing health insurance through AHCCCS or private insurance plans.

Figure 42. Births paid by AHCCCS and IHS, 2014 to 2019



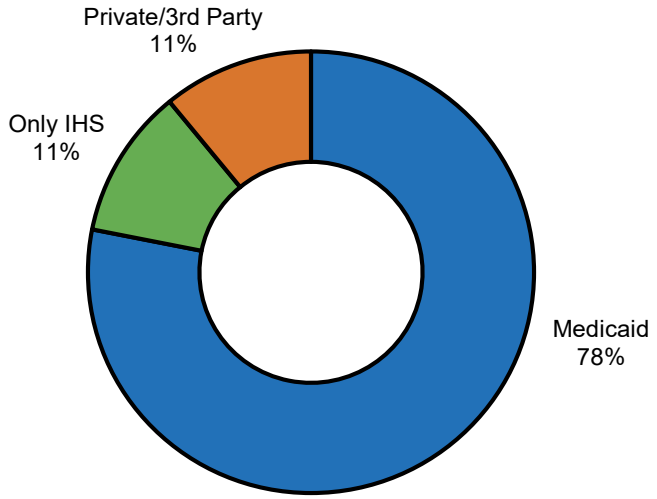
Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from https://pub.azdhs.gov/health-stats/report/hspam/index.php

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

However, among young children in the region seen at Izee Baa' Gowąh, the vast majority have a form of insurance beyond only IHS. Nearly four in five young children are enrolled in AHCCCS (Arizona's Medicaid program), and 11% have private or 3rd party insurance. Only 11% have no insurance coverage beyond IHS care, which matches data available from the ACS (Figure 43). This may reflect the success of patient benefits coordinators at Izee Baa' Gowąh who help patients enroll in AHCCCS or Affordable Care Act (ACA) Health Insurance Marketplace plans if they are not currently insured.

Facilitating enrollment in AHCCCS and other insurance plans 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.

Figure 43. Percentage of children birth to 5 with insurance seen at Izee Baa' Gowąh (San Carlos Apache Healthcare Corporation), Jan 2018- Apr 2021



Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

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.[193,194,195,196]

In 2019, there were 195 births in the San Carlos Apache Region (Table 33). Among these births, only about half (50.8%) were to mothers who began prenatal care in their first trimester, which is both lower than both the state overall (68.9%) and all Arizona reservations combined (75.3%), as well as far below the Healthy People 2020 target of 84.8% of births with prenatal care beginning in the first trimester. In 2019, about one in 10 births (10%) were to mothers with no prenatal care at all, and more than one in three births (39%) were to mothers who had fewer than five prenatal care visits. This lack of adequate prenatal care puts mothers and infants at higher risk of poor health outcomes. These low rates of prenatal care may also help explain why so few births are covered by AHCCCS in the region—AHCCCS coverage is available to low-income expectant mothers in the state of Arizona with no monthly premiums required,[197] but if expectant mothers are not attending prenatal care visits, they may not be aware that they are eligible for this coverage.

Table 33. Prenatal care for the mothers of babies born in 2018 and 2019

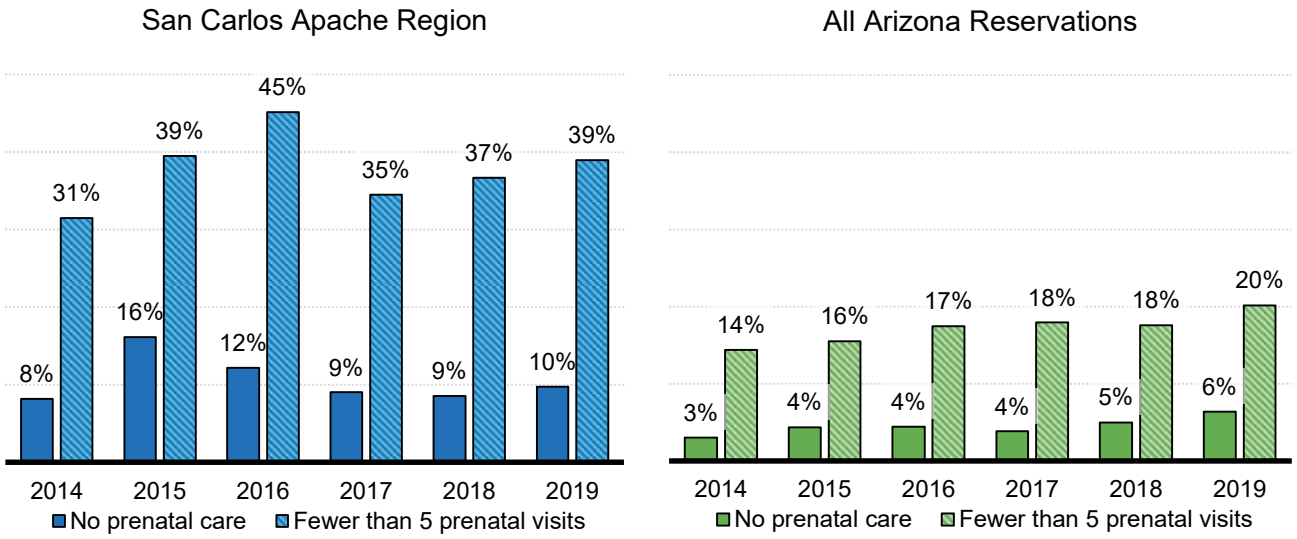
Geography	Calendar year	Number of births	Mother had no prenatal care	Mother had fewer than five prenatal visits	Mother began prenatal care in the first trimester
San Carlos Apache Region	**2018**	**199**	**9%**	**37%**	**38.2%**
	2019	**195**	**10%**	**39%**	**50.8%**
All Arizona Reservations	2018	1,990	5%	18%	64.4%
	2019	2,180	6%	20%	75.3%
Gila County	2018	497	4%	15%	62.0%
	2019	473	4%	16%	64.1%
Graham County	2018	513	3%	15%	64.9%
	2019	493	2%	11%	71.4%
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' row reflects only births to American Indian mothers residing on Arizona reservations. Mothers of twins are counted twice in this table.

Examining trends over time shows that in the San Carlos Apache Region, the percentage of births to mothers with inadequate prenatal care has been consistently high the past five years. Though the percent of births to mothers with fewer than five prenatal visits fell from a high of 45% in 2016 to 35% in 2017, this percentage has been increasing ever since (Figure 44). The proportion of births to mothers with no prenatal care has fallen from a high of 16% in 2015 to 10% in 2019, but this is still nearly double that seen across all Arizona reservations. Quality preconception counseling and early-onset prenatal care can help reduce some of these risks for poor prenatal and postnatal outcomes for both mothers and infants by providing information, conducting screenings, and supporting an expectant mother's health and nutrition.[198] The rising rates of inadequate prenatal care in the region point to a need for further health education and outreach to expectant mothers.

Figure 44. 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' row reflects only births to American Indian mothers residing on Arizona reservations. Mothers of twins are counted twice in this table.

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.[199] Babies born to mothers who smoke are more likely to be born early (pre-term), have low birthweight, die from sudden unexpected infant death (SUID) and have weaker lungs than babies born to mothers who do not smoke.[200, 201]

In 2019, the percent of births to teenaged mothers in the San Carlos Apache 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 reservations in Arizona, and 13% were to mothers younger than 20 compared to 10% in statewide reservation lands (Table 34). Rates of gestational diabetes and pre-pregnancy obesity were more variable year to year. Of total births in the region, 8% were to mothers with gestational diabetes (compared to 9% statewide), a large drop for 2018 when 15% of births were to mothers with gestational diabetes. Nearly half of births (45%) were to mothers with pre-pregnancy obesity compared to only 28% in 2018. Rates of tobacco use in pregnancy greatly exceeded the Healthy People 2020 target of no more than 1.4% of births to mothers who reported using tobacco during pregnancy. In 2019, 5.6%, or more than one in 20 births in the region, were to mothers who used tobacco while pregnant (Table 34).

Table 34. Selected characteristics of mothers giving birth, 2018 to 2019

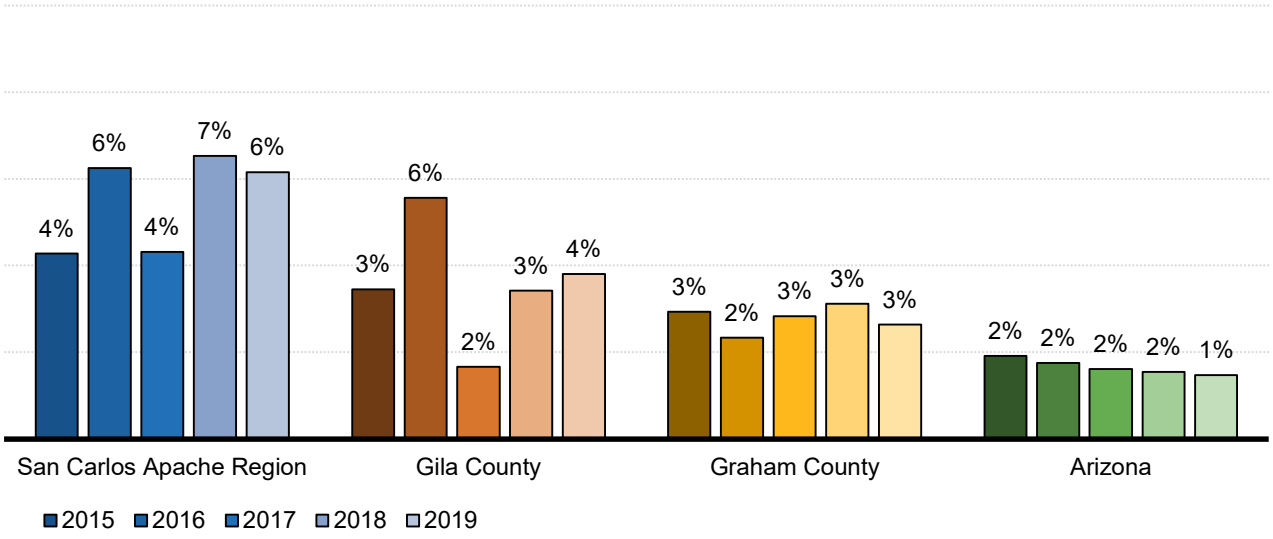
Geography	Calendar year	Number of births	Mother was younger than 18	Mother was younger than 20	Birth was covered by AHCCCS	Birth was covered by IHS	Mother had gestational diabetes	Mother had pre-pregnancy obesity	Mother used tobacco during pregnancy
San Carlos Apache Region	**2018**	**199**	**7%**	**16%**	**16%**	**76%**	**15%**	**28%**	**6.5%**
	2019	**195**	**6%**	**13%**	**16%**	**73%**	**8%**	**45%**	**5.6%**
All Arizona Reservations	2018	1,990	5%	11%	69%	22%	N/A	N/A	4.0%
	2019	2,180	4%	10%	70%	17%	N/A	N/A	3.2%
Gila County	2018	497	3%	11%	52%	20%	6%	29%	16.5%
	2019	473	4%	10%	48%	22%	5%	33%	12.7%
Graham County	2018	513	3%	9%	47%	11%	9%	28%	10.5%
	2019	493	3%	8%	40%	9%	7%	27%	9.9%
Arizona	2018	80,539	2%	6%	50%	1%	8%	29%	4.5%
	2019	79,183	1%	5%	49%	1%	9%	30%	4.3%
Healthy People 2020 Target									1.4%

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

Note: 'All Arizona Reservations' row reflects only births to American Indian mothers residing on Arizona reservations. Mothers of twins are counted twice in this table. The Healthy People 2030 target for maternal use of tobacco during pregnancy was increased to no more than 4.3% of women giving birth reporting smoking during pregnancy, or alternatively 95.7% of women reporting abstaining from smoking during pregnancy.

Looking at trends over the past six years shows that the percentage of births to teenaged mothers under age 18 has ranged between 4% and 6% depending on the year (Figure 45). The rate of births to teenaged mothers has remained consistently higher than rates in surrounding counties and the state. The prevalence of young parents in the region suggests a particular need for parent education and additional support to help parents of young children complete high school and pursue higher education or further job training, such as that available through Nnee Bich'o Nii.

Figure 45. Births to mothers younger than 18, 2015 to 2019

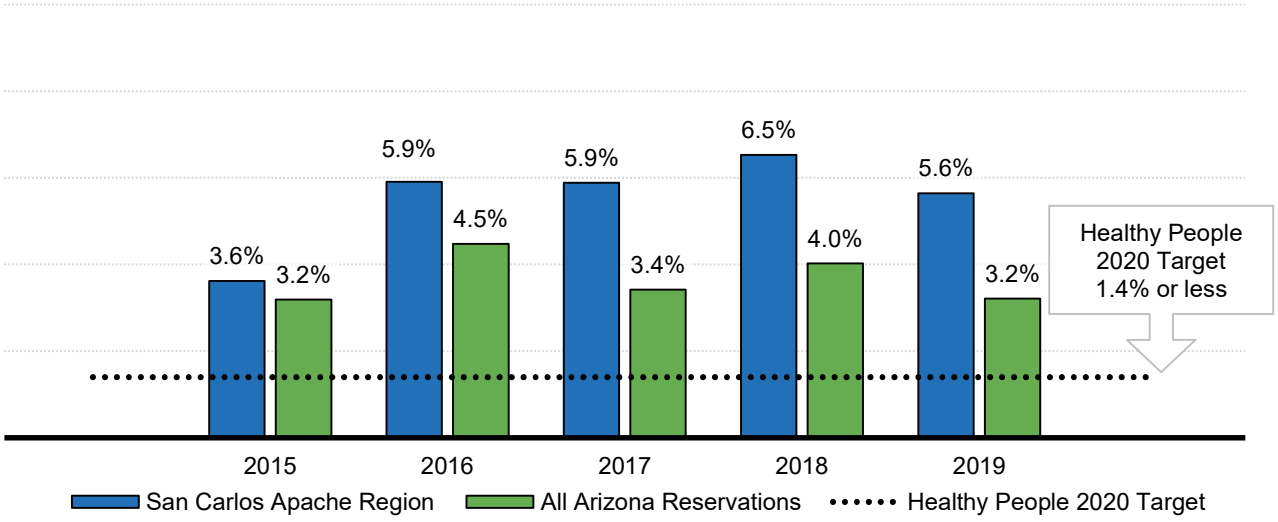


Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from https://pub.azdhs.gov/health-stats/report/hspam/index.php

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

Trend data also suggest that the percent of births to mothers who reported using tobacco during pregnancy has been steadily increasing in the region, rising from 3.6% in 2015 to a high of 6.5% in 2018 before falling slightly to 5.6% in 2019 (Figure 46). Regional percentages have consistently exceeded the rate seen in all Arizona reservations, and the region has not met the Healthy People 2020 goal of less than 1.4% of births to mothers who smoked during pregnancy at any point in the past five years. 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.[202, 203]

Figure 46. Births to mothers who used tobacco during pregnancy, 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' row reflects only births to American Indian mothers residing on Arizona reservations. Mothers of twins are counted twice in this table.

Maternal obesity is associated with increased risk of birth complications and neonatal and infant mortality. [204,205] 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.[206]

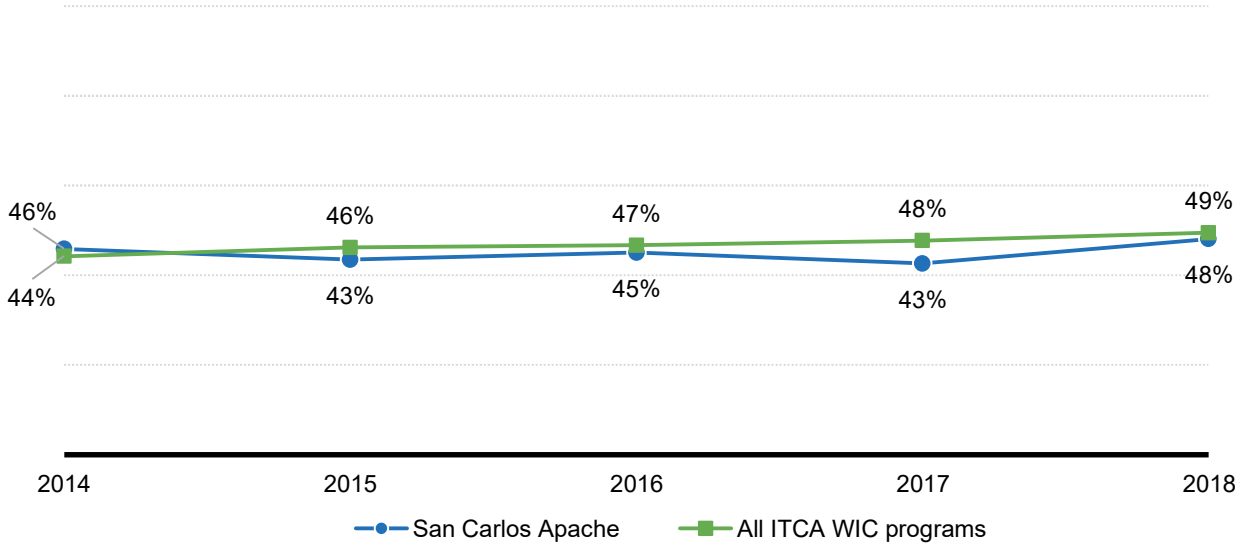
Among women who were enrolled in WIC in 2018, nearly half (48%) of mothers in the region had obesity before pregnancy, compared to 49% across all ITCA WIC programs (Table 35). Only 2% of mothers were underweight before pregnancy, the same percentage seen in all ITCA WIC programs. The proportion of WIC-enrolled women in the region with pre-pregnancy obesity has varied over the past five years of available data, ranging from a low of 43% in 2015 and 2017 to high of 48% in 2018 (Figure 47). Across all ITCA WIC programs, pre-pregnancy obesity has risen at a consistent rate of 1% per year between 2014 and 2018. The pre-pregnancy obesity rate in the San Carlos Apache WIC program has been consistently below the rate of all ITCA WIC programs since 2015.

Table 35. Pre-pregnancy weight status for mothers enrolled in WIC, 2018

Geography	Women With BMI Determined	Underweight	Obese
San Carlos Apache Region	**210**	**2%**	**48%**
All ITCA WIC programs	2,184	2%	49%

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

Figure 47. Pre-pregnancy obesity rates for mothers enrolled in WIC, 2014 to 2018

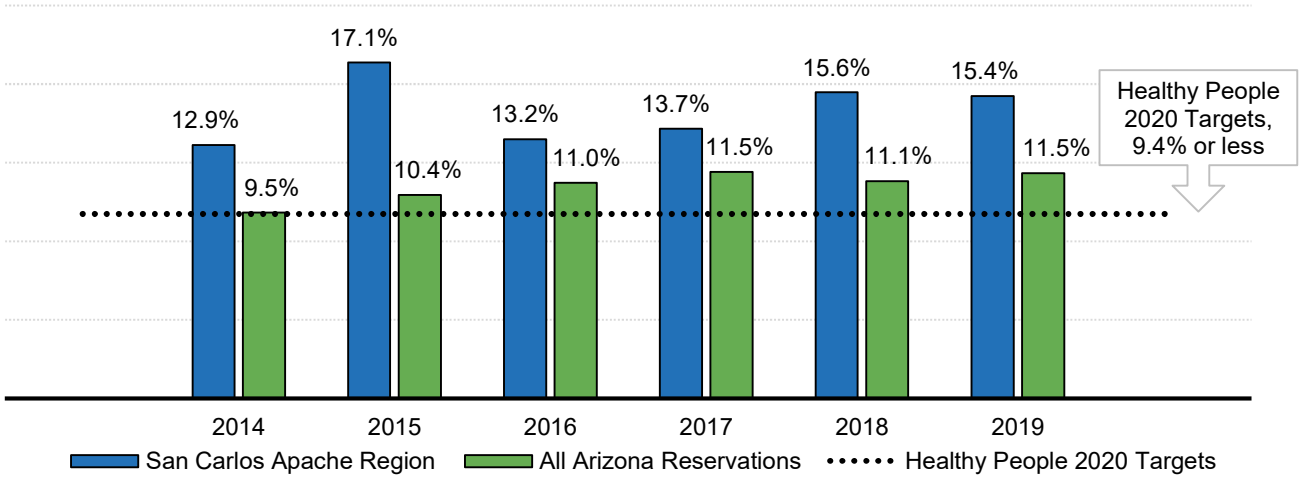


Source: Inter-Tribal Council of Arizona (2021) [WIC Dataset]. Unpublished data received by request.

Birth outcomes

Preterm birth, 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. [207,208] The San Carlos Apache Region has not met the Healthy People 2020 target of no more than of 9.4% of babies born preterm at any point in the past five years (Figure 48). Rates of preterm births in the region have consistently exceeded the rates seen across all Arizona reservations. Though rates have fallen from their peak in 2015 at 17.1%, they rose from 13.2% in 2015 to 15.6% in 2018. These high rates of preterm birth indicate that many young children in the region may be at higher risk for developmental and health challenges.

Figure 48. Preterm births (less than 37 weeks gestation), 2014 to 2020

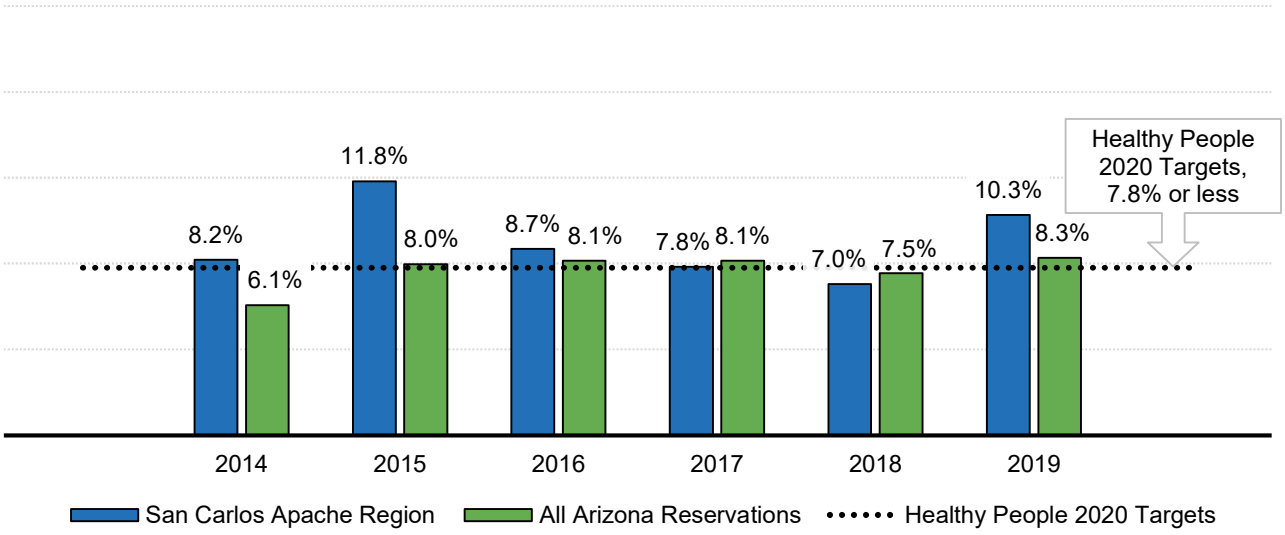


Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from https://pub.azdhs.gov/health-stats/report/hspam/index.php

Note: 'All Arizona Reservations' row reflects only births to American Indian mothers residing on Arizona reservations. The Healthy People 2030 target for preterm births remains 9.4% or fewer of live births.

Babies born at a low birthweight (less than 5 pounds, 8 ounces) are at increased risk of infant mortality and longer-term health problems such as diabetes, hypertension and cardiac disease.[209,210] In the San Carlos Apache Region, rates of low-birthweight births have varied each year but have consistently exceeded the Healthy People 2020 target of less than 7.8% of babies born at low birthweight (Figure 49). In 2019, more than one in 10 babies were born at a low birthweight, again indicating that young children in the region may be at higher risk for health challenges as they grow up.

Figure 49. Low birthweight births (less than 2,500 grams), 2014 to 2019

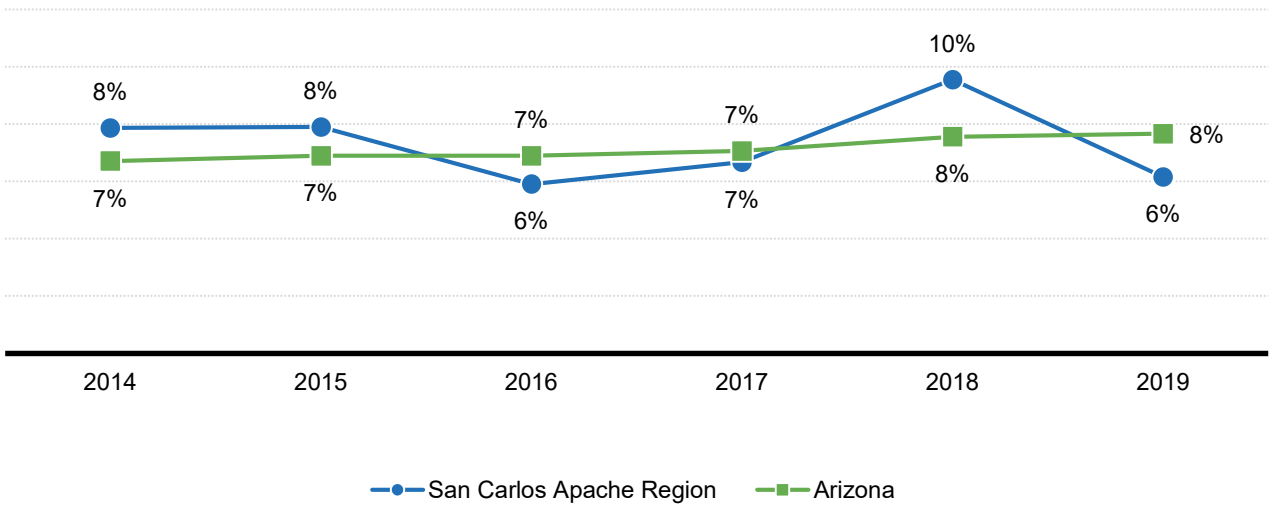


Source: Arizona Department of Health Services (2021). [Vital Statistics Births dataset]. Unpublished data. Arizona Department of Health Services (2020). Health status profile of American Indians in Arizona 2018, 2019. Retrieved from https://pub.azdhs.gov/health-stats/report/hspam/index.php

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

Newborns are admitted into neonatal intensive care units (NICUs) for numerous reasons that can vary across medical providers and have implications for the short and long-term health of babies.[211] While NICU admissions may be an indicator of serious health concerns in newborns, including low birthweight, they can also be a site of family-based interventions that can positively impact infant development and parent-child relationships.[212] The percent of babies admitted to the NICU in the San Carlos Apache Region varied substantially by year (Figure 50). NICU admission rates were highest in 2018 (10%) and lowest in 2016 and 2019 (6%). In 2019, the most recent year of data available, 6% of babies were admitted to the NICU, lower than the NICU admission rate seen statewide (8%).

Figure 50. 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. 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.

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.[213] This can create longer hospital stays, increase health care costs and increase complications for infants born with NAS. In the San Carlos Apache Region, there were 128 newborns hospitalized because of maternal drug use during pregnancy between January 2016 and June 2020 (Table 36). Local key informants in the region noted that substance use by pregnant mothers is a major issue in the region, leading to higher-risk pregnancies and the need for specialized care for newborns born with neonatal abstinence syndrome or other health issues linked to substance exposure in utero.

Table 36. Newborns hospitalized because of maternal drug use during pregnancy, January 2016 to June 2020 cumulative

Geography	Newborns hospitalized	Average length of stay (days)
San Carlos Apache Region	**128**	**3.6**
Gila County	241	4.2
Graham County	163	4.7
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.[214] The American Academy of Pediatrics (AAP) recommends exclusive breastfeeding for about six months and continuing to breastfeed as new foods are introduced for one year or longer.[215] In 2020 in the San Carlos Apache Region, about half of infants enrolled in WIC (47%) were ever breastfed or given human milk at birth or sometime after (Table 37). This was lower than the percentage seen across all ITCA WIC programs, where 69% of infants have breastfeeding initiated. About one in 10 WIC-enrolled infants (10%) were breastfed for at least six months. This percentage was less than half that of infants breastfed at least six months across all ITCA WIC programs (23%), suggesting that breastfeeding is less common among mothers in the San Carlos Apache WIC program than other ITCA WIC programs statewide.

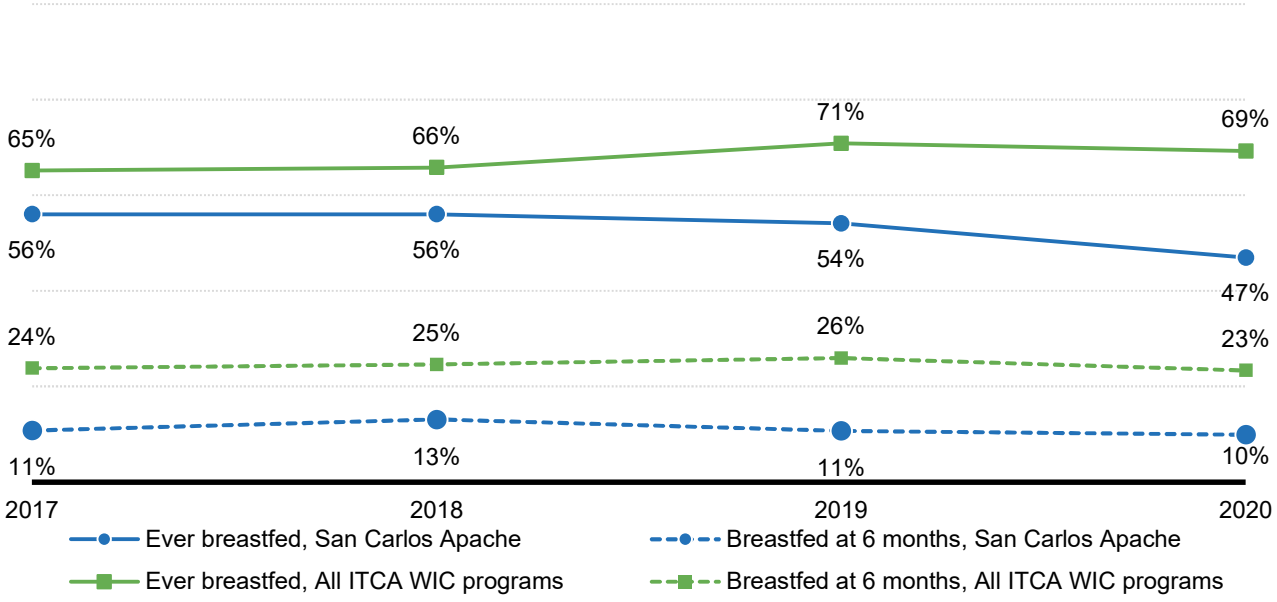
Table 37. Breastfeeding status for WIC enrolled infants, 2020

Geography	Infants For Whom Breastfeeding Status Is Determined	Infants Ever Breastfed	Infants Ever Breastfed	Breastfed Infants Who Are Breastfed For 6+ Months
San Carlos Apache	198	47%	75	10%
All ITCA WIC programs	1,754	69%	729	23%

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

Looking at trends over time, both the percent of infants ever breastfed and the percent of infants breastfed at 6 months has been declining since 2018 (Figure 51). By contrast, rates of breastfeeding initiation have risen in all ITCA WIC programs in the same period. Declining rates of breastfeeding in the San Carlos Apache WIC program may indicate a need for more education and support for women who are interested in breastfeeding their infants.

Figure 51. Breastfeeding rates for WIC-enrolled infants, 2017 to 2020



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

Note: 'Ever breastfed' means that an infant was breastfed or received human milk at birth or sometime after, for any duration of time

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.[216,217] Among American Indian and Alaska Native children, rates of childhood obesity are even higher at 29.7% as of 2015 according to data from IHS and tribal 638 facilities.[218] Obesity can have negative consequences on physical, social and psychological well-being that begin in childhood and continue into and throughout adulthood.[219] Higher birthweight and higher infancy weight, as well as lower-socioeconomic status and low-quality mother-child relationships, have all been shown to be related to higher childhood weight and increased risk for obesity and metabolic syndrome (which is linked to an increased risk of heart disease, stroke and diabetes).[220, 221]

From January 2018 to April 2021, 31% of children ages 2-5 seen at Izee Baa' Gowąh had obesity, which is a higher percentage than that seen in IHS facilities nationwide (22.7% in 2020) (Table 38).[222]. IHS set a national target of a 22.6% or lower obesity rate for young children, meaning that the San Carlos Apache Region did not meet this target in 2020.

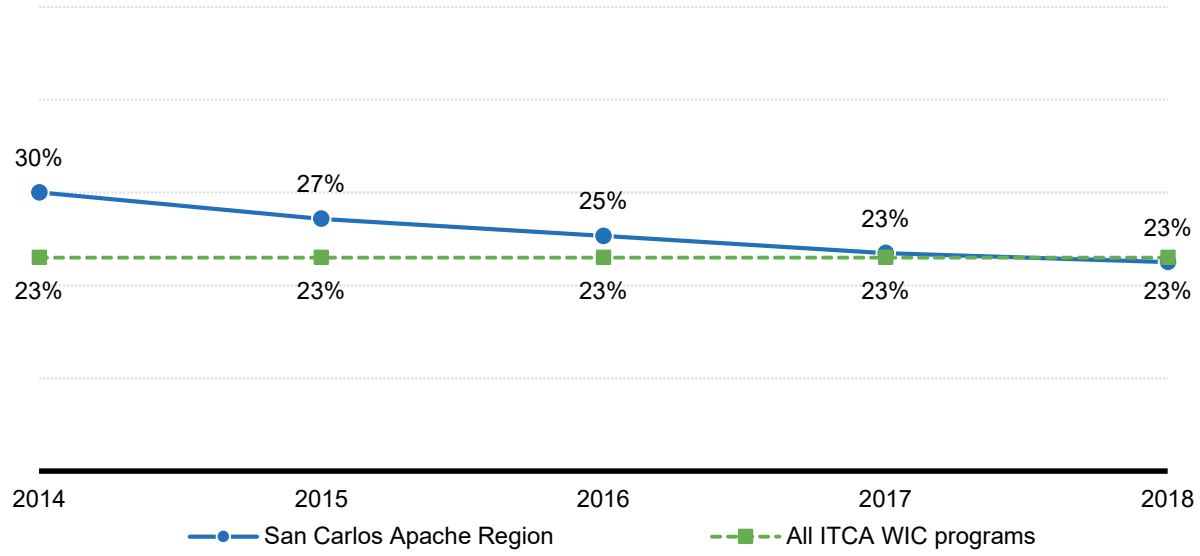
Table 38. Children (ages 2-5) with obesity at Izee Baa' Gowąh (San Carlos Apache Healthcare Corporation), Jan 2018- Apr 2021

	Total children (ages 2-5) assessed	Children (ages 2-5) with obesity	Percent of children (ages 2-5) with obesity
San Carlos Apache Healthcare	436	134	31%

Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

However, data from the San Carlos Apache WIC program suggests that the region is making progress on early childhood obesity. While 30% of children ages 2-5 enrolled in WIC had obesity in 2014, this percentage fell to 23% in 2017 and 2018 (Figure 52). Because of this decline, rates of early childhood obesity in the San Carlos Apache WIC program matched those in all ITCA WIC programs for the first time in 5 years. This suggests that while early childhood obesity is still a concern in the region, progress is being made through programs that support healthy nutrition such as WIC.

Figure 52. 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.

Child underweight, or low weight-for-age, can be caused by chronic undernutrition or infectious disease and can lead to long-term impacts on cognitive and physical development.[223] In 2018, only 0.5% of children ages 2-4 in the San Carlos Apache WIC program were underweight compared to 2% in all ITCA WIC programs, again a positive sign for early childhood nutrition in the region.[224]

Childhood obesity has been linked to risk for developing Type 2 diabetes, both in childhood and adulthood, particularly for American Indian populations.[225] The prevalence of diagnosed diabetes among

American Indian adults nationwide in 2018 (14.7%) exceeded the rates seen in any other racial or ethnic groups.[226] The reasons for these disproportionately high rates are complex and multi-faceted, and include the loss of traditional foodways due to colonization and forced assimilation, food insecurity and poor diet quality largely driven by federal food provision policies, and environmental contamination and pollution.[227, 228]

Among adults ages 20 and older seen at Izee Baa' Gowąh between January 2018 and April 2021, 22% had diagnosed diabetes, indicating a very high prevalence of diabetes in the region (Table 39). Rates of diabetes were much lower for children under 18, with only 15 children with diabetes seen at Izee Baa' Gowąh in the same period (Table 40). Izee Baa' Gowąh has a diabetes program with a clinic, fitness, and outreach team to prevent diabetes through healthy diet and exercise and to help patients with diabetes manage their health .[229] The Traditional Western Apache Diet Project, discussed in more detail in the *Food Sovereignty* section of this report, also partners with the Diabetes Prevention Program to support the revitalization of traditional foodways and medicine to nurture Apache health.[230]

Table 39. Children birth to 17 with diabetes seen at San Carlos Apache Healthcare, Jan 2018-Apr 2021

	Children (ages 0-17)	Children (ages 0-17) with diabetes	Percent of children with diabetes
San Carlos Apache Healthcare	5,556	15	0.27%

Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

Table 40. Adults with diabetes seen at San Carlos Apache Healthcare, Jan 2018- Apr 2021

	Adults (ages 20 and older)	Adults (20 and older) with diabetes	Percent of adults with diabetes
San Carlos Apache Healthcare	10,615	2,314	22%

Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

Oral Health

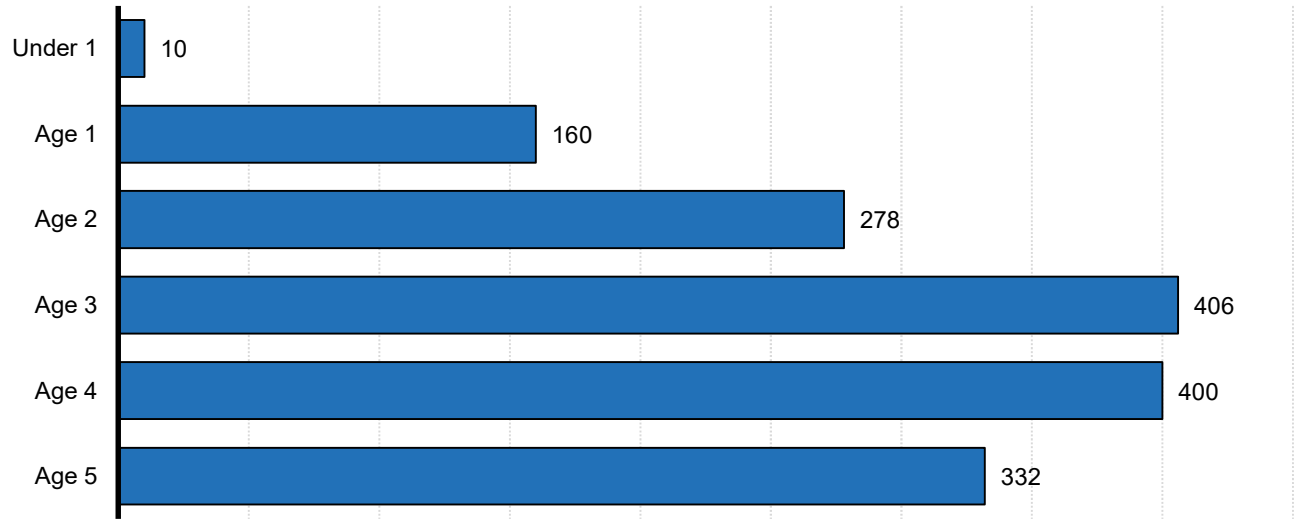
Oral health and good oral hygiene practices are important to children's overall health. Tooth decay and early childhood cavities can have short- and long -term consequences including pain, poor appetite, disturbed sleep, lost school days, and reduced ability to learn and concentrate.[231] In 2010, IHS implemented an ongoing oral health surveillance system to monitor the oral health of American Indian and Alaska Native (AI/AN) children.[232] Historically, this population has seen the highest rates of tooth decay in the United States, and it continues today at a rate that is three times than that of White children. The most recent data available from the 2018-19 IHS oral health survey of children ages 1 to 5 found that rates of cavities and untreated tooth decay are declining for AI/AN children nationwide. Despite this improvement, more than half of young children ages 1 to 5 (54%) have early childhood cavities. Rates

were slightly lower in the IHS Phoenix Service Area, which includes the San Carlos Apache Region, at 42.5% in 2018-19.233

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 one dental encounter. Access to care, however, was generally lower for children birth to 5 and decreased over time from 68% in 2013 to 53% in 2018. Dental sealant encounters for young IHS active users in Arizona also decreased in this time period, especially for children ages birth to 2, who had the lowest percentage of sealant encounters all of age groups and decreased from 23% in 2013 to 1% in 2018. Topical fluoride is another common tooth decay prevention method. Among Arizona young IHS users, about two-thirds of children ages 3 to 5 received at least one topical fluoride treatment each year between 2013 and 2018. In that same period, however, the proportion of children birth to 2 receiving topical fluoride treatments decreased sharply from 61% to 40%.[234] 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 San Carlos Apache Region can access oral health care at Izee Baa' Gowąh, which houses a comprehensive dental services program. Between January 2018 and April 2021, 1,586 children ages birth to 5 were diagnosed with dental caries (cavities) at Izee Baa' Gowąh (Figure 53). When compared to the overall population of children seen at Izee Baa' Gowąh in this period (n=1,595), this suggests that nearly all children seen have at least some dental decay. However, as local key informants noted, this also indicates a high prevalence of parents seeking dental care for their children, a very positive development in the region. Key informants indicated that Izee Baa' Gowąh has held many open house events and other community outreach events to encourage parents to bring young children for dental care and has increased the amount of pediatric dental services provided in the community. Due to these efforts, key informants felt that there is now greater awareness of the importance of early dental care and more willingness from families to bring their young children in to see a dentist. According to data from Izee Baa' Gowąh, about one in five young children (19%) received topical fluorides and 2% received sealants between January 2018 and April 2021 (Table 41). Given the high prevalence of dental decay among young children, there may be room for improvement in the rate of children receiving these preventative treatments.

Figure 53. Dental caries in children birth to 5 at Izee Baa' Gowąh (San Carlos Apache Healthcare Corporation), Jan 2018 - Apr 2021



Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

Table 41. Children (ages 0-5) receiving oral health care at Izee Baa' Gowąh (San Carlos Apache Healthcare Corporation), Jan 2018- Apr 2021

	Total children (ages 0-5)	Children (ages 0-5) who received topical fluorides	Percent of children (ages 0-5) who received topical fluorides	Children (ages 0-5) who received sealants	Percent of children (ages 0-5) who received sealants
San Carlos Apache Healthcare	1,595	309	19%	25	2%

Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

Note: IHS calculates the percentages using different denominators (children 1-5 for fluoride; children 2-5 for sealants)

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.[235] 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.[236]

Data from Izee Baa' Gowąh shows that less than half of toddlers ages 19 to 35 months (40%) had completed their full immunization series on-time for their age group (Table 42).[xxiii] 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 immunization rates in the region did not meet this national target.

Table 42. Children (ages 19-35 months) with complete immunizations at Izee Baa' Gowąh (San Carlos Apache Healthcare Corporation), Jan 2018 - Apr 2021

	Total children (ages 19-35 months) assessed	Children (ages 19-35 months) with complete immunizations (4313*314 series)	Percent of children (ages 19-35 months) with complete immunization (4313*314 series)
San Carlos Apache Healthcare	326	132	40%

Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

However, data from San Carlos Apache Head Start and the Rice Elementary Preschool program indicate that by the time they reach preschool age, most young children in the region are fully immunized. Among children enrolled in Head Start in fiscal year 2019, 89% were up to date on required vaccinations by year end (Table 43). All children enrolled in the San Carlos Unified School District preschool program were fully up-to-date on the major required immunizations in the 2019-20 school year (Table 44). Examining data over the past five years shows that exemption rates from immunizations at San Carlos Unified School District preschool have been consistent at 0%, a trend that runs counter to rising exemption rates statewide (Figure 54).

Table 43. Immunization rates for children enrolled in San Carlos Apache Head Start, FY2019

	Children (ages 3-5) enrolled in Head Start	Children up to date on required immunizations at end of year
San Carlos Apache Head Start	233	89%

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

[xxiii] *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).*

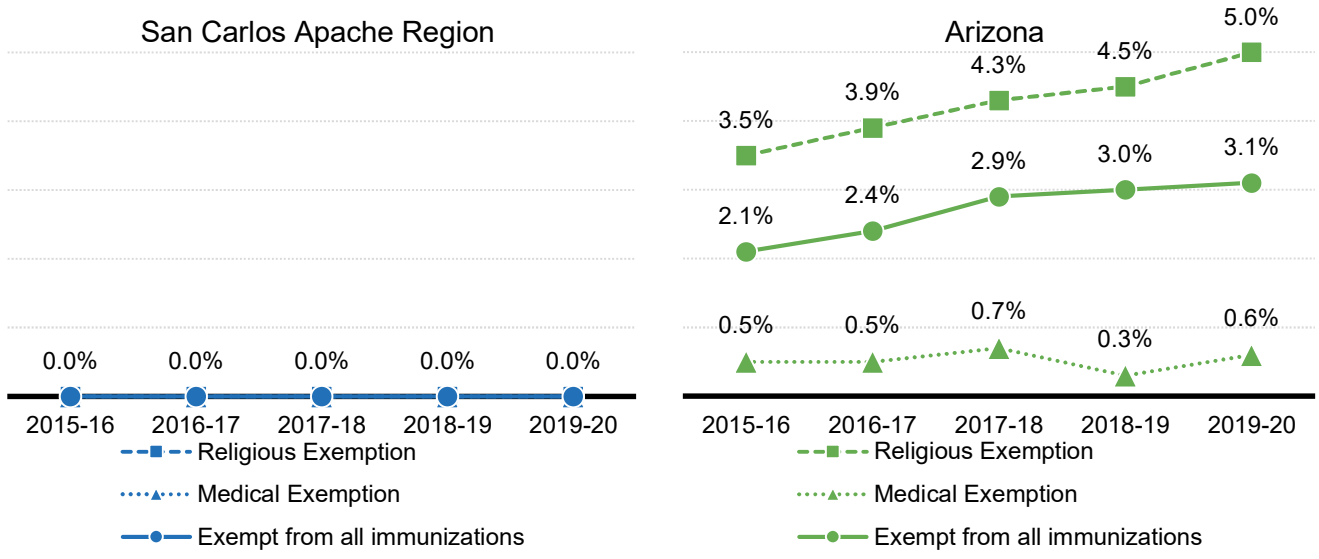
Table 44. Children in child care with selected required immunizations, 2019-20

Geography	Number enrolled	DTaP	Polio	MMR	Religious exemption	Medical exemption	Exempt from every required vaccine
San Carlos Apache Region	**19**	**100.0%**	**100.0%**	**100.0%**	**0.0%**	**0.0%**	**0.0%**
All Arizona reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	354	86.2%	89.0%	94.6%	4.2%	0.3%	3.1%
Graham County	244	98.0%	98.8%	98.0%	2.0%	0.0%	0.8%
Arizona	83,851	91.9%	93.4%	93.9%	5.0%	0.6%	3.1%
Healthy People 2020 Targets		90.0%	90.0%	90.0%			

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

Note: Regional data in this table reflect the Rice Elementary School preschool program only.

Figure 54. Child care immunization exemption rates, 2015-16 to 2019-20



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

Note: Regional data in this figure reflect the Rice Elementary School preschool program only.

Among students enrolled in kindergarten in the San Carlos Apache Region, most (96.7-97.3%) had completed the three major vaccine series (DTAP, polio, and MMR) in the 2019-20 school year (Table 45). These rates exceeded statewide and countywide immunization rates for these vaccines and exceeded the Healthy People 2020 target of 95%. No kindergarteners were exempt from all required vaccines, a rate well below the 3.2% seen statewide. Kindergarten immunization data reflect students enrolled at Rice Elementary School, Mt. Turnbull Elementary School, and Peridot-Our Savior's Lutheran School. Over the past five years, rates of exemptions from required vaccines for kindergarteners at elementary schools in the region were consistently nearly 0%, much lower than rates seen statewide or in Gila or Graham County (Figure 55). The high rates of kindergarten immunizations and low rates of exemptions are an asset to public health for children in the region.

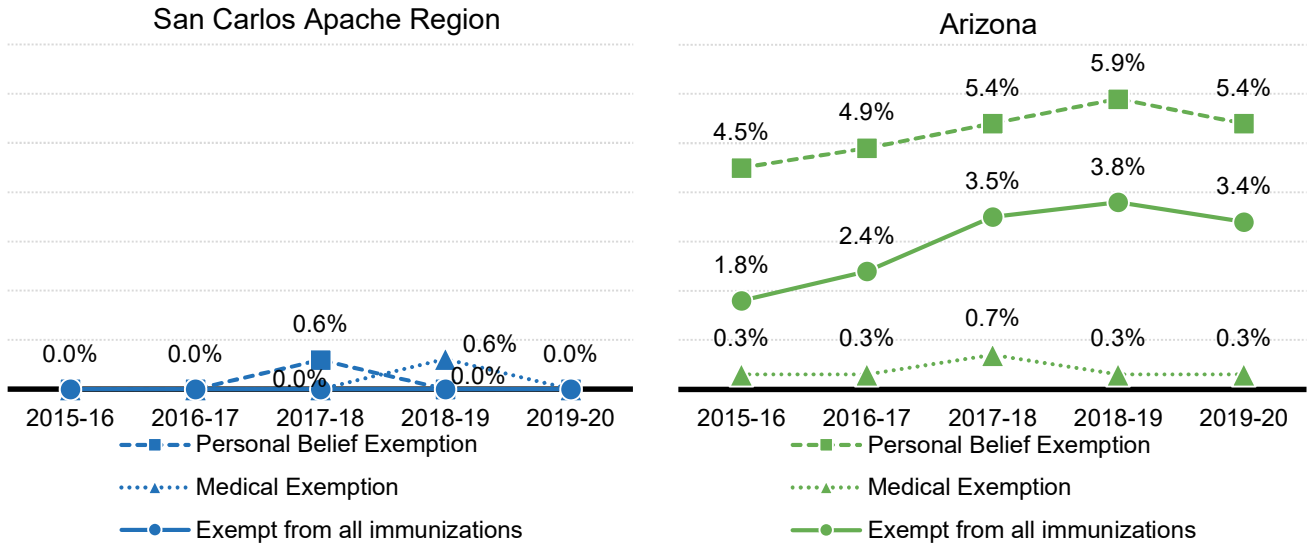
Table 45. Kindergarteners with selected required immunizations, 2019-20

Geography	Number enrolled	DTaP	Polio	MMR	Personal belief exemption	Medical exemption	Exempt from every required vaccine
San Carlos Apache Region	**182**	**96.7%**	**97.3%**	**97.3%**	**0.0%**	**0.0%**	**0.0%**
All Arizona reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	604	91.9%	93.9%	93.0%	4.1%	0.0%	3.0%
Graham County	580	94.7%	95.5%	94.7%	4.1%	0.9%	2.6%
Arizona	82,358	93.2%	93.8%	93.5%	5.4%	0.3%	3.4%
Healthy People 2020 Targets		95.0%	95.0%	95.0%			

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

Note: Kindergarten immunization data reflect students enrolled at Rice Elementary School, Mt. Turnbull Elementary School and Peridot-Our Savior's Lutheran School. The Healthy People 2030 target for immunization rates of children in kindergarten for the MMR vaccine remained at 95%; goals for DTaP and polio were not included.

Figure 55. Kindergarten immunization exemption rates, 2015-16 to 2019-20



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

Note: Kindergarten immunization data reflect students enrolled at Rice Elementary School, Mt. Turnbull Elementary School and Peridot-Our Savior's Lutheran School.

Illness, Injury and Mortality

Asthma is the most common chronic illness affecting children,[237] and it is more prevalent among boys, Black children, American Indian or Alaska Native children, and children in low-income households.[238,239] 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.[240]

In the San Carlos Apache Region, between 2016 and 2020, there were 36 emergency room visits due to asthma for children up to age 14 (Table 46). A smaller set of children presented with cases severe enough to need hospitalization. In the region, 20 children ages birth to 14, of whom 14 were children ages birth to 4 (both excluding newborns), were hospitalized due to asthma during the same 5-year period. The average length of a child's hospital stay was 1.7 days, lower than the average statewide (2.0).

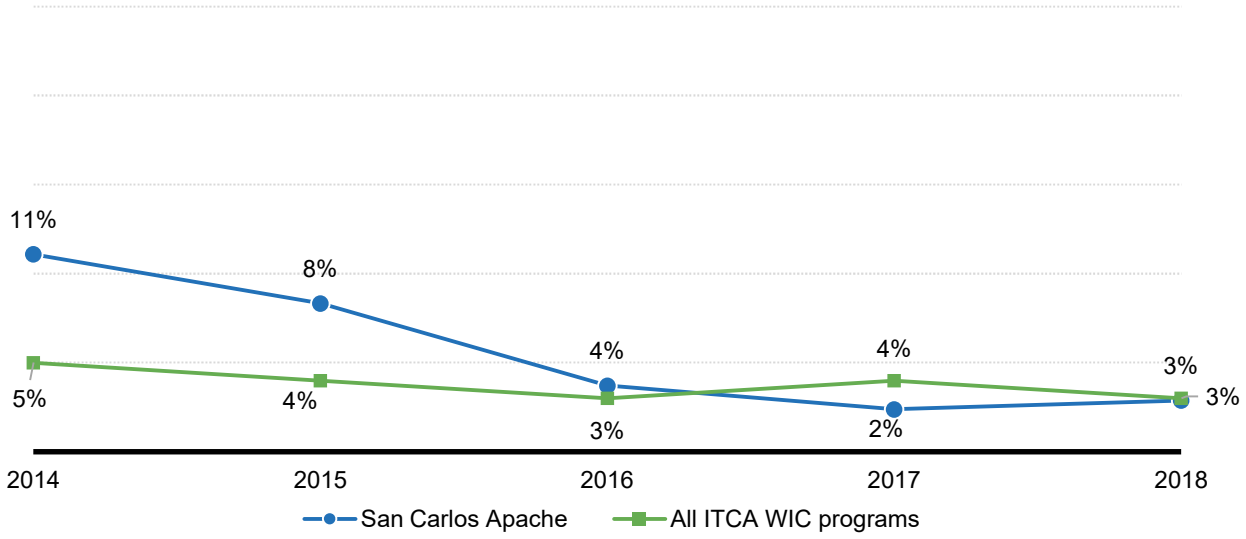
Table 46. Hospitalizations and emergency room visits due to asthma, 2016-2020 combined

Geography	Number of inpatient asthma hospitalizations for children ages birth to 4 (except newborns)	Number of inpatient asthma hospitalizations for children ages birth to 14 (except newborns)	Average length of stay for asthma hospitalization for children ages birth to 14	Number of emergency department visits for asthma, children ages birth to 14
San Carlos Apache Region	**14**	**20**	**1.7**	**36**
All Arizona Reservations	N/A	N/A	N/A	N/A
Gila County	<6	34	1.7	236
Graham County	<6	10	2.7	220
Arizona	2,214	5,672	2.0	41,103

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

Smoking in the household is another risk factor affecting children's vulnerability to illness. Exposure to secondhand smoking puts children at a higher risk of developing ear infections, respiratory illnesses and sudden unexplained infant death (SUID).[241] The percent of WIC-enrolled children ages 1-4 exposed to smoking in the household has substantially declined in the San Carlos Apache Region over the most recent five years of data available (Figure 56). In 2014, more than one in 10 children who were enrolled in WIC were exposed to smoking at home (11%), which was more than double the rate of exposure in all ITCA WIC programs (5%). However, the rate of exposure to smoking at home fell sharply from 2014 to 2016, and as of 2018 only 3% of WIC-enrolled children were exposed to smoking at home, matching the rate (3%) seen in all ITCA WIC programs. This decline in exposure to secondhand smoke marks a very positive trend for healthy home environments for young children.

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.

Unintentional injuries are the leading cause of death for children in Arizona and nationwide.[242, 243] 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.[244] 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.[245, 246]

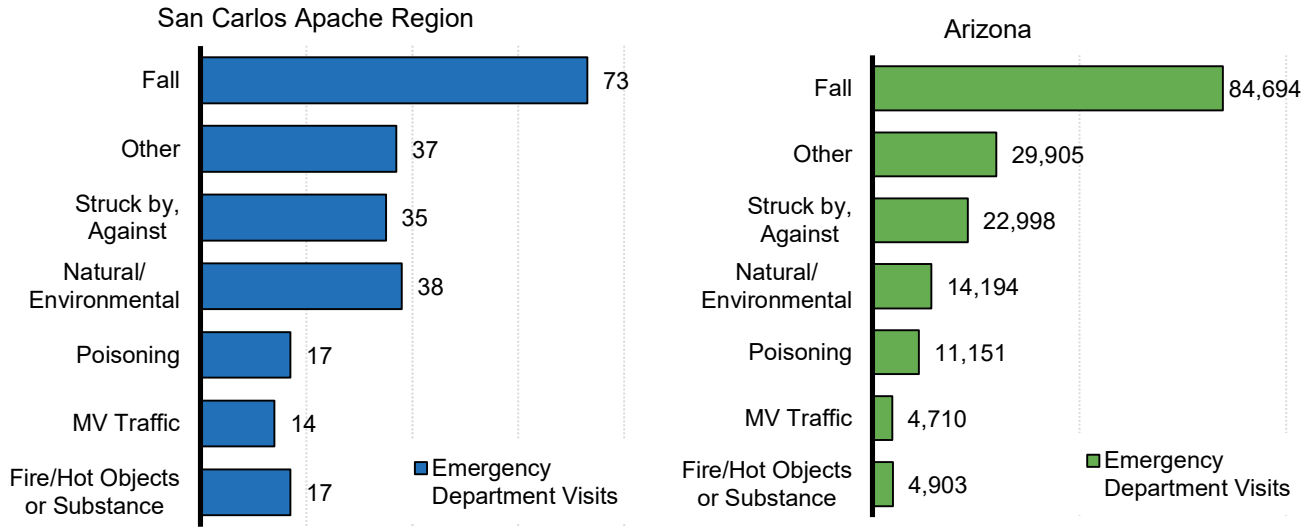
Between 2016 and 2020, there were 242 non-fatal emergency department visits and 29 non-fatal inpatient hospitalizations for unintentional injuries in the San Carlos Apache Region among children ages birth to 4 (Table 47). The most common reasons for emergency departments visits were falls, accounting for nearly a third of emergency department visits (Figure 57). The pattern of unintentional injuries in the region mostly resembles the same pattern seen statewide. However, as a percent of overall emergency department visits due to unintentional injuries, natural or environmental mechanisms were a more frequent causes of a visit in the region (15%) than in the state (8%). Natural and environmental mechanisms of injury include reactions to poisonous or venomous animals or plants, injuries caused by animals and exposure to excessive heat or cold.[247] This pattern is also clear in Emergency Department data at Izee Baa' Gowąh—between January 2018 and April 2021, the most common injuries seen included head injuries, bee stings, scorpion stings, and insect bites (Table 48).

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

Geography	Non-fatal inpatient hospitalizations for unintentional injuries	Non-fatal emergency department visits for unintentional injuries
San Carlos Apache Region	**29**	**242**
Gila County	27	1,531
Graham County	43	1,827
Arizona	2,890	181,035

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

Figure 57. 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.

Table 48. Top diagnoses for children ages 0-5 seen in the Emergency Department at Izee Baa' Gowąh (San Carlos Apache Healthcare Corporation), Jan 2018 - Apr 2021

	Visits	Unique Patients
Head injuries (cuts, bruises, etc.)	354	338
Bee stings	101	90
Scorpion stings	61	55
Insect bites	9	9

Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal 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.[248] 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 unexplained infant death (SUID) and unintentional injuries.[249,250]

In the San Carlos Apache Region, seven children died in 2018 and fewer than six children died in 2019 (data on the causes of these deaths was not available due to the very small number of deaths) (Table 49). These very low death numbers mean that mortality rates for young children and infants cannot be reported to protect individual privacy.

Table 49. 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)
San Carlos Apache Region	2018	**<6**	**DS**	**<6**	**DS**	**7**	**N/A**
	2019	**<6**	**DS**	**<6**	**DS**	**<6**	**N/A**
All Arizona Reservations	2018	N/A	N/A	N/A	N/A	N/A	N/A
	2019	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	2018	<6	DS	6	188.6	12	137.7
	2019	<6	DS	<6	DS	8	DS
Graham County	2018	<6	DS	<6	DS	7	86.9
	2019	<6	DS	<6	DS	7	87.6
Arizona	2018	447	5.6	562	127.4	824	65.2
	2019	430	5.4	513	117.4	777	61.6
Healthy People 2020 Target			6.0				

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

Note: The Healthy People 2030 target for infant mortality rate was decreased to no more than 5.0 infant deaths per 1,000 live births.

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

FAMILY SUPPORT AND LITERACY

FAMILY SUPPORT AND LITERACY

Why it Matters

Responsive relationships and language-rich experiences for young children help build a strong foundation for later success in school and in life. Families and caregivers play a critical role as their child's first and most important teacher. Positive and responsive early relationships and interactions support optimal brain development, academic skills, and literacy during a child's earliest years and lead to better social, physical, academic, and economic outcomes later in life. [251,252,253,254,255] 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.[256] Storytelling is an important practice in many Native communities that passes on cultural values and beliefs and supports emergent literacy for young children.[257,258, 259] A strong sense of cultural identity can be a key protective factor in fostering resilience in Native children and youth to cope with stress and maintain well-being.[260, 261] Children benefit when their families have the knowledge, resources, and support to use positive parenting practices that support their child's healthy development, nutrition, early learning, and language acquisition. Specifically, parental knowledge of positive parenting practices and child development is one of five key protective factors that improve child outcomes and reduce the incidence of child abuse and neglect.[xxiv,262]

Unfortunately, not all children are able to begin their lives in positive, stable, nurturing environments. Adverse childhood experiences (ACEs)[xxv] have been associated with developmental disruption, mental illness, drug and alcohol use and overall increased healthcare utilization.[263,264] Arizona is among the top ten states with the highest proportion of children birth to 5 who have experienced at least one ACE, with nearly one in three (31.8%) young children in Arizona having one or more ACEs.[265] Future poor health outcomes are more likely as an individual's ACE score increases.[266] 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%).[267] 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.[268] These children and their families may require specific, targeted resources and interventions in order to reduce harm and prevent future risk.[269]

[xxiv] *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.*

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

Alternatively, Positive Childhood Experiences (PCEs), including positive parent-child relationships and feelings of safety and support, have been shown to have similarly cumulative, though positive, long-term impacts on mental and relational health.[270] Strategies for preventing ACEs include: strengthening economic supports for families; promoting social norms that protect against violence and adversity; ensuring a strong start for children; enhancing skills to help parents and children handle stress, manage emotions, and tackle everyday challenges; connecting youth to caring adults and activities; and intervening to lessen immediate and long-term harms.[271]

What the Data Tell Us

Parenting Education, Family Involvement, 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.[272,273] Home-based literacy practices between parents and caregivers and young children, specifically, have been shown to improve children's reading and comprehension, as well as children's motivation to learn.[274,275] 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.[276] Communities may employ many resources to support families in engaging with their children, including through targeted programs like home visitation programs and "stay and play" programs, or participating in larger initiatives like Read On Arizona, the national "Reach Out & Read" program or the Dolly Parton Imagination Library program.[277] The First Things First San Carlos Apache Regional Partnership Council funds the Gila County Library District to distribute books to young children in the San Carlos Apache Region through the Dolly Parton Imagination Library program as well as to provide regular story times to encourage families to read together. Read On San Carlos Apache Tribe supports reading challenges through schools and early childhood centers in the region and promotes awareness of the importance of early literacy for young children's brain development.

Gowa: Teachable Moments for Apache Children is a comprehensive, community-based program to promote early literacy for young children in the San Carlos Apache Region.[278] The Gowa program is implemented by the University of Arizona Cooperative Extension with funding from the U.S. Department of Agriculture. Due to the COVID-19 pandemic, Gowa program activities in 2020 and 2021 were limited to early literacy handouts, story time videos, and online family literacy events, but the program hopes to begin delivering in-person, drop-in family literacy events and multi-session educational programs for parents and caregivers of young children on promoting early literacy beginning in 2022.

Nnee Bich'o Nii operates two parenting programs for families in the region. The Fatherhood is Sacred program was established in 2018 and the Motherhood is Sacred program began virtually via Zoom in 2020 during the pandemic. Both programs aim to teach the values of parenting and remind parents that their children are sacred. Local key informants indicated that the programs are successful in nurturing affectionate and supportive parent-child relationships, encouraging parents to be warm and

demonstrative with their children and to spend quality time together over meals and doing activities. Nnee Bich'o Nii also receives books from the First Things First San Carlos Apache Regional Partnership Council to distribute in its building's reading corner as well as materials distributed on daily bus services run to Globe and Safford. The San Carlos Apache Social Services Department also provides parenting classes for families involved with Tribal Child Protective Services.

The COVID-19 pandemic greatly impacted the support and education services provided in the San Carlos Apache Region. According to local key informants, many service providers located outside the region, such as the Gila County Library District, had a difficult time reaching families while the community was closed. Many classes and events transitioned online to Facebook Live and Zoom, but families who lacked sufficient internet access at home may have struggled to access these resources. Beyond accessing services, the stress of the pandemic also amplified pre-existing family dynamics. Families who already had healthy relationship patterns grew stronger as they were able to spend more time together at home. However, those families with conflict, substance abuse or other challenging dynamics faced further challenges. These families may need particular support as in-person services resume.

Mental and Behavioral 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.[279] 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 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.[280] Improving supports available through coordinated, collaborative efforts are key to early identification and intervention for both young children and their caregivers.[281,282]

Behavioral and mental health services for residents of all ages are available in the San Carlos Apache Region through the San Carlos Apache Wellness Center. In Arizona, the Arizona Health Care Cost Containment System (Arizona's Medicaid program) contracts with community-based organizations, known as Regional Behavioral Health Authorities (RBHAs) and Tribal Regional Behavioral Health Authorities (TRBHAs), to administer publicly-funded behavioral health services. Arizona is divided into separate geographical service areas (GSAs) served by various RBHAs or TRBHAs. The San Carlos Apache Wellness Center serves as the TRBHA for the San Carlos Apache Tribe.

The San Carlos Apache Wellness Center is a tribally-run outpatient mental health and substance abuse program with locations in San Carlos, Peridot and Bylas, as well as a Wellness Camp facility in Point-

of-Pines. The Wellness Center provides preventative mental and behavioral health services and education, individual and group therapy, traditional healing, telepsychiatry services, crisis stabilization services and a sober living program. [283] For children and youth, the Wellness Center offers before- and after-school programs, in-school mentoring and support and individual and family therapy. The Wellness Center's youth programs aim to promote healthy relationships and positive coping mechanisms as well as suicide prevention. The Wellness Center employs two behavioral health technicians who specialize in working with children, including young children birth to 5.[284] During the pandemic, the Wellness Center offered advice, support and resources for parents to help children at home through websites, social media and virtual events.[285] According to local key informants in the region, Izee Baa' Gowąh recently hired a child psychologist who previously worked at the Wellness Center. The child psychologist now works in the pediatrics department and convenes many of the community service providers and Izee Baa' Gowąh pediatricians to share information, resources and community events. This convening work is seen as a major asset in the community for supporting healthy development for young children.

The pandemic has exacerbated many of the pre-existing challenges around mental and behavioral health care access in the region and across the entire country. Disruptions to daily life heightened stress, anxiety and depression in both children and caregivers nationwide. [286] Additionally, the deaths caused by the COVID-19 pandemic also affect children nationwide. A recent study estimated that approximately 140,000 children in the U.S. and 4,800 in Arizona, lost a parent or caregiver (such as a grandparent) to COVID-19 between April 2020 and June 2021.[287] The same study found that American Indian or Alaska Native children were 4.5 times as likely to have lost a parent or caregiver than White children due to the high rates of death from COVID-19 in Native communities. Local key informants noted that many families in the region lost loved ones due to COVID-19. There were more than 60 deaths within the San Carlos Apache Tribe, and many tribal members have extended families in other tribal nations that were also hard hit by the pandemic. Key informants describe the period of lockdown as very emotionally and physically draining and scarring for the community. The grief and loss brought by the pandemic mean that trauma-informed approaches on the part of San Carlos Apache departments and agencies will be important to support families and children in the years to come.

Substance Use Disorders

Much like mental health, parental substance use has major implications for children's health and well-being. A mother's use of substances such as drugs and alcohol during pregnancy can impact her newborn's health. As stated previously, babies born to mothers who smoke are more likely to be born early (preterm), have low birth weight, die from sudden unexplained infant death (SUID) and have weaker lungs than babies born to mothers who do not smoke.[288,289] 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.[290] As noted previously (Table 36), between 2016 and 2020, there were 128 newborns in the San Carlos Apache Region hospitalized because of maternal drug use during pregnancy. Local key

informants indicated that maternal substance use during pregnancy continues to be a major issue in the region. This leads to a pattern of higher-risk births and increased need for specialized care for newborns.

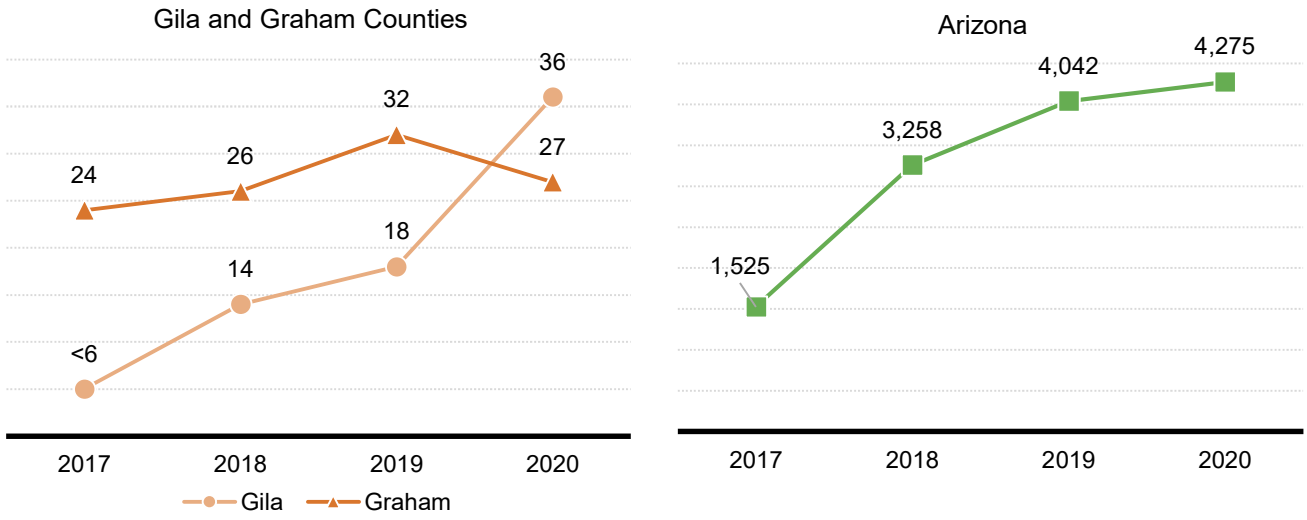
Parental substance use also has other impacts on family wellbeing. According to the National Survey of Children's Health, young children in Arizona are more than twice as likely to live with someone with a problem with alcohol or drugs than children in the U.S. as a whole (9.8% compared to 4.5%).[291] 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.[292,293] Substance use treatment and supports for parents and families grappling with these issues can help to ameliorate the short- and long-term impacts on young children.[294]

Local key informants noted that substance abuse is an ongoing challenge in the San Carlos Apache Region, and many feel it has gotten worse in recent years. The San Carlos Apache Wellness Center offers services in the community for individuals struggling with substance abuse, including group therapy and individual therapy. In March 2022, the Wellness Center also held the grand opening for the new Sober Living program, called Nohwi'ihi'n̲a' Bá Gózhǭǭ Doleeł. This program, located in the Seven Mile Wash District, will provide a safe residential living space for individuals in recovery. Key informants also noted that San Carlos Apache College has begun offering a certificate in substance abuse and addiction studies to train local students to work as substance abuse professionals and counselors.

The COVID-19 pandemic affected substance use nationwide. Along with an increase in stress and mental health concerns among adults in the U.S., data from the Census Bureau's Household Pulse Survey show that more than one in 10 adults (12%) reported increases in alcohol consumption or substance use during the pandemic.[295] 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.[296] 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.[297] This rise in substance use issues coincides with a time when these groups have disproportionately dealt with negative effects of the pandemic, including stress, job loss, illness and death.

According to data provided by the Arizona Department of Health Services (ADHS), non-fatal overdoses due to opioids have been increasing in Arizona and in Gila County and Graham County over the past four years. Non-fatal overdoses doubled between 2019 and 2020 in Gila County. Data on non-fatal opiate overdoses were not available for the San Carlos Apache Region. From 2017 to 2020, there were fewer than six opioid-related deaths in the San Carlos Apache Region.

Figure 58. Number of non-fatal overdoses with opioids or opiates contributing to the overdose, 2017 to 2020



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

Table 50. Number of deaths with opiates or opioids contributing, 2017 through 2020

Geography	Number of deaths with opiates or opioids contributing, 2017 through 2020
San Carlos Apache Region	**<6**
Gila County	35
Graham County	15
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.

Child Removals and Foster Care

Child welfare services in the San Carlos Apache Region are provided by the San Carlos Apache Social Services Department. The Social Services Department houses Tribal Child Protective Services (CPS), which takes reports of child abuse and neglect, investigates these reports, and determines whether a child may need to be removed from their family to keep them safe. According to data provided by the Social Services Department, cases of child abuse and neglect increased during the COVID-19 pandemic, rising to 59 substantiated cases in 2020 compared to 45 in 2019 (Table 51). More children were also removed in 2020 (n=95) than in the previous year (n=80). Local key informants in the region indicated

that due to the stress and trauma of the pandemic and lockdown, there were many more cases of domestic violence and reports of child abuse and neglect in the community.

Table 51. Children removed by Tribal CPS and Child Abuse Cases, 2019 to 2020

	2019	2020
Children (ages 0-17) removed by Tribal CPS	80	95
Substantiated cases of child abuse or neglect	45	59
Children (ages 0-17) in ICWA placements	7	9

Source: San Carlos Apache Social Services Department (2016). [Child Welfare data]. Unpublished data.

According to local key informants, Tribal CPS receives hundreds of referrals each year, which an intake staff member triages and prioritizes by severity. For children who do not have enough food or who are not attending school, Social Services staff make referrals to appropriate community resources, such as public health nurses, school district staff or Nnee Bich'o Nii. Most referrals to Tribal CPS occur due to neglect, where parents are providing inadequate supervision or care for their children. For more severe cases, such as those involving physical or sexual abuse, Social Services staff work with the San Carlos Apache Police Department to investigate cases. Local key informants described an environment where Social Services staff have a difficult time following up on all referrals and ensuring that families receive services because of the overwhelming volume of cases. Families who are highly motivated to seek help and change do see successes, but other families may fall through the cracks. Key informants also noted that there are challenges with communication and coordination between department and service providers and that it can be difficult to determine which providers are following up with families and children.

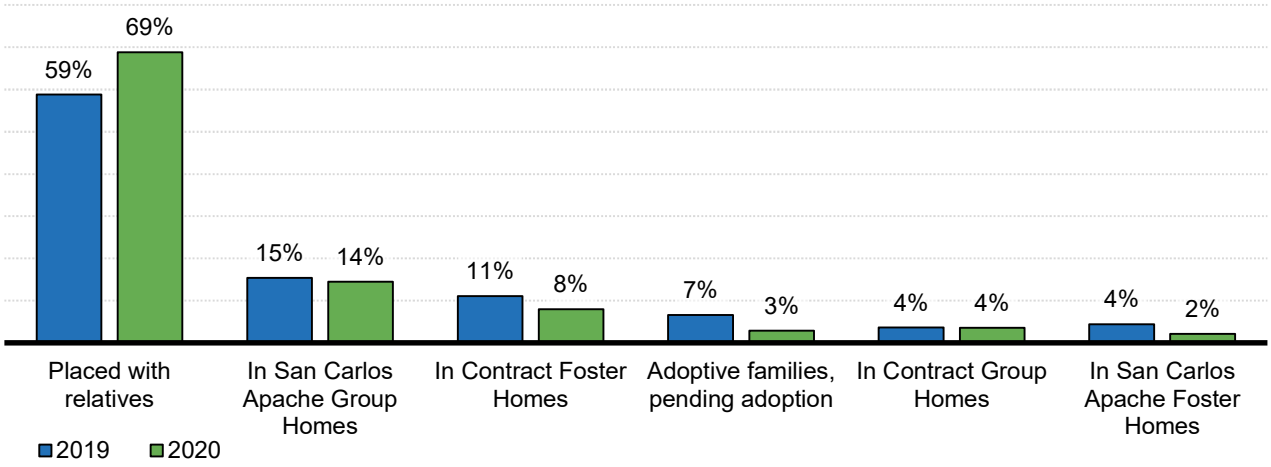
Local key informants noted that funding and staffing are ongoing challenges for the Social Services Department. The department has had difficulties filling open positions due to a lack of interested applicants for the pay rate that the department can afford. Additionally, due to the serious nature of the work and high numbers of reports that need investigating, staff are frequently at risk of burnout. Currently, one of the CPS investigators commutes in from the Phoenix metropolitan area to work Monday through Friday in the community. Key informants indicated that more resources to be able to offer pay rates competitive with those offered in the Phoenix and Tucson areas might help to recruit and retain staff.

Overall, local key informants estimated that the Social Services Department works with about 150 families per year. The department uses third-party billing through AHCCCS to fund much of their family support services, such as providing parenting education and counseling, transportation for families to and from appointments and classes and incentives for completing education courses. The Social Services Department has sought funding in the past under the Family First Prevention Services Act, which was signed into law on February 9, 2018, and redirected federal investments to keep children

safely with their families and avoid the traumatic experience of entering foster care whenever possible.[298] This act made more federal reimbursement funds available to child welfare agencies for preventative services to keep children safely with their families. However, local key informants indicated that the level of funding available through this mechanism was not sufficient to justify the amount of work required to apply for and maintain funding. Key informants hope that the continued use and expansion of 3rd party billing under AHCCCS will allow the funding of similar preventative services in a more sustainable way for staff.

According to data provided by the Social Services Department, children ages birth to 17 who have been removed from their parents' care were most frequently placed with relatives in 2019 and 2020, followed by placements in San Carlos Apache Group Homes, foster homes and with adoptive families (Figure 59). The proportion of children placed with relatives increased slightly from 59% in 2019 to 69% in 2020, while the share of children in contract foster homes, San Carlos Apache foster homes and with adoptive families decreased. Local key informants noted that while placement of children with relatives is common, many families find it challenging to care for often-traumatized children who need a lot of additional supports such as behavioral health services through the Wellness Center.

Figure 59. Placement of wards of the court (ages 0-17), 2019 to 2020



Source: San Carlos Apache Social Services Department (2021). [Child Welfare data]. Unpublished data.

Table 52. Placement of wards of the court (ages 0-17), 2019 to 2020

	2019	2020
Children (ages 0-17) in contracted foster homes	15	11
Children (ages 0-17) placed with relatives	80	95
Children (ages 0-17) in contracted group homes	<10	<10
Children (ages 0-17) in San Carlos Apache Group Homes	21	20
Children (ages 0-17) in San Carlos Apache Foster Homes	<10	<10
Children (ages 0-17) with adoptive families, pending adoptions	<10	<10

Source: San Carlos Apache Social Services Department (2021). [Child Welfare data]. Unpublished data.

According to data provided by the Social Services Department, the number of San Carlos Apache foster care homes available has been declining in recent years. The total number of homes fell from an average of 23 available per month in 2018 to 18 per month in 2019. Most of the foster homes licensed by the San Carlos Apache Social Services Department are in the Globe and Safford areas. Local key informants noted that there have been challenges trying to recruit potential foster parents. They indicated that for Apache families in the community, the licensing process is often seen as too intrusive, and the requirement that all household members over 18 go through a background check is a barrier to some families pursuing licensing. Local key informants feel that many potential foster parents outside the community are looking for children to adopt as quickly as possible rather than fostering with the goal of family reunification.

Table 53. Foster Care Availability, 2018 and 2019 Monthly Averages

	2018		2019	
	On-Reservation	Off-Reservation	On-Reservation	Off-Reservation
San Carlos Apache Foster Care Homes	5	18	4	14
Beds in San Carlos Apache Foster Care Homes	10	32	9	24

Source: San Carlos Apache Social Services Department (2021). [Child Welfare data]. Unpublished data.

During the COVID-19 pandemic and resulting lockdown of the community, the Social Services Department had to adapt many of their practices for community safety. Social Services staff communicated with families via text or phone and were able to provide basic cellphones with free calling cards for families who needed them. They also transitioned counseling services and parent meetings to Zoom from March 2020 until COVID-19 vaccines became available in early 2021. Staff also drove out to families' houses to drop off supplies, including food, clothing and personal protective

equipment throughout the pandemic. Once vaccines became available in 2021, the Social Services Department began offering face-to-face parenting classes again at the youth home. Local key informants indicated that staff did their best to reach out to families and that about a dozen families stayed highly engaged through Zoom counseling and parenting classes during the lockdown; however, many families were lost to contact. Going forward, there is a need for better coordination of referrals and services, adequate staffing to prevent burnout and ensure families do not fall through the cracks and for trauma-informed care to support families in creating nurturing and healthy environments for their children.

SUMMARY AND CONCLUSIONS

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

Population Characteristics

- The San Carlos Apache Tribe's Apache Language Preservation Department partners with Apache Kid Child Care Center and San Carlos Apache Head Start to teach the Apache language to young children and help to cultivate a strong sense of cultural identity.
- There is a high prevalence of multi-generational households in the region, which can provide mutual help and support for families raising young children.

Economic Circumstances

- The Nnee Bich'o Nii TANF program offers wraparound services for low-income families in the region, ranging from cash assistance to job training to intensive parenting education programs. Nnee Bich'o Nii also operates public transit that helps families access needed resources.
- Participation rates in the San Carlos Apache WIC program reached an all-time high in 2020, exceeding participation rates in Inter Tribal Council of Arizona WIC programs across the state.
- The Traditional Western Apache Diet Project supports the revitalization of traditional foodways and promotes cultural, physical, mental and spiritual health for San Carlos Apache members.
- During the pandemic, the San Carlos Apache Department of Education, Department of Health and Human Services and Social Services Department were able to purchase laptops, tablets, and Wi-Fi hotspots for families who needed them, expanding internet and technology access.

Educational Indicators

- Passing rates on the 3rd grade AzMERIT English Language Arts and Math assessments were increasing at Mt. Turnbull Elementary School before the pandemic.
- Graduation rates at San Carlos High School have consistently exceeded statewide graduation rates. Graduation rates for American Indian students enrolled at Globe High School also increased between 2017 and 2019 and exceeded statewide graduation rates.

Early Learning

- Families in the San Carlos Apache Region have access to multiple sources of no-cost and low-cost care, including Apache Kid Child Care Center, San Carlos Apache Head Start, San Carlos Apache Early Head Start and the inclusive preschool at Rice Elementary School. All of these

programs participate in Quality First, indicating their commitment to providing high quality early education experiences for young children.

- The opening of Early Head Start in 2017 has greatly increased the number of early care and education slots available to children birth to 2 in the region.
- The new inclusive preschool program at Rice Elementary School, opened in 2021-22, provides a new no-cost early education opportunity for preschool-age children in the region. This program does not have any income eligibility requirements, meaning that it can serve children who do not qualify for Head Start.

Child Health

- Izee Baa' Gowąh San Carlos Apache Health Care Corporation is a major asset in the region as a tribally operated, culturally respectful health care facility that provides a wide array of preventative, specialty and emergency care. Data from Izee Baa' Gowąh shows that the hospital serves nearly all residents of the San Carlos Apache Region.
- Nearly nine in 10 children seen at Izee Baa' Gowąh have insurance coverage through AHCCCS or private health insurance. This high rate of health insurance enrollment means that Izee Baa' Gowąh can save money through outside billing to insurance providers and use these funds to benefit the health of the community.
- Rates of early childhood obesity among children ages 2 to 4 enrolled in WIC have been steadily declining over the past five years, suggesting that progress is being made in encouraging healthy nutrition for young children.
- Though the number of children diagnosed with dental caries is very high, these high numbers also indicate many young children in the region are being seen by a pediatric dentist at Izee Baa' Gowąh. This indicates that outreach efforts to increase the number of children receiving early oral health care are succeeding, and local key informants noted that pediatric dental services provided at Izee Baa' Gowąh have expanded in recent years.
- The vast majority of children in child care and kindergarten in the San Carlos Apache Region are up to date on required immunizations. Rates of exemption from required immunizations for kindergarteners have remained nearly 0% over the past five years.

Family Support and Literacy

- Parent education programs and early literacy programs, including those offered through the Gila County Library District, University of Arizona Cooperative Extension, the San Carlos Apache Social Services Department and Nnee Bich'o Nii, support healthy child development, nurturing family relationships and early literacy skills for young children and their families in the region.
- The San Carlos Apache Wellness Center offers culturally respectful mental and behavioral health services and substance use treatment, including mental and behavioral health programs and treatment for young children birth to 5.

- The child psychologist at Izee Baa' Gowąh works with pediatric providers at the hospital to share resources and convene community service providers to support the overall health and wellbeing of young children in the region

Even with these strengths in the region, there continue to be challenges to fully serving the needs of families with young children, and the tremendous stress and disruption of the COVID-19 pandemic often exacerbated existing problems. A more extensive list of regional challenges follows, but we first summarize key needs in the region based on available data. The San Carlos Apache Regional Partnership Council supports multiple efforts that aim to address these major challenges, and many of these challenges are challenges seen statewide as well. These include:

- **The need to support families living in poverty**– Poverty rates in the region among young children are triple those seen statewide and exceed rates seen across all Arizona reservations combined. Local key informants describe many families in the region as living in 'survival mode' where meeting basic needs for food and housing takes substantial effort and may prevent families from accessing education and other resources to improve their lives. Programs like Nnee Bich'o Nii provide many wraparound supports for low-income families, including job training, transportation, parent education and cash assistance, but uptake of this program is low among families with young children in the region.

- **The need for expanded capacity for early education and child care in the region—**The multiple early education and child care programs in the region and the high quality of early education provided through these programs is an asset for the San Carlos Apache Region. However, these programs only have sufficient capacity to serve a fraction of the young children in the region. High staff turnover, especially during the pandemic, and space constraints have also limited the capacity of early education programs to even operate at their licensed capacity over the past two years. More qualified early education teachers and staff are needed to ensure that programs like Apache Kid Child Care and San Carlos Apache Early Head Start can operate at their pre-pandemic capacities. In the long term, more capacity in early care and education programs, either through expansion of existing programs or opening of new programs, will be needed to ensure that more children in the region have access to high quality early education.

- **The need for additional outreach to identify the youngest children with special needs** –Very few children ages birth to 2 receive services through AzEIP or DDD, despite local key informants noting a high rate of children entering kindergarten and 1st grade with developmental delays and communication disorders. Additional screening, outreach, parent education and system navigation support, especially for families with very young children may be needed to ensure that children have access to early intervention services that can provide the support they need for healthy development

- **The need for strengthening the child welfare system—**Even before the pandemic, Tribal Child Protective Services received hundreds of referrals for child neglect and abuse. This high volume of cases along with difficulties recruiting and maintaining an adequate number of qualified staff has meant that some families may be falling through the cracks in the child welfare system. The pandemic only exacerbated these challenges with increased numbers of referrals for neglect and

abuse, increased cases of domestic violence and challenges following-up with families while the community was closed. Better systems for coordination of referrals and services, support to maintain adequate staffing levels and ongoing training in provision of trauma-informed care all could help strengthen the child welfare system to protect the most vulnerable children in the San Carlos Apache Region.

Additional regional challenges highlighted in this report include:

Population Characteristics

- Low numbers of enrolled San Carlos Apache members ages birth to 2 indicate that many families may wait to enroll children as members until they reach preschool age. However, this may limit access to some services for very young children.
- Rates of Native language use at home in the San Carlos Apache Region are lower than those seen in tribal communities across the state. This highlights the ongoing need for efforts led by the San Carlos Apache Tribe's Apache Language Preservation Department to teach the Apache language to the next generation of children and youth.
- A high percentage of young children in the region live in grandparent-led households, and there are nearly 350 grandparents in the region who are responsible for raising their grandchildren ages birth to 17. Given the heightened risks that multigenerational households faced during the pandemic, along with the challenges faced by grandparents and other relative caregivers for young children in accessing services online during the pandemic, additional outreach and supports for these families may be warranted.

Economic Characteristics

- The number of children participating in social safety net programs, including Nnee Bich'o Nii, SNAP, and WIC, have declined in recent year, even while rates of child poverty remain high. This raises concerns that young children who could benefit from these programs are not accessing them.
- A shortage of safe and adequate housing in the region has led to overcrowding at home for many families in the region. Local key informants indicated that there are high rates of families living 'doubled up' in the region and emphasized that there is substantial need to increase the supply of safe housing for residents.

Educational Indicators

- The transition to remote learning was challenging for some students due the difficulty that some parents and caregivers had in helping children stay connected with school, especially due to limited access and knowledge of technology and online platforms. Students will need additional supports, provided in a trauma-informed way, to recover unfinished learning.

- Passing rates on AzMERIT Math and English Language Arts assessments were very low in 2018-19, and the disruption of the COVID-19 pandemic has likely set students even further behind.
- Rates of educational attainment for adults in the region are lower than those statewide and across all Arizona reservations, and about one in three babies in the region are born to mothers with less than a high school education. This points to a need for programs that support education and training for parents of young children.

Early Learning

- Most early education and care programs in the region, especially those serving very young children ages birth to 2 such as Apache Kid Child Care and Early Head Start, are currently operating well under their licensed capacity due to shortages of qualified staff.
- The number of preschool-age children receiving special needs services at Rice Elementary School has fallen steadily over the past three years, even while the number of early elementary students with special needs has remained steady. This may indicate that children with special needs are not receiving services until they reach kindergarten.

Child Health

- The rate of births to mothers with inadequate prenatal care has been consistently high over the past five years, and more than one in 10 babies were born to mothers with no prenatal care in 2019. This concerning trend points to a need for further outreach and health education on the importance of timely prenatal care.
- Rates of birth to young parents under age 20 and under age 18 have also remained high in recent years. These young parents may need additional education and support to provide healthy environments for their children and continue with their own educations.
- The rate of tobacco use among expectant mothers in the region exceeded both the rate seen across all Arizona reservations and statewide, and this rate was four times the Healthy People 2020 goal of no more than 1.4%. Tobacco cessation support and more robust prenatal education may be needed.
- Substance use among pregnant mothers continues to be a major concern among local key informants in the region. Infants born to these mothers often need more specialized treatment and care at birth and are at greater risk for longer term health challenges.
- Breastfeeding rates for infants enrolled in the San Carlos Apache WIC program have been consistently lower than those seen across all ITCA WIC programs, and rates of both breastfeeding initiation and breastfeeding for six months or more have fallen in recent years. This may indicate a need for more education and support for women who are interested in breastfeeding their infants.

- The number of children birth to 5 with diagnosed dental decay nearly matches the total number of children seen at Izee Baa' Gowąh for health care services. This indicates that most young children in the region likely have dental decay and points to an ongoing need for early preventative dental treatments such as fluoride applications and sealants for young children in the region.

Family Support and Literacy

- The loss of loved ones due to COVID-19 as well as the stressors of the pandemic means that young children and their families may be more in need of mental health services.
- Cases of child abuse and neglect increased between 2019 and 2020. Local key informants indicated that the stress of the pandemic on many families led to increased incidents of domestic violence, family conflict and increased material hardship for some families.

These needs are complex issues that have root causes that no single department or organization can tackle alone. Successfully addressing the needs outlined in this report will require continued concentrated efforts of collaboration between San Carlos Apache departments, agencies and programs, the First Things First Regional Partnership Council, federal and state agencies, and other community stakeholders in and around the region. San Carlos Apache families have unique assets and strengths and a deep love for their children. Ongoing collaborations and responsive approaches to community needs will create opportunities for young children and their parents and caregivers to thrive in the San Carlos Apache Region.

APPENDIX 1: ADDITIONAL DATA TABLES

Population Characteristics

Table 54. 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
San Carlos Apache Region	**10,710**	**8%**	**1%**	**0%**	**91%**	**0%**	**8%**
All Arizona Reservations	185,988	6%	4%	0%	90%	1%	2%
Gila County	53,546	19%	62%	1%	16%	1%	3%
Graham County	37,996	33%	51%	2%	13%	1%	3%
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 55. Children ages birth to 5 living with parents who are foreign-born, 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	
San Carlos Apache Region	**1,321**	**0**	**0%**
All Arizona Reservations	16,370	277	2%
Gila County	3,224	42	1%
Graham County	2,886	101	3%
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.

Table 56. Language spoken at home (by persons ages 5 and older), 2015-2019 ACS

Geography	Estimated population (age 5 and older)	Speak only English at home	Speak Spanish at home	Speak languages other than English or Spanish at home
San Carlos Apache Region	**9,449**	**64%**	**1%**	**35%**
All Arizona Reservations	170,803	46%	3%	51%
Gila County	50,611	83%	9%	8%
Graham County	35,231	80%	15%	5%
Arizona	6,616,331	73%	20%	7%
United States	304,930,125	78%	13%	8%

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

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

Table 57. English-language proficiency (for persons ages 5 and older), 2015-2019 ACS

Geography	Estimated population (age 5 and older)	Speak only English at home	Speak another language at home, and speak English very well	Speak another language at home, and do not speak English very well
San Carlos Apache Region	**9,449**	**64%**	**28%**	**8%**
All Arizona Reservations	170,803	46%	41%	13%
Gila County	50,611	83%	13%	4%
Graham County	35,231	80%	15%	6%
Arizona	6,616,331	73%	19%	9%
United States	304,930,125	78%	13%	8%

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

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

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

Geography	Estimated number of households	Number and percent of limited-English-speaking households	
San Carlos Apache Region	**2,393**	**124**	**5%**
All Arizona Reservations	50,231	6,698	13%
Gila County	21,945	455	2%
Graham County	11,017	235	2%
Arizona	2,571,268	102,677	4%
United States	120,756,048	5,308,496	4%

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

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

Table 59. 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
San Carlos Apache schools	<11	<11	12
Graham County	14	11	39
Gila County	42	44	134
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.

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

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

Geography	Estimated number of children (birth to 5) living in households	Living with two married parents	Living with one parent	Living not with parents but with other relatives	Living with non-relatives
San Carlos Apache Region	**1,533**	**23%**	**63%**	**12%**	**2%**
All Arizona Reservations	18,182	28%	62%	8%	2%
Gila County	3,509	39%	53%	6%	2%
Graham County	3,288	49%	39%	10%	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. 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 61. Grandchildren ages birth to 5 living in a grandparent's household, 2015-2019 ACS

Geography	Estimated number of children (birth to 5 years old) living in households	Number and percent living in their grandparent's household	
San Carlos Apache Region	**1,533**	**850**	**55%**
All Arizona Reservations	18,182	8,177	45%
Gila County	3,509	943	27%
Graham County	3,288	862	26%
Arizona	517,483	67,495	13%
United States	23,640,563	2,521,583	11%

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

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

Economic Circumstances

Table 62. 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
San Carlos Apache Region	**10,648**	**46%**	**1,508**	**59%**
All Arizona Reservations	183,717	39%	17,906	51%
Gila County	52,641	22%	3,441	45%
Graham County	33,980	23%	3,222	36%
Arizona	6,891,224	15%	508,453	23%
United States	316,715,051	13%	23,253,254	20%

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

Note: This table includes only persons whose poverty status can be determined. Adults who live in group settings such as dormitories or institutions are not included. Children who live with unrelated persons are not included. In 2019, the poverty threshold for a family of two adults and two children was $25,926; for a single parent with one child, it was $17,622.

Table 63. Children ages birth to 5 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
San Carlos Apache Region	**1,508**	**37%**	**21%**	**19%**	**23%**
All Arizona Reservations	17,906	31%	20%	24%	25%
Gila County	3,441	28%	17%	21%	34%
Graham County	3,222	21%	15%	20%	44%
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 64. Children ages birth to 5 receiving TANF, state fiscal years 2016 to 2020

	Children ages 0-5 receiving TANF, 2018	Children ages 0-5 receiving TANF, 2019	Children ages 0-5 receiving TANF, 2020
San Carlos Apache Region	148	129	113

Source: Nnee Bich'o Nii Program (2021). [Tribal TANF dataset]. Unpublished tribal data received by request.

Table 65. 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	
San Carlos Apache Region	**844**	**996**	**947**	**880**	**800**	**723**	**95%**
Gila County	2,488	1,969	1,926	1,752	1,584	1,458	64%
Graham County	2,448	1,152	1,116	1,020	954	858	39%
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 66. 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	
San Carlos Apache Region	**1,435**	**1,727**	**1,673**	**1,549**	**1,396**	**1,223**	**97%**
Gila County	3,657	3,186	3,135	2,840	2,537	2,282	69%
Graham County	3,830	1,788	1,730	1,563	1,485	1,317	39%
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 67. 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
San Carlos Apache Region	**2,124**	**2,124**	**2,124**	**127**	**106**	**86**
Gila County	4,841	4,841	4,841	340	303	265
Graham County	3,218	3,218	3,218	172	150	127
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 68. Participation rates in the San Carlos Apache WIC Program, 2020

	Women	Infants	Children	Total
San Carlos Apache	97%	100%	97%	98%
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.

Table 69. Children (ages 0-4) enrolled in the San Carlos Apache WIC Program, 2016 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
San Carlos Apache Region	**1,581**	**1,487**	**1,386**	**1,245**
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 70. Yearly participation rates in the San Carlos Apache WIC Program, 2017 to 2020

	Participation rate, 2017	Participation rate, 2018	Participation rate, 2019	Participation rate, 2020
San Carlos Apache Region	**93%**	**95%**	**97%**	**98%**
All ITCA WIC programs	90%	94%	91%	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.

Table 71. Meals served through the National School Lunch Program, 2017-18 to 2019-20

	2017-18	2018-19	2019-20
San Carlos Apache Region schools	491,270	500,804	317,206
San Carlos Middle School	0	78,616	56,445
San Carlos High School	128,333	77,424	43,450
Rice Elementary School	273,267	239,193	130,410
Peridot-Our Savior's Lutheran School	20,455	25,962	20,098
St. Charles School	32,537	25,187	25,918
San Carlos Alternative High School	0	12,339	6,937
Mt. Turnbull Academy	5,831	5,716	5,241
Mt. Turnbull Elementary School	30,847	36,367	28,707
Gila County schools	1,221,442	1,238,552	838,800
Graham County schools	780,294	774,340	542,554
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

Table 72. Meals served through the Summer Food Service Program, 2017-18 to 2019-20

	2017-18	2018-19	2019-20
San Carlos Apache Region Schools	7,249	40	284,797
San Carlos Middle School	0	0	186,606
San Carlos High School	0	40	0
Rice Elementary School	7,249	0	0
Peridot- Our Savior's Lutheran School	0	0	9,232
Globe Unified School District – Indian Hills Park Bus Route	0	0	49,549
Miami Bus 5 San Carlos/Apache Gold Casino – Miami USD	0	0	2,175
San Carlos Recreation and Wildlife Department	0	0	17,872
Tufa Stone Housing Authority	0	0	19,363
Gila County Schools	22,156	19,987	628,007
Graham County Schools	50,605	44,480	310,069
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

Table 73. Monthly unemployment insurance claims, Nov 2019 to Nov 2020

Month	San Carlos Apache 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	30	<10	DS	7,787	2,275	29%
Dec 2019	22	<10	DS	7,906	2,312	29%
Jan 2020	43	13	30%	9,892	2,712	27%
Feb 2020	23	<10	DS	7,185	1,919	27%
Mar 2020	31	<10	DS	110,129	66,655	61%
Apr 2020	60	15	25%	186,217	93,529	50%
May 2020	105	32	30%	98,786	33,481	34%
Jun 2020	95	31	33%	94,720	30,465	32%
July 2020	91	31	34%	78,744	26,081	33%
Aug 2020	63	20	32%	46,360	16,028	35%
Sept 2020	49	<10	DS	39,660	9,464	24%
Oct 2020	57	15	26%	30,032	7,807	26%
Nov 2020	10	<10	DS	15,835	1,812	11%

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

Table 74. 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 married parents, both in the labor force	Living with two married parents, one in the labor force and one not	Living with two married parents, neither in the labor force	Living with one parent, in the labor force	Living with one parent, not in the labor force
San Carlos Apache Region	**1,321**	**15%**	**11%**	**2%**	**50%**	**23%**
All Arizona Reservations	16,370	12%	15%	4%	39%	30%
Gila County	3,224	21%	20%	1%	45%	13%
Graham County	2,886	21%	33%	1%	30%	14%
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. 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 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
San Carlos Apache Region	**2,393**	**28%**	**7%**	**30%**	**35%**
All Arizona Reservations	50,231	31%	5%	22%	42%
Gila County	21,945	56%	10%	18%	16%
Graham County	11,017	61%	7%	20%	12%
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
San Carlos Apache Region	**10,699**	**48%**	**21%**	**30%**
All Arizona Reservations	184,145	42%	23%	35%
Gila County	52,594	68%	18%	13%
Graham County	34,164	80%	12%	8%
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. 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
San Carlos Apache Region	**5,186**	**79%**	**27%**	**0%**
All Arizona Reservations	77,951	68%	68%	2%
Gila County	35,994	86%	62%	1%
Graham County	27,289	87%	77%	0.1%
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 78. Kindergarten to 3rd grade students with chronic absences, 2018-19 to 2019-20

Geography	K-3 students enrolled, 2018-19	K-3 students with chronic absences, 2018-19	Chronic absence rate, 2018-19	K-3 students enrolled, 2019-20	K-3 students with chronic absences, 2019-20	Chronic absence rate, 2019-20
San Carlos Apache Region Schools	603	263	44%	548	187	34%
Rice Elementary School	537	248	46%	481	179	37%
Mt. Turnbull Elementary School	66	15	23%	DS	DS	12%
Off-reservation Schools (All students)	625	176	28%	631	83	13%
Gila County	2,133	267	13%	2,143	152	7%
Graham County	2,280	633	28%	2,270	381	17%
Arizona Schools	326,891	43,773	13%	329,300	25,382	8%

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

Table 79. Migrant students (grades K-12) enrolled in public and charter schools, 2017-18 to 2019-20

Geography	Number of migrant students			Percent of students who were migrant students		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
San Carlos Apache Region Schools	DS	DS	DS	DS	DS	DS
Gila County Schools	DS	DS	DS	DS	DS	DS
Graham County Schools	DS	DS	DS	DS	DS	DS
Arizona Schools	4,023	3,426	4,498	0.4%	0.3%	0.4%

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

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

Table 80. Trends in graduation rates, 2017 to 2019

	Four-year graduation rates			Five-year graduation rates		
	2017	2018	2019	2017	2018	2019
San Carlos Apache Region Schools	65%	64%	76%	68%	74%	77%
San Carlos High School	79%	88%	96%	79%	90%	96%
San Carlos Alternative High School	42%	26%	47%	56%	51%	48%
Mt. Turnbull Academy	59%	81%	69%	59%	82%	69%
Off-reservation Schools (American Indian students)	89%	95%	100%	92%	100%	100%
Gila County Schools	75%	73%	78%	79%	78%	81%
Graham County Schools	85%	87%	89%	87%	89%	91%
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

Early Learning

Table 81. 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	
San Carlos Apache Region	**683**	**256**	**37%**
All Arizona Reservations	6,575	2,836	43%
Gila County	1,253	318	25%
Graham County	1,350	427	32%
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.

Table 82. San Carlos Apache Head Start and Early Head Start enrollment by age, 2018-19

	Cumulative Enrollment
Total	319
Under 1	10
Age 1	25
Age 2	33
Age 3	89
Age 4	162

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

Table 83. San Carlos Apache Head Start enrollment by family type, 2018-19

	Total Families	Two-parent families	Single parent families	Grandparents	Other relatives (not grandparents)	Foster Parents
Total	300	58%	35%	3%	3%	0.7%
Head Start	237	57%	35%	4%	3%	0.4%
Early Head Start	63	62%	33%	0%	3%	2%

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

Table 84. San Carlos Apache Head Start enrollment by category, 2018-19

	Cumulative Enrollment	Income below Federal Poverty Line	Receiving public assistance	Foster child	Over Income
Total	319	63%	12%	2%	24%
Head Start	251	64%	14%	2%	21%
Early Head Start	68	60%	6%	1%	32%

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

Table 85. Staff credentials for San Carlos Apache 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
Head Start Classroom Teachers	12	0	5	4	0
Head Start Assistant Teachers	12	0	0	0	0
Early Head Start Classroom Teachers	16	0	1	0	0

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

Table 86. Early care and education providers served through Quality First, 2020

Geography	Child care providers served	Child care providers with a 3-5 star rating	Percent of child care providers with a 3-5 star rating
San Carlos Apache Region	**8**	**6**	**75%**
Gila County	N/A	N/A	N/A
Graham County	N/A	N/A	N/A
Arizona	1,045	824	79%

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

Table 87. Children served through Quality First, 2020

Geography	Children enrolled at a Quality First provider site	Children enrolled at a Quality First provider site with a 3-5 star rating	% of Children in a Quality-Level Setting (3-5 Stars)
San Carlos Apache Region	**297**	**223**	**75%**
Gila County	N/A	N/A	N/A
Graham County	N/A	N/A	N/A
Arizona	60,927	45,822	75%

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

Table 88. Eligible families not using DES child care subsidies, 2015 to 2020

Geography	2015	2016	2017	2018	2019	2020
San Carlos Apache Region	**13%**	**14%**	**19%**	**27%**	**DS**	**DS**
Gila County	7%	5%	3%	7%	**DS**	**DS**
Graham County	9%	7%	8%	17%	**DS**	21%
Arizona	6%	6%	7%	8%	8%	18%

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

Table 89. Preschoolers with disabilities enrolled in special education in public and charter schools by disability type, 2019-20

Geography	Number of preschoolers enrolled	Developmental Delay	Preschool Severe Delay	Speech or Language Impairment	Other Disabilities
San Carlos Apache Region Schools	DS	50%	25%	25%	<2%
Rice Elementary School	DS	50%	25%	25%	<2%
Off-reservation Schools (All students)	DS	41%	12%	47%	<2%
Gila County	97	57%	15%	28%	<2%
Graham County	95	44%	12%	44%	<2%
Arizona Schools	10,521	43%	20%	34%	3%

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

Table 90. Preschoolers with a disability enrolled at Rice Elementary School by primary disability, 2017-18 to 2019-20

	Developmental Disability	Preschool Severe Delay	Speech Language Impairment	Other Disabilities
2017-18	58%	17%	25%	<2%
2018-19	64%	18%	18%	<2%
2019-20	50%	25%	25%	<2%

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

Table 91. Kindergarten to 3rd grade students with disabilities enrolled in special education in public and charter schools by disability type, 2019-20

Geography	Number of K-3 students enrolled	Autism	Developmental Delay	Specific Learning Disability	Speech or Language Impairment	Other Disabilities
San Carlos Apache Region Schools	100	10%	52%	10%	25%	3%
Rice Elementary School	95	11%	53%	9%	24%	3%
Mt. Turnbull Elementary	DS	<2%	40%	20%	40%	<2%
Off-reservation Schools (All students)	72	6%	40%	14%	36%	5%
Gila County	348	7%	41%	14%	30%	8%
Graham County	289	12%	15%	17%	46%	9%
Arizona Schools	39,071	11%	25%	15%	36%	14%

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

Note: Fewer than 10 students were enrolled in special education at Mt. Turnbull Elementary in any given year, so school level totals cannot be shown for either school when displaying regional totals in order to protect student privacy.

Child Health

Table 92. Number of well-child visits for children birth to 5 at San Carlos Apache Healthcare, Jan 2018- Apr 2021

	Number of visits
Total well-child visits	4,425
Under 1	263
Age 1	766
Age 2	955
Age 3	1,133
Age 4	741
Age 5	567

Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

Table 93. 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)
San Carlos Apache Region	**10,710**	**14%**	**1,533**	**12%**
All Arizona Reservations	185,032	22%	18,201	17%
Gila County	52,797	10%	3,509	8%
Graham County	34,503	7%	3,288	5%
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 94. Children birth to 5 with insurance seen at San Carlos Apache Healthcare, Jan 2018-Apr 2021

	Young Children with known insurance status (ages 0-5)	Children with health insurance: Medicaid	Children with health insurance: Private or other 3rd party insurance	Children with no health insurance besides IHS
San Carlos Apache Healthcare	1,663	1,299	182	182

Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

Table 95. 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)
San Carlos Apache Region	45%	43%	45%	43%	48%
All ITCA WIC programs	44%	46%	47%	48%	49%

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

Table 96. 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
San Carlos Apache Region	**2018**	**199**	**7.0%**	**15.6%**	**10%**
	2019	**195**	**10.3%**	**15.4%**	**6%**
All Arizona Reservations	2018	1,990	7.5%	11.1%	N/A
	2019	2,180	8.3%	11.5%	N/A
Gila County	2018	497	11.3%	13.5%	7%
	2019	473	10.4%	12.5%	6%
Graham County	2018	513	9.2%	10.9%	9%
	2019	493	8.5%	8.7%	6%
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. Data on NICU admissions are not available for all Arizona reservations.

Table 97. Breastfeeding rates for WIC-enrolled infants, 2017 to 2020

Geography	Ever Breastfed (2017)	Ever Breastfed (2018)	Ever Breastfed (2019)	Ever Breastfed (2020)
San Carlos Apache	56%	56%	54%	47%
All ITCA WIC programs	65%	66%	71%	69%

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

Note: 'Ever breastfed' means that an infant was breastfed or received human milk at birth or sometime after, for any duration of time

Table 98. Rates of breastfeeding at 6 months for WIC-enrolled infants

Geography	Breastfed at least 6 months (2017)	Breastfed at least 6 months (2018)	Breastfed at least 6 months (2019)	Breastfed at least 6 months (2020)
San Carlos Apache	11%	13%	11%	10%
All ITCA WIC programs	24%	25%	26%	23%

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

Table 99. Obesity rates for WIC-enrolled children (ages 2-4), 2014 to 2018

Geography	Percent of children ages 2-4 with obesity				
	2016	2017	2018	2019	2020
San Carlos Apache	30%	27%	25%	23%	23%
All ITCA WIC programs	23%	23%	23%	23%	23%

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

Table 100. Weight status of WIC-enrolled children (2-4), 2018

Geography	Children (2-4) For Whom Weight Determined	Underweight	Obese
San Carlos Apache	662	0.5%	23%
All ITCA WIC programs	4,176	2%	23%

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

Table 101. Dental caries in children birth to 5 at San Carlos Apache Healthcare, Jan 2018 – Apr 2021

	Patients seen
Total young patients with dental caries	1,586
Under 1	10
Age 1	160
Age 2	278
Age 3	406
Age 4	400
Age 5	332

Source: San Carlos Apache Healthcare Corporation (2021). [Health services data]. Unpublished tribal data.

Table 102. Child care immunization exemption rates, 2015-16 to 2019-20

	Children in child care with religious exemptions					Children in child care exempt from all immunizations				
Geography	2015-16	2016-17	2017-18	2018-19	2019-20	2015-16	2016-17	2017-18	2018-19	2019-20
San Carlos Apache Region	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
All Arizona reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	0.5%	0.8%	0.2%	0.2%	0.3%	3.4%	2.1%	3.5%	5.6%	3.1%
Graham County	0.0%	0.0%	0.3%	0.0%	0.0%	1.6%	2.3%	1.4%	2.0%	0.8%
Arizona	0.5%	0.5%	0.7%	0.3%	0.6%	2.1%	2.4%	2.9%	3.0%	3.1%

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

Note: Regional data in this table reflect the Rice Elementary Preschool program only.

Table 103. Kindergarten immunization exemption rates, 2015-16 to 2019-20

Geography	Kindergarteners with personal belief exemptions					Kindergarteners exempt from all vaccines				
	2015-16	2016-17	2017-18	2018-19	2019-20	2015-16	2016-17	2017-18	2018-19	2019-20
San Carlos Apache Region	**0.0%**	**0.0%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
All Arizona reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	4.4%	3.2%	4.7%	5.9%	4.1%	2.1%	1.2%	2.2%	3.6%	3.0%
Graham County	4.2%	3.1%	2.7%	5.8%	4.1%	1.7%	1.7%	1.1%	5.4%	2.6%
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

Note: Kindergarten immunization data reflect students enrolled at Rice Elementary School, Mt. Turnbull Elementary School, and Peridot-Our Savior's Lutheran School.

Table 104. WIC-enrolled children exposed to smoking in the household, 2014 to 2018

Geography	2014	2015	2016	2017	2018
San Carlos Apache Region	**11%**	**8%**	**4%**	**2%**	**3%**
All ITCA WIC programs	5%	4%	3%	4%	3%

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

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 San Carlos Apache tribal departments and agencies with approval from the San Carlos Apache Tribal Council by Resolution Number SP-19-146, 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[299] 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 San Carlos Apache Region presented in this report are drawn from the Census Geography for the San Carlos 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).[300]

The American Community Survey (ACS)[301] 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 San Carlos Apache Region were also drawn from the Census Geography for the San Carlos 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.

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 two known numbers plus 1 on the lower bound to the sum of the two 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.

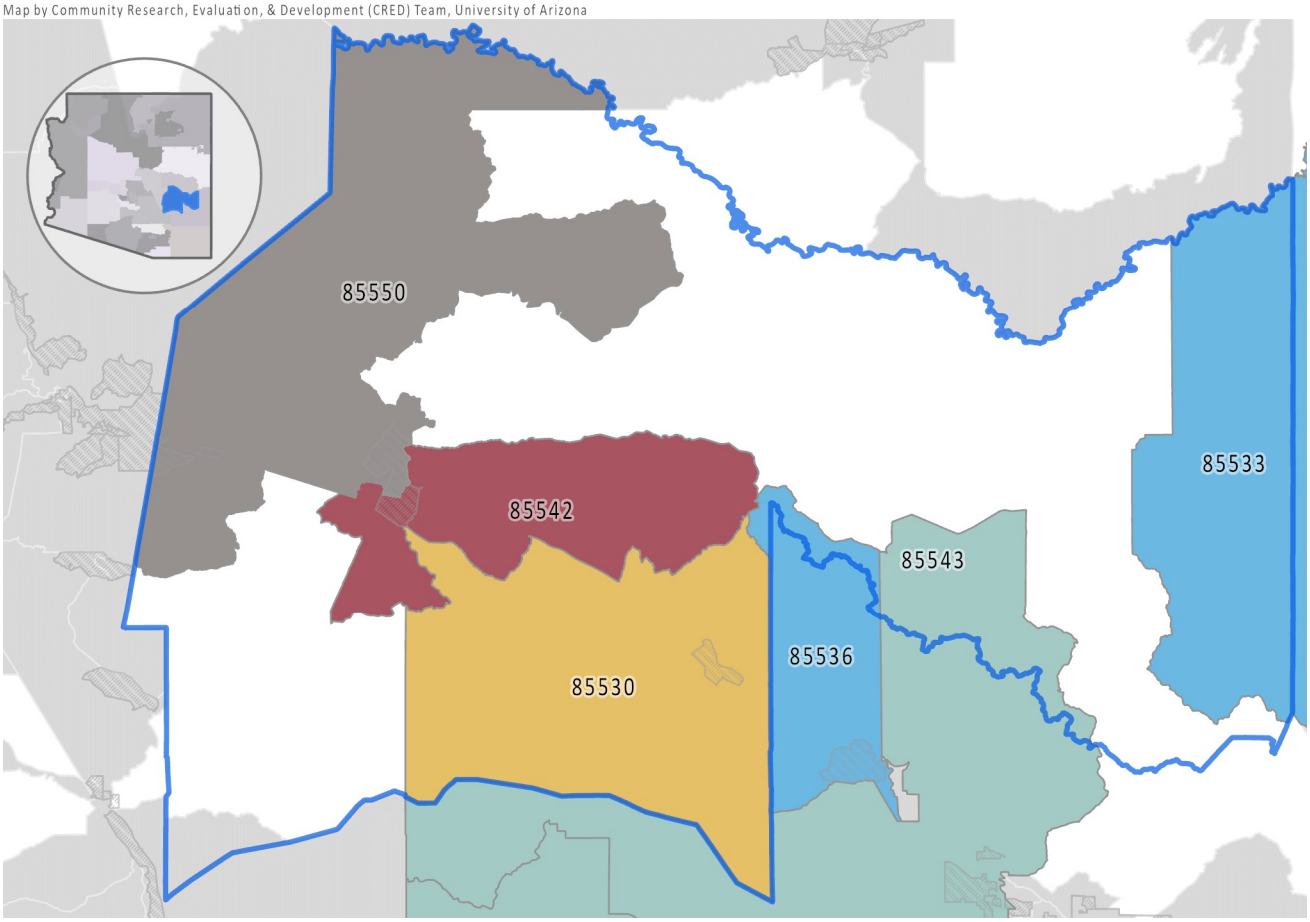
The Report Process.

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 and representatives from the regional partnership council. 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 SAN CARLOS APACHE REGION

Figure 60. Zip Code Tabulation Areas (ZCTAs) in the San Carlos Apache 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)

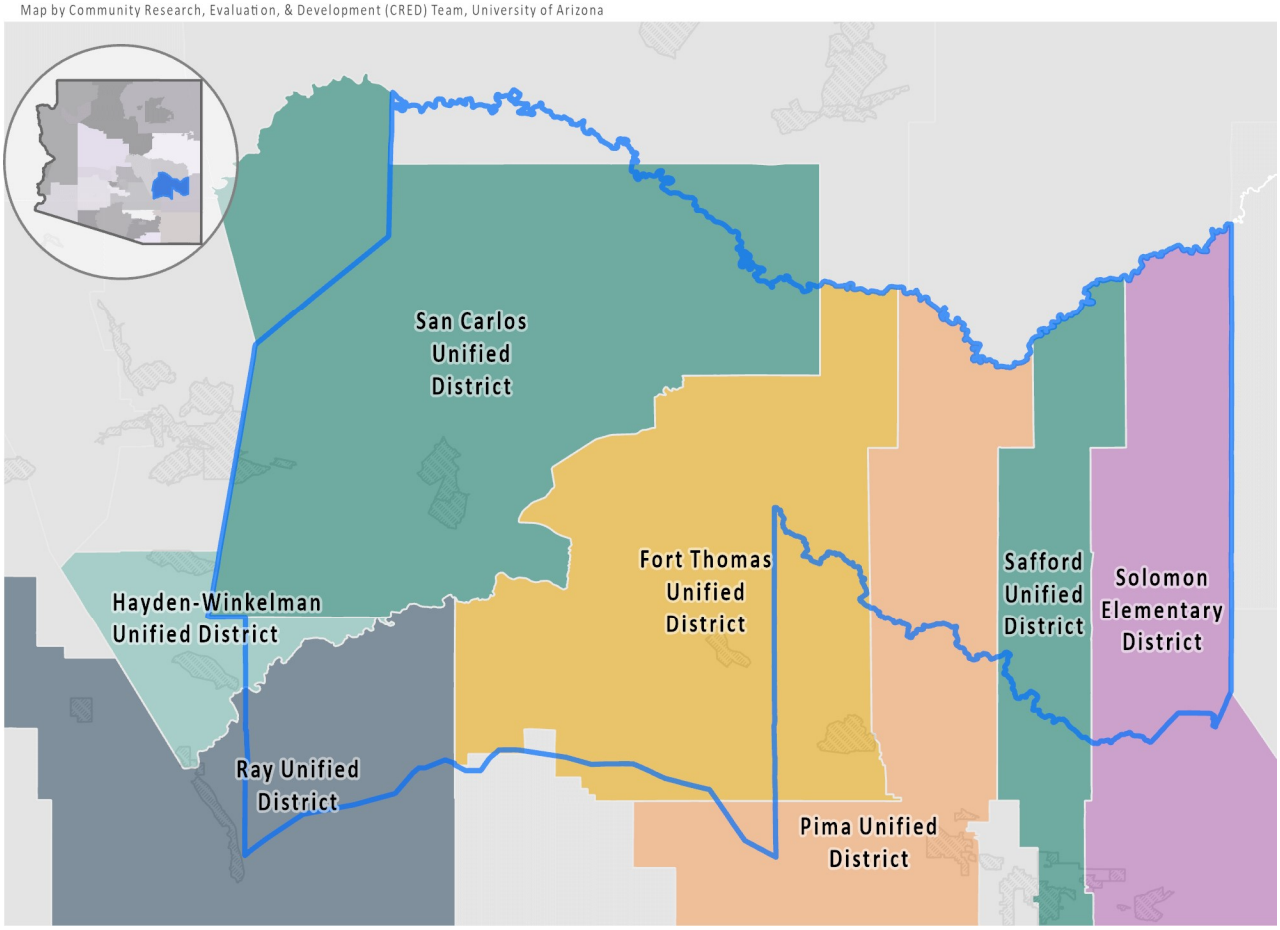
Table 105. Zip Code Tabulation Areas (ZCTAs) in the San Carlos Apache Region

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 region	This ZCTA is shared with
San Carlos Apache Region	**10,068**	**1,435**	**2,320**	**844**	**N/A**	
85530	2,069	274	476	175	100%	
85533	9	3	3	1	0%	Graham/Greenlee
85542	3,196	497	721	273	100%	
85543	1	0	1	0	0%	Graham/Greenlee
85550	4,790	661	1,118	395	100%	
Areas with no ZCTA assigned	3	0	1	0	N/A	

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

APPENDIX 4: SCHOOL DISTRICTS OF THE SAN CARLOS APACHE REGION

Figure 61. School Districts in the San Carlos Apache 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: Hayden-Winkelman, Ray, Pima and Safford Unified and Solomon Elementary Districts all overlap the region but have no schools located within the region.

Table 106. ADE School Districts and Local Education Authorities (LEAs) in the San Carlos Apache Region

Name of district or Local Education Agency (LEA)	Number of schools	Number of students in kindergarten through third grade
San Carlos Apache Region	**7**	**548**
San Carlos Unified District	4	481
Rice Elementary School	1	481
San Carlos Middle School	1	N/A
San Carlos High School	1	N/A
San Carlos Alternative High School	1	N/A
Fort Thomas Unified District	2	67
Mt. Turnbull Elementary School	1	67
Mt. Turnbull Academy	1	N/A
Globe Unified District (Off-reservation district)	3	455
Destiny School Inc. (Off-reservation charter school)	1	176

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

Note: Globe Unified District and Destiny School were identified at the beginning of the 2022 report cycle as schools serving a number of San Carlos Apache students, so data for American Indian students attending these schools were requested and presented in this report. Private schools in the region that do not report data beyond school meal service into the ADE data system include Peridot-Our Savior's Lutheran School and St. Charles Apache Mission School.

APPENDIX 5: DATA SOURCES

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