

FIRST THINGS FIRST

Navajo/Apache Region



2020 NEEDS AND ASSETS REPORT

Navajo/Apache Regional Partnership Council

2020

Needs and Assets Report

Prepared by

Community Research, Evaluation & Development (CRED)
John & Doris Norton School of Family and Consumer Sciences
College of Agricultural and Life Sciences
The University of Arizona

Funded by

First Things First Navajo/Apache Regional Partnership Council

John & Doris Norton School of Family and Consumer Sciences
College of Agricultural and Life Sciences

The University of Arizona

PO Box 210078

Tucson, AZ 85721-0462

Phone: (520) 621-8739

Fax: (520) 621-4979

<http://ag.arizona.edu/fcs/>

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 arrive at 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 of our communities and our state.

This Needs and Assets Report for the FTF Navajo/Apache Region helps community leaders and decision-makers understand the needs of young children in the region, the resources available to meet those needs and gaps that may exist in those resources. Data collection and analysis for the 2020 report were completed prior to the COVID-19 pandemic and, therefore, do not reflect the impact of COVID-19 on families with young children and the services that support them. The report is organized by topic areas pertinent to young children in the region, such as the population characteristics or educational indicators. Within each topic area are sections that set the context for why the data found in the topic areas are important (Why it Matters), followed by a section that includes available data on the topic (What the Data Tell Us).

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

Acknowledgements

The Navajo/Apache Regional Council wants to thank the Arizona Department of Economic Security, the Arizona Department of Health Services, the Arizona Department of Education and the U.S. Census Bureau, for their contributions of data for this report and their ongoing support and partnership with FTF on behalf of young children.

To the current and past members of the Navajo/Apache Regional Council, your vision, dedication and passion have been instrumental in improving outcomes for young children and families within the region. Our future efforts will build upon those successes with the ultimate goal of building a comprehensive early childhood system for the betterment of young children within the region and the entire state.

LETTER FROM THE CHAIR

May 8, 2020

Message from the Chair:

Since the inception of First Things First, the Navajo/Apache Regional Partnership Council has taken great pride in supporting evidence-based and evidence informed early childhood programs that are improving outcomes for young children. Through both funded and unfunded approaches, the early childhood programs and services supported by the regional council have strengthened families, improved the quality of early learning, and enhanced the health and well-being of children birth to 5 years old in our community.

This impact would not have been possible without data to guide our discussions and decisions. One of the primary sources of that data is our regional Needs and Assets report, which provides us with information about the status of families and young children in our community, identifies the needs of young children, and details the supports available to meet those needs. Along with feedback from families and early childhood stakeholders, the report helps us to prioritize the needs of young children in our area and determine how to leverage First Things First resources to improve outcomes for young children in our communities.

The Navajo/Apache Regional Council would like to thank our Needs and Assets vendor, University of Arizona, for their knowledge, expertise and analysis of the Navajo/Apache region. Their partnership has been crucial to our development of this report and to our understanding of the extensive information contained within these pages.

As we move forward, the First Things First Navajo/Apache Regional Partnership Council remains committed to helping more children in our community arrive at kindergarten prepared to be successful by funding high-quality early childhood services, collaborating with system partners to maximize resources, and continuing to build awareness across all sectors of the importance of the early years to the success of our children, our communities and our state.

Thanks to our dedicated staff, volunteers and community partners, First Things First has made significant progress toward our vision that all children in Arizona arrive at kindergarten healthy and ready to succeed.

Thank you for your continued support.

Sincerely,

Byron Lewis, Chair



NAVAJO/APACHE REGIONAL PARTNERSHIP COUNCIL

4000 North Central Avenue, Suite 800
Phoenix, Arizona 85012
Phone: 602.771.5046
Fax: 602.274.7040

Byron Lewis, Chair

Carrie Classay, Vice Chair

Claude Endfield

Rachel Armstrong

Kim Avery

Doug Harris

Jeff Oakes

Jill Hoover

Becky Benda-Dodd

Report Prepared by:

Community Research, Evaluation & Development (CRED)
John & Doris Norton School of Family and Consumer Sciences
College of Agricultural and Life Sciences
The University of Arizona



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Executive Summary

Regional Description

The First Things First Navajo/Apache Region encompasses the central areas of Navajo and Apache counties, excluding the lands belonging to the Navajo Nation and the Hopi Tribe in the north and the land belonging to the White Mountain Apache Tribe in the south. The region also includes the Forest Lakes community in Coconino County, east of Heber-Overgaard. The region does not include the city of Winslow, which is in Navajo County but is assigned to the Coconino Region.

Population Characteristics

According to the U.S. Census, the Navajo/Apache Region had a population of 73,083 in 2010, of whom 6,166 (8%) were children ages birth to 5. Fifteen percent of households in the region included a young child, a lower proportion of households than in Navajo (20%) or Apache (21%) counties and the state (16%). Population projections for Navajo County and Apache County show that the population of young children (ages 0-5) is projected to be about 14,559 by 2020, a decrease from 2010 (17,721). Projections continue to show a decrease in the count of young children over time after 2020, with a projected low of 10,423 in 2050.

Just over one in 10 (12%) adults and almost one in four (23%) young children (ages 0-4) in the Navajo/Apache Region are Hispanic. These proportions are higher than in Navajo County (10% and 15% respectively) and Apache County (5% and 8% respectively). The Navajo/Apache Region also has a lower percentage of American Indian young children (8%) than Navajo County (52%) and Apache County (77%) but a similar proportion to the state (6%). The proportions of adults and young children (1% for each) who are Black or African American in the region are similar to the counties but lower than the state (4% and 5% respectively) and the United States overall (12% and 14%, respectively). The percentages of Asian or Pacific Islander adults and young children (1% for each) in the Navajo/Apache Region similarly mirror the counties but are slightly lower than state and national proportions. In 2017, a larger proportion of births were to mothers who were Hispanic or Latina in the region (18%) than in either Navajo (10%) or Apache (4%) counties, although this proportion was much lower than across the state (41%). In contrast, the proportion of births to mothers who were American Indian was lower in the region (17%) than in either county (57% Navajo; 80% Apache), but higher than in the state overall (6%).

Only eight percent of children in the Navajo/Apache Region live with one or two foreign-born parents, a proportion higher than in Navajo (4%) or Apache (5%) counties, but much lower than across the state (26%). More of the population of the Navajo/Apache Region speak only English at home (86%) than in Navajo County (63%), Apache County (45%) or across the state (73%). In addition, a smaller proportion of individuals speak a language other than English or Spanish at

home in the Navajo/Apache Region (5%) than in Navajo County (31%) or Apache County (51%), although this proportion is only slightly lower than the state overall (6%). There are also fewer limited-English-speaking households in the region (2%) than in Navajo (6%) or Apache (14%) County, or the state (4%).

A majority of children living in the Navajo/Apache Region live in two-parent households; 59 percent of young children in the region live with two parents or stepparents, compared to 44 percent in Navajo County, 34 percent in Apache County and 59 percent in Arizona. The proportion of young children living in a single-female household in the region (20%) is lower than both counties (32% and 35%, respectively) and the state overall (24%). The percentage of young children living in a grandparent's household in the region (13%) is similar to the state (14%) but lower than in Navajo (27%) or Apache (32%) counties, although the percentage of children living with a grandparent who is responsible for them is comparable between the region, counties and state.

Economic Circumstances

Nearly one of every five (18%) residents in the Navajo/Apache Region lives in poverty, similar to the state (17%) but lower than in Navajo (29%) and Apache (36%) counties. When it comes to young children, one in three (30%) lives in poverty in the region, higher than that of the total (all-age) population living in poverty (18%), but much lower than young children in Navajo (43%) and Apache (49%) counties. Twenty-six percent of young children across the state live in poverty. Across household types, median annual family income is lower in Navajo County and Apache County than in Arizona and the United States. Median income for married-couple families with children in Navajo County (\$63,813) is more than four times the median income for single female headed families (\$14,475). This gap is not as wide in Apache County, with median income for married-couple families with children (\$52,950) more than double the median income for single female headed families (\$21,601).

Eligibility for some public assistance programs is determined by different poverty thresholds. For example, family income at or below 141 percent of the federal poverty threshold is one criterion for eligibility for Arizona Health Care Cost Containment System (AHCCCS)ⁱ for children ages 1 to 5, and at or below 147 percent of the federal poverty threshold for children under 1 year old. In the Navajo/Apache Region, the percentage of families with young children who may qualify for AHCCCS (those under 130% of FPL and between 130% and 149% of FPL) is higher than the state overall (45% and 38%, respectively), but lower than in Navajo (57%) and Apache (62%) counties. Between 2015 and 2018, the number of families and young children receiving Temporary Assistance for Needy Families (TANF) declined in the region. In 2018, the percentages of families and young children participating in TANF were low for the region (2%

ⁱ Arizona Health Care Cost Containment System (AHCCCS) is the name of Arizona's Medicaid program, which offers health care programs to Arizona residents.

and 1% respectively), Navajo County (2% for each), and the state (3% for each). While participation in the Supplemental Nutrition Assistance Program (SNAP) by families and young children also declined between 2015 and 2018, participation in SNAP was still relatively high in the region for families (44%) and young children (45%), proportions comparable to the state, but much lower than in Navajo (63% and 64% respectively) and Apache counties (72% and 71% respectively). Since the 2015-2016 school year, the percentage of students eligible for free or reduced-price lunch in the Navajo/Apache Region has declined slightly, from 56 percent in 2015-2016 to 53 percent in 2018-2019. Conversely, the percentage of students eligible for free or reduced-price lunch in Navajo and Apache counties increased over the same time period.

Rates of adult employment in the Navajo/Apache Region (44%), and Navajo (41%) and Apache (34%) counties are lower than across the state (55%) and the US as a whole (59%). Between 2015 and 2017, adult unemployment rates decreased in Navajo County and Apache County, then leveled off in 2018 to 10.1 percent in Navajo County and 7.8 percent in Apache County. Across all years, unemployment rates in both counties were higher than across the state, with a 4.8 percent unemployment rate statewide in 2018. More than half of households with young children in the region (53%) have all present parents in the labor force. Eight percent of children in the region live with one parent who is not in the labor force.

One-quarter of households in the region spend 30 percent or more of their income on housing, a proportion higher than Navajo (23%) and Apache (15%) counties, but lower than state (31%) and national levels (32%).

Sixty percent of households in the region have both a smartphone and computer, lower than state (67%) and national (66%) numbers but higher than in Navajo (49%) and Apache (33%) counties. The majority (81%) of Navajo/Apache Region residents live in households with a computer and internet, similar to state (82%) and national (83%) proportions but higher than in Navajo (60%) and Apache (40%) counties. For children specifically, household access to a computer and internet in the region is even higher (84%). Of people living in households with a computer and internet in the region, 16 percent rely solely on a cellular data plan.

Educational Indicators

In the 2018-2019 school year, 217 children were enrolled in preschool in the Navajo/Apache Region. Kindergarten through third grade enrollments for the region were all relatively similar, ranging from 887 to 951 children enrolled in each grade. Kindergarten through 3rd grade chronic absence ratesⁱⁱ increased overall from 2015-16 to 2018-19 at the regional, county, and state level. During the 2018-2019 school year, the Navajo/Apache Region had a 14 percent chronic absence rate, with 614 kindergarten through 3rd grade students in the region chronically absent. By grade level, chronic absences ranged from seven percent to 19 percent in the Navajo/Apache Region. In the region and Navajo County, chronic absences were highest

ⁱⁱ Chronic absenteeism is defined as missing more than 10 percent of the school days within a school year.

among 1st grade students (19% and 22%, respectively), while Apache County and state-level chronic absences were highest among kindergarteners (28% and 13% respectively).

Fewer than half of 3rd grade students are meeting proficiency expectations for 3rd grade literacy. Slightly more than half are meeting proficiency expectations for math. Arizona's Measurement of Education Readiness to Inform Teaching (AzMERIT) 3rd grade English Language Arts passing rates for the Navajo/Apache Region (44%) mirrored statewide passing rates in 2017-2018 but were higher than in Navajo (33%) and Apache (30%) counties. AzMERIT 3rd grade English Language Arts passing rates have increased over time at the region, county, and state levels, with an increase from 38 percent passing in the region in 2015-2016 to 44 percent in 2017-2018. AzMERIT 3rd grade Math passing rates for the Navajo/Apache Region (53%) also mirrored statewide passing rates in 2017-2018 and were higher than county passing rates (42% Navajo County; 40% Apache County). AzMERIT 3rd grade Math passing rates have improved over time at the region, county, and state level, with regional passing rates increasing from 43 percent in 2015-2016 to 53 percent in 2017-2018.

Since 2015, both the four-year and five-year graduation rates have declined overall in the Navajo/Apache Region. In 2017, the four-year graduation rate for the region was 81 percent and the five-year graduation rate was 83 percent. The 7th-12th grade dropout rate for the Navajo/Apache Region remained constant at four percent from 2015-2016 to 2017-2018.

Though comparable to Arizona (62%) and the United States overall (60%), a larger proportion of adults in the Navajo/Apache Region have more than a high-school education (62%) than in Navajo County (53%) and Apache County (46%). This difference is also seen specifically in mothers giving birth, with a larger proportion of births in the Navajo/Apache Region to mothers with more than a high-school education (54%) than in Navajo County (45%) and Apache County (52%), although it is a slightly lower proportion than across the state (56%).

Early Learning

In the Navajo/Apache Region, 45 percent of children (ages 3 and 4) are enrolled in nursery school, preschool, or kindergarten. While this is a slightly larger proportion than in Navajo and Apache counties (43% for each) and across the state (38%), it is lower than across the country as a whole (48%). In the Navajo/Apache Region, nearly all (96%) licensed child care capacity is provided by child care centers, with the remainder provided by family child care providers (4%). The Navajo/Apache Region has a higher percentage of providers who are accredited (25%) than Navajo County (17%) or the state (10%), as well as a higher percentage of potential child care slots (provider capacity) with accredited providers (21%) than Navajo County (17%) and the state (12%).

Median monthly child care costs for approved family homes are similar across the region, county, and state. Median monthly costs for certified group homes are slightly lower in the Navajo/Apache Region compared to the state, whereas median monthly costs for licensed

centers in the region are at least \$160 less than the state. Overall in the region, licensed centers are the most expensive care setting for infants and 1 to 2 year olds, certified group homes are the most expensive care setting for 3 to 5 year olds, and approved family homes the least expensive care setting for all ages. Child care costs are relatively more expensive in Navajo County and Apache County than across the state overall. At median levels, sending an infant to a licensed center requires around one-fifth (18% in Navajo County; 21% in Apache County) of a family's income. Given that almost one in five Navajo/Apache residents lives in poverty and one-quarter of households in the Navajo/Apache Region are spending 30 percent or more of their income on housing, this is a notable proportion of income needed to cover child care for families that may already have difficulty meeting their basic needs.

The large majority of children who are eligible for Department of Economic Security (DES) child care subsidies in the Navajo/Apache Region have received them in recent years, although the proportion has decreased from 94 percent in 2015 to 89 percent in 2018. This proportion is slightly lower than the state overall, where 92 percent of eligible children received child care subsidies in 2018. For Arizona Department of Child Safety (DCS)-involved children specifically, the proportion of eligible children receiving DES subsidies in the region is lower than for all eligible children and has also declined overall, from 82 percent in 2015 to 80 percent in 2018. This decline in DCS-involved children receiving subsidies was also seen at a state level, with 82 percent of DCS-involved children receiving subsidies in Arizona in 2018 compared to 91 percent in 2015. The proportion of eligible families not using DES child care subsidies has increased over time at the region, county, and state level. In 2018, eight percent of eligible families in the Navajo/Apache Region did not use their child care subsidies.

From 2017 to 2018, the number of children in quality environments decreased in the Navajo/Apache Region and Navajo County, while increasing across the state. However, the number of DCS children in quality environmentsⁱⁱⁱ increased at the regional, Navajo County, and state levels (Apache County had too few children in quality environments to report change). In 2019, a total of four child care providers in the Navajo/Apache Region participated in Quality First, all of which were quality-level settings (public 3-5 stars). A total of 103 children were enrolled at a Quality First provider site and forty-nine children received Quality First scholarships.

The number of young children (ages 3-5) enrolled in special education increased slightly from 2015-2016 (173) to 2018-2019 (182) in the Navajo/Apache Region. In school year 2018-2019, nearly half (46%) of the 182 children (3-5) enrolled in special education in the region were diagnosed with a speech or language impairment and 41 percent with a developmental delay. Fifteen percent of students (grades 1-3) are enrolled in special education in the region, a rate

ⁱⁱⁱ Providers are considered quality educational environments by the Arizona Department of Economic Security if they receive a Quality First three-star rating or higher or are accredited by a national organization, such as the Association for Early Learning Leaders or the National Association for the Education of Young Children (NAEYC).

slightly higher than the state (12%) and both counties (14% Navajo County; 11% Apache County). Special education enrollment for this age group has continued to increase in the region since 2015-2016 (11%), with 15 percent of children in first through third grades enrolled in special education in 2018-2019.

From 2016 to 2017, the percentage of children (ages 0-2) who were referred to the Arizona Early Intervention Program (AzEIP) and found eligible decreased from 60 percent to 54 percent in the Navajo/Apache Region. Only 34 percent of referrals were found eligible in Apache County in 2017, down from 42 percent in 2016. From 2017 to 2018, the number of active AzEIP cases in the Navajo/Apache Region increased by seven percent, with a much greater increase in Apache County (19%). The number of children receiving services from the Division of Developmental Disabilities (DDD) has increased over time at the region, county, and state levels since 2015. In the Navajo/Apache Region, children ages 0-2 receiving DDD services have increased by 24 percent, with an increase of 181 percent in Navajo County over the same time period.

Child Health

In the Navajo/Apache Region, 13 percent of people don't have health insurance coverage, a number similar to the state of Arizona overall (12%), but lower than in Navajo County (15%) or Apache County (23%). For young children specifically, health insurance coverage is slightly better than the overall population in the region and similar to the state, with eight percent of young children uninsured in the Navajo/Apache Region and seven percent of young children uninsured across the state. Navajo County has the same proportion of young children uninsured as the region, while Apache County has an elevated proportion (18% of young children uninsured). More than half of births (57%) in the Navajo/Apache Region were covered by the Arizona Health Care Cost Containment System (AHCCCS)^{iv} in 2017, a percentage slightly higher than the state (53%), but lower than in Navajo (72%) and Apache (75%) counties. The proportion of self-paid births were comparable across the region, county, and state in 2017, with a lower proportion of births covered by the Indian Health Service (IHS) in the region and state (1% for each) than in Navajo County (3%) or Apache County (7%).

The Navajo/Apache Region had rates of prenatal care similar to Arizona as a whole, with one percent of births to mothers who had no prenatal care at all, 26.9 percent with no prenatal care in the first trimester, and six percent with fewer than five visits if they did have prenatal care, compared to state averages (3%, 26.4%, and 8% respectively). Neither the region nor the state met the Healthy People 2020 target of at least 77.9 percent of births to mothers who received prenatal care in the first trimester. The proportion of babies born at low birth weight is slightly higher in the Navajo/Apache Region (8.7%) than in Apache County (7.7%) and the state (7.5%) and slightly lower than in Navajo County (9.7%). The region did not meet the Healthy People 2020 target of no more than 7.8 percent. For rates of preterm birth, the Navajo/Apache Region

^{iv} Arizona Health Care Cost Containment System (AHCCCS) is Arizona's Medicaid program.

(7.9%), along with the state (9.3%), met the Healthy People 2020 target of no more than 9.4 percent of births before 37 weeks gestation. Both counties exceeded this target (10.4% Navajo County; 9.9% Apache County). The Navajo/Apache Region did not meet the Healthy People 2020 target for maternal use of tobacco during pregnancy (1.4%), with 11.9 percent of births to mothers using tobacco while pregnant. This proportion was higher than across Navajo County (8%), Apache County (3.3%) and the state (4.7%). In 2017, Navajo County had an infant mortality rate (10 per 1,000 live births) that exceeded the Healthy People 2020 target (6.0 per 1,000 live births) and was higher than Apache County (6.3 per 1,000 live births) and state rates (5.6 per 1,000 live births).

In 2016 and 2017, the rate of neonatal abstinence syndrome (i.e., opioid-addicted babies) in Navajo County (4.3 per 1,000 live births) was lower than the state rate (7.4 per 1,000 live births). Between June 2017 and June 2018, there were 123 suspected opioid overdoses among people of all ages in Navajo County and less than 10 in Apache County. In 2017, there were less than 10 deaths directly attributed to opioids in both Navajo County and Apache County.

In Navajo County and Apache County, rates of breastfeeding for infants in Arizona's Special Supplemental Nutrition Program for Women, Infants and Children (WIC) are higher than across the state. While 83 percent of WIC infants in Navajo and Apache counties were breastfed at some point in infancy, rates of breastfeeding decline with the baby's age. Although the American Academy of Pediatrics recommends exclusive breastfeeding until six months of age, at six months of age, only 32 percent of infants in Navajo County and 40 percent in Apache County were breastfed and only eight percent had been exclusively breastfed at six months in both Navajo County and Apache counties. At three months old, roughly one-third of WIC infants were exclusively breastfed in Navajo County (31%) and Apache County (37%). All of these proportions were higher than the state overall, however.

Across all required immunizations, with the exception of Hepatitis A, children in child care in the Navajo/Apache Region had similar vaccination rates to the state as a whole and met the Healthy People 2020 targets during the 2018-2019 school year. However, the region fell below county and statewide immunization rates for kindergarten immunizations during this time and did not meet Healthy People 2020 targets.

In terms of immunization exemptions among children in child care, between 2016-2017 and 2017-2018, the region had higher rates of children receiving religious exemptions than across the state, but then had a lower proportion of religious exemptions (4.2%) than the state (4.5%) in 2018-2019. Across all years, the region had higher rates of exemptions from all required vaccines, with four percent of children in child care receiving exemptions from all required vaccines in the Navajo/Apache Region compared to three percent of children statewide in the 2018-2019 school year. The Navajo/Apache Region had higher rates of children in kindergarten receiving personal belief exemptions and exemptions from all required vaccinations than statewide between the 2016-2017 and 2018-2019 school years. During the 2018-2019 school

year, 14.1 percent of children in kindergarten received a personal belief exemption in the region compared to 5.9 percent of children statewide, and 10.2 percent of children in kindergarten received exemptions from all required vaccines in the Navajo/Apache Region compared to 3.8 percent statewide.

Reasons for non-fatal inpatient hospitalizations of young children in the Navajo/Apache Region aligned with the state, with falls (27% region; 33% state) and poisoning (22% region; 15% state) the most common. However, in Navajo and Apache counties, the most common reason for non-fatal hospitalizations of young children were burns (24% and 41%, respectively). Reasons for non-fatal emergency room visits were similar between the region, counties, and state, with falls (43% for the region) the most common. The second most common differed, with “other” the second most common reason for the region and Navajo County, whereas being ‘struck by or against’ an object or person was the second most common reason for non-fatal emergency room visits in Apache County and across the state. Between 2015 and 2017, there were 38 emergency room visits and 11 inpatient hospitalizations for asthma for young children in the Navajo/Apache Region. The average length of stay for asthma hospitalization (1.7 days) was lower for the region than the state (1.9 days).

Between 2015 and 2017, there were 38 deaths of children in the Navajo/Apache Region, 71 percent of which were in young children (27 deaths). The proportion of child deaths that involved young children was the same in the Navajo/Apache Region and the state (71%), but higher than in Navajo County (68%) and Apache County (58%).

Family Support and Literacy

Between January 2018 and June 2018, there were 35 substantiated maltreatment reports in Navajo County and eight in Apache County. Of those substantiated reports, the majority were related to neglect (83% Navajo County; 75% Apache County), with a smaller proportion related to physical abuse (17% Navajo County; 25% Apache County). During the same time period, five percent of Department of Child Safety (DCS) reports resulted in a child removal in Navajo County and 16 percent in Apache County, with 27 children removed in Navajo County and 18 in Apache County. While the percentage of children removed overall was the same for Apache County and the state (16%), there was a higher percentage of children with a prior removal in the last 24 months in Apache County (22%) than the state (9%). Navajo County had no children with a prior removal in the last 24 months. While the number of foster placements declined from 2015 to 2018, the statewide number of licensed foster homes steadily increased during this time.

Systems Coordination among Early Childhood Programs and Services

Adverse Childhood Experiences (ACEs) have become the primary focus of a variety of sectors of the local community. The Navajo County Community Health Assessment and the Community Health Improvement Plan will begin to include specific data related to the birth to 5 population

of children, their families and data points related to social determinants of health. Summit Healthcare Regional Medical Center has become the regional home for this work and they are approaching the scope of the data collection and resulting planning to be inclusive of all of Navajo and Apache counties. There have been intentional community-level conversations about using First Things First (FTF) data and the imperative need to include early childhood data in all community level strategic planning.

The Anna, Age Eight Institute for the Data-driven Prevention of Childhood Trauma in New Mexico, is the framework that is being utilized to structure our community's work to move toward trauma-free communities. Dominic Cappello engaged in the recording of a podcast on Adverse Childhood Experiences (ACEs) and conducted a community-level work session and training that launched our regions' ACEs movement. This work was then coined as the 10@100% Movement, which refers to the framework developed by The Anna, Age Eight Institute of 10 community sectors that must be adequate and accessible to all members of a community to move toward a trauma-free community. Well over 140 people attended this work session and training and remain engaged in this work. The outcome of this work session was the incorporation of the Anna Age Eight system framework into the ongoing community health data collection and planning work, resulting in the creation of sub-committee work groups formed to address community level ACEs. All of the regional and state-wide funded FTF grantees are engaged in this conversation. While the momentum of the inclusion of ACEs into multiple sectors of the community conversation has been strong, it has become necessary to reschedule the summer/fall 2019 High Quality Early Childhood Partners and the Birth to 5 Community Partners meetings to allow members to be engaged in the ACEs work. Partners are beginning to request that the next meetings be scheduled, so planning has begun for meetings to be held in spring 2020.

The loss of a well-respected, and deeply loved, member from the regional council and from the early childhood community has been difficult. Her HealthySteps team took on her case load of children amongst themselves so that children and families would not go unserved. The redistribution of staff to cover pediatric clinics sharply reduced their availability to attend community meetings. The lead coordinator of the Navajo-Apache-Gila (NAG) Oral Health Coalition had been progressively declining in health, and passed away in the fall of 2019, leading to the need to identify new leadership for the NAG Oral Health Coalition. The transition away from the founding coordinator has been a long time in coming, but very difficult. The coalition has struggled to remain relevant and membership has declined over time. Therefore, a result of the Children's Health System Change consultative work over the course of SFY19 was the recommendation to include children's oral health in an existing robust collaborative group. An offer was extended to the Oral Health Coalition to embed it into the Birth to 5 Community Partners Group, as an early childhood health focused group.

Communication, Public Information and Awareness

First Things First regularly measures progress toward building support for children birth to age 5 through statewide surveys targeting both the general population and parents of young children. The most recent statewide survey conducted in September 2018 found that, compared to previous surveys in 2012 and 2016, there was increased agreement in the general public and parents of young children with statements about the importance of early childhood health and development. These include: the state should ensure all children have access to early childhood services, a child who received early education and healthcare services before age 5 is more likely to succeed in school and beyond, and the state should put the same priority on early education as it does on K-12 education. While the survey also showed that awareness of First Things First has increased over time, there are still large portions of the general public (87%) and parents of young children (66%) who have never heard of First Things First.

In SFY 2019, First Things First secured 11 million advertising impressions through traditional media strategies, including television, radio, cinema, and billboard ads, and 76 million digital advertising impressions through digital media strategies, including online ads on desktop and smartphone devices. Particular success has been seen in the growth of Facebook Page Likes for FTF, which grew from just 3,000 in 2012 to 142,600 in 2019. Additional digital marketing content in 2019 included 40 original, high-quality digital marketing pieces and the creation of an online searchable database of early childhood programs, which logged over 24,187 visits in its first six months. Specifically in the Navajo/Apache Region, digital advertising led to a total of 11,059 click-throughs to the FTF website where families could access more information and resources.

Because Arizona is so vast—with more than 500,000 children under age 6 and nearly 400,000 households with kids under age 6—engaging others in spreading the word about early childhood is critical to reaching across diverse geographic areas and expanding our reach. Supporters and Champions are trained in early childhood messaging and effective ways to share early childhood information, and the Navajo/Apache Region had 131 Supporters and 58 Champions in 2019. These Supporters and Champions reported a total of 47 positive actions taken on behalf of young children throughout the Navajo/Apache Region in 2019. These actions range from leading presentations in support of early childhood to sharing FTF's early childhood resources with parents at community events.

First Things First has also led a concerted effort to build awareness among policymakers at all levels (federal, tribal, state, and municipal) of the importance of early childhood. In SFY19, FTF also launched ACT4KIDS, a text-based system that alerts participants to timely developments in early childhood policy and opportunities to engage with policymakers. In its first nine months of implementation, more than 700 Arizonans had signed up to participate in ACT4KIDS. In addition, FTF actively participates in the Arizona Early Childhood Alliance, comprised of more than 50 early childhood system leaders, which represents a united voice of the early childhood

community in advocating for early childhood programs and services. For the past three years, the Alliance has also led an annual Early Childhood Day at the legislature, which draws hundreds of Arizonans to the state capitol to engage with policymakers and show their support for early childhood development and health.

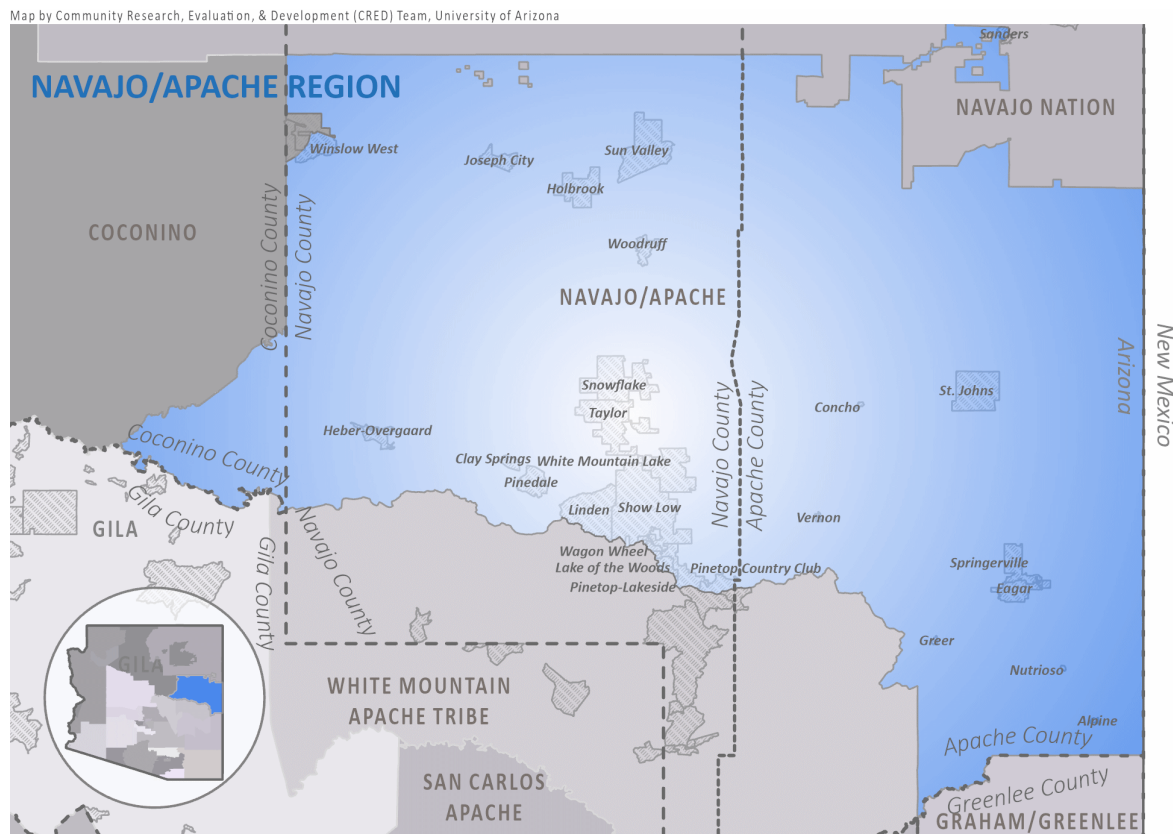
The Navajo/Apache Region

Regional Boundaries

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

The First Things First Navajo/Apache Region encompasses the central areas of Navajo and Apache counties, excluding the lands belonging to the Navajo Nation and the Hopi Tribe in the north and the land belonging to the White Mountain Apache Tribe in the south. The region also includes the Forest Lakes community in Coconino County, east of Heber-Overgaard. The region does not include the city of Winslow, which is in Navajo County but is assigned to the Coconino Region. Figure 1 below shows the geographical area covered by the Navajo/Apache Region. Additional information available at the end of this report includes a map of the region by zip code in Appendix 1, a table listing zip codes for the region in Appendix 2, and a map of school districts in the region in Appendix 3.

Figure 1. The First Things First Navajo/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>)

Data Sources

The data contained in this report come from a variety of sources. Some data were provided to First Things First by state agencies, such as the Arizona Department of Economic Security (DES), the Arizona Department of Education (ADE), and the Arizona Department of Health Services (ADHS). Other data were obtained from publicly available sources, including the 2010 U.S. Census, the American Community Survey (ACS), the Arizona Department of Administration (ADOA), and the Department of Child Safety (DCS).

The U.S. Census¹ 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. The Census data for the Navajo/Apache Region presented in this report were calculated by identifying each block in the region and aggregating the data over all of those blocks.

The American Community Survey (ACS)² is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-to-face interviews. It covers many different topics,

including income, language, education, employment, and housing. The ACS data are available by census tract. Arizona is divided into about 1,500 census tracts, with an average of about 4,200 people in each. The ACS data for the Navajo/Apache Region were calculated by aggregating over the census tracts which are wholly or partially contained in the region. The data from partial census tracts were apportioned according to the percentage of the 2010 Census population in that tract living inside the Navajo/Apache Region. The most recent and most reliable ACS data are averaged over the past five years; those are the data included in this report. They are based on surveys conducted from 2013 to 2017. In general, the reliability of ACS estimates is greater for more populated areas. Statewide estimates, for example, are more reliable than county-level estimates.

To protect the confidentiality of program participants, the First Things First Data Dissemination and Suppression Guidelines preclude our reporting social service and early education programming data if the count is less than ten and preclude our reporting data related to health or developmental delay if the count is less than six. In addition, some data received from state agencies may be suppressed according to their own guidelines. The Arizona Department of Health Services does not report counts less than six; the Arizona Department of Economic Security does not report counts between one and nine; and the Arizona Department of Education does not report counts less than eleven. 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. 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 ages 0-12 months, 13 children ages 13-24 months, and 12 children ages 25-35 months, the entry in the table would read “26 to 34.” This is because the suppressed number of children ages 0-12 months is between one and nine, so the possible range of values is the sum of the two known numbers plus one to the sum of the two known numbers plus nine. Ranges that include numbers below the suppression threshold of less than six or ten may still be included if the upper limit of the range is above six or ten. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.

Population Characteristics

Why it Matters

To support the healthy development and learning of young children across Arizona, advocates and decision makers need to understand who those children and their families are.³ Although parents are a child’s first and most important teachers, families of young children often use community resources to help them promote positive outcomes for their children.⁴ The number and characteristics of young children and families in a region can inform the range of services needed in a community, helping to guide where to locate child care, health care, and social services so that they are accessible to those who need them.^{5,6}

Immigrant families. Families in the US are becoming more diverse. Knowing how local communities are changing can help ensure families have access to the services and supports they need to thrive.⁷ Children of foreign-born parents represent one of the fastest growing groups of young children in the country.⁸ Recent changes in national immigration policy have led some immigrant families to avoid using social services for which they legally qualify due to fear of deportation or jeopardizing their legal status in the country.^{9,10,11} Policy changes at a national level, such as the “public charge rule”^v set to be enacted in October 2019, may deter families—particularly those with a recent history of immigration—from using available supports for which they legally qualify.^{12,13} Children in these families may be at particular risk of reduced access to medical care and increased food insecurity.^{14,15,16}

Language use. Households with multiple languages spoken pose a unique balance of benefits for child learning and barriers to parental engagement, which counties with high rates of other languages spoken should specifically consider. 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.^{17,18,19,20} Awareness of the levels of English proficiency and of other home languages spoken within a region provides information about a community’s assets and allows for identifying relevant supports. Young children can benefit from exposure to multiple languages; mastery of more than one language is an asset in school readiness and academic achievement and offers cognitive and social-emotional benefits in early school and throughout their lifetime.^{21,22,23,24} Although dual language learning is an asset, limited English speaking households (that is, households where none of the adult members speak English well) can face challenges. These families may experience barriers to accessing health care and social service information, as well as barriers to engaging in important parent-teacher interactions, all of which can impede their child’s health and development.^{25,26}

^v U.S. Citizenship and Immigration Services defines “public charge” as an individual who is likely to become “primarily dependent on the government for subsistence, as demonstrated by either the receipt of public cash assistance for income maintenance, or institutionalization for long-term care at government expense.”

Providing information about resources and services in languages accessible to families in the region can help remove those barriers. Although Spanish is the most common second language spoken, Arizona is also home to a large number of Native communities, with Native languages spoken by families in those communities. 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.^{27, 28} Special consideration should be given to respecting and supporting the numerous Native American languages spoken, particularly in tribal communities around the state.

Family and household composition. In addition to growing racial, ethnic and social diversity, US and Arizona families are becoming more diverse in terms of family structure.^{29,30,31,32} Understanding the makeup of families in a region can help better prepare child care, school and agency staff to engage with families in ways that support positive interactions both within families and with staff to enhance each child’s early learning and development.³³

Multi-generational households, particularly those where grandparents live in the home with the child and parents, are traditional in some communities and cultures and can provide financial and social benefits.³⁴ However, parents are not always in the picture in these homes. Care of children by someone other than their parents, such as relatives or close friends, is known as kinship care and is increasingly common.³⁵ 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, drug abuse, or incarceration, or due to abuse, neglect, or homelessness. Understanding who is caring for children can help in identifying and creating specific supports for these families. Children in kinship care often face special needs as a result of trauma, and therefore these families often require additional support and assistance to help children adjust and provide the best possible home environment.³⁶ A child’s risk of living in poverty is also higher for those living with grandparents, adding to the family stress.³⁷ These families are likely to require access to information on resources, support services, benefits, and policies available to aid in their caregiving role.³⁸

What the Data Tell Us

Population, Race, and Ethnicity

- According to the U.S. Census, the Navajo/Apache Region had a population of 73,083 in 2010, of whom 6,166 (8%) were children ages birth to 5. Fifteen percent of households in the region included a young child, a lower proportion of households than in Navajo (20%) or Apache (21%) counties and the state (16%) (Table 1).
- Population projections for Navajo County and Apache County show that the population of young children (ages 0-5) is projected to be about 14,559 by 2020, a decrease from 2010 (17,721). Projections continue to show a decrease in the count of young children over time after 2020, with a low of 10,423 in 2050 (Figure 2).
- Just over one in 10 (12%) adults and almost one in four (23%) young children (ages 0-4) in the Navajo/Apache Region are Hispanic. These proportions are higher than in Navajo County (10% and 15% respectively) and Apache County (5% and 8% respectively). The Navajo/Apache Region also has a lower percentage of American Indian young children (8%) than Navajo County (52%) and Apache County (77%) but a similar proportion to the state (6%). The proportions of adults and young children (1% for each) who are Black or African American in the region are similar to the counties but lower than the state (4% and 5% respectively) and the United States overall (12% and 14%, respectively). The percentages of Asian or Pacific Islander adults and young children (1% for each) in the Navajo/Apache Region similarly mirror the counties but are slightly lower than state and national proportions (Table 3 & Table 4).
- In 2017, a larger proportion of births were to mothers who were Hispanic or Latina in the region (18%) than in either Navajo (10%) or Apache (4%) counties, although this proportion was much lower than across the state (41%). In contrast, the proportion of births to mothers who were American Indian was lower in the region (17%) than in either county (57% Navajo; 80% Apache), but higher than in the state overall (6%) (Table 5).

Immigrant Families and Language Use

- Only eight percent of children in the Navajo/Apache Region live with one or two foreign-born parents, a proportion higher than in Navajo (4%) or Apache (5%) counties, but much lower than across the state (26%) (Table 6).
- More of the population of the Navajo/Apache Region speak only English at home (86%) than in Navajo County (63%), Apache County (45%), or across the state (73%). In addition, a smaller proportion of individuals speak a language other than English or Spanish at home in the Navajo/Apache Region (5%) than in Navajo County (31%) or Apache County (51%), although this proportion is only slightly lower than the state

overall (6%) (Table 7). There are also fewer limited-English-speaking households in the region (2%) than in Navajo (6%) or Apache (14%) County, or the state (4%) (Table 9).

Family and Household Composition

- A majority of children living in the Navajo/Apache Region live in two-parent households; 59 percent of young children in the region live with two parents or stepparents, compared to 44 percent in Navajo County, 34 percent in Apache County, and 59 percent in Arizona (Table 10). The proportion of single-female households with young children in the region (20%) is lower than both counties (32% and 35%, respectively) and the state overall (24%) (Table 11).
- The percentage of young children living in a grandparent's household in the region (13%) is similar to the state (14%) but lower than in Navajo (27%) or Apache (32%) counties, although the percentage of children living with a grandparent who is responsible for them is comparable between the region, counties, and state (Table 12 & Table 13).

Population, Race, and Ethnicity

Table 1. Population and households, 2010

| GEOGRAPHY | TOTAL POPULATION | POPULATION (AGES 0-5) | TOTAL NUMBER OF HOUSEHOLDS | HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5) | PERCENT OF HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5) |
|-----------------------------|------------------|-----------------------|----------------------------|---|--|
| Navajo/Apache Region | 73,083 | 6,166 | 27,887 | 4,106 | 15% |
| Navajo County | 107,449 | 10,550 | 35,658 | 7,011 | 20% |
| Apache County | 71,518 | 7,171 | 22,771 | 4,729 | 21% |
| 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% |

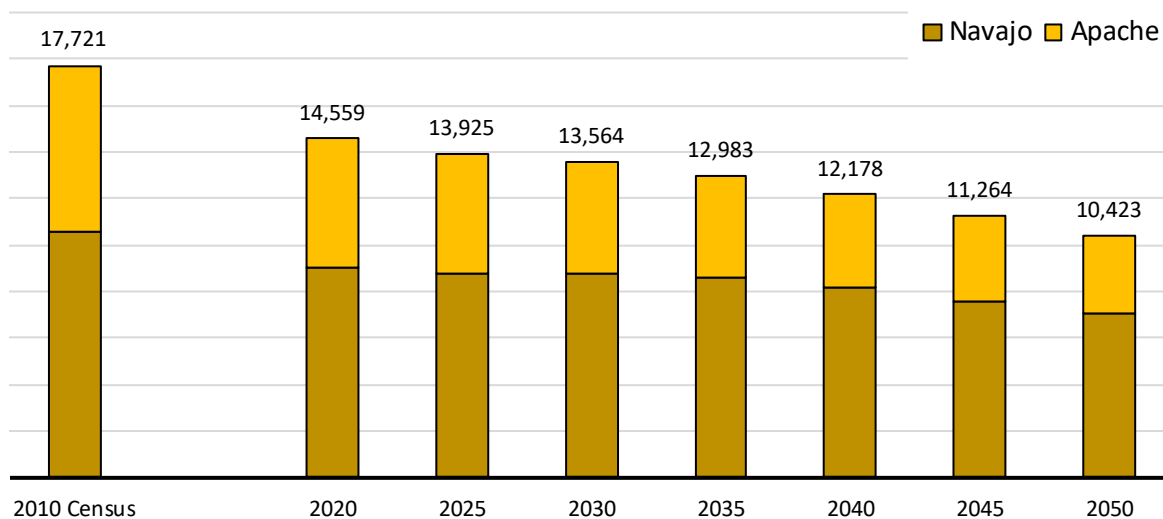
Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Tables P1, P4, & P20

Table 2. Population of children by single year of age, 2010

| GEOGRAPHY | POPULATION (AGES 0-5) | AGE 0 | AGE 1 | AGE 2 | AGE 3 | AGE 4 | AGE 5 |
|-----------------------------|-----------------------|------------|------------|--------------|--------------|--------------|--------------|
| Navajo/Apache Region | 6,166 | 942 | 973 | 1,072 | 1,048 | 1,097 | 1,034 |
| Navajo County | 10,550 | 1,665 | 1,691 | 1,833 | 1,784 | 1,766 | 1,811 |
| Apache County | 7,171 | 1,174 | 1,128 | 1,165 | 1,228 | 1,265 | 1,211 |
| Arizona | 546,609 | 87,557 | 89,746 | 93,216 | 93,880 | 91,316 | 90,894 |
| United States | 24,258,220 | 3,944,153 | 3,978,070 | 4,096,929 | 4,119,040 | 4,063,170 | 4,056,858 |

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P14

Figure 2. Population projections for young children (ages 0-5) in Navajo and Apache counties, 2020 to 2050



Source: Arizona Office of Economic Opportunity. (2018). Arizona Population Projections: 2018 to 2055, Medium Series

Note: The numbers in the base of each bar indicate the county’s population as a percentage of the state’s population of young children.

Table 3. Race and ethnicity of the adult population (ages 18 and older), 2010

| GEOGRAPHY | POPULATION 18 YEARS AND OVER | HISPANIC | WHITE, NOT HISPANIC | BLACK OR | AMERICAN | ASIAN OR | OTHER, NOT HISPANIC |
|-----------------------------|------------------------------------|------------|---------------------------|--|----------------------------|---|---------------------------|
| | | | | AFRICAN- AMERICAN, NOT HISPANIC | INDIAN, NOT HISPANIC | PACIFIC ISLANDER, NOT HISPANIC | |
| Navajo/Apache Region | 54,085 | 12% | 80% | 1% | 5% | 1% | 1% |
| Navajo County | 75,476 | 10% | 48% | 1% | 40% | 1% | 1% |
| Apache County | 48,858 | 5% | 23% | <1% | 70% | <1% | 1% |
| Arizona | 4,763,003 | 25% | 63% | 4% | 4% | 3% | 1% |
| United States | 234,564,071 | 14% | 67% | 12% | 1% | 5% | 1% |

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P11

Table 4. Race and ethnicity of the population of young children (ages 0-4), 2010

| GEOGRAPHY | POPULATION (AGES 0-4) | HISPANIC | WHITE, NOT HISPANIC | BLACK OR AFRICAN- AMERICAN | AMERICAN INDIAN | ASIAN OR PACIFIC ISLANDER |
|-----------------------------|--------------------------|------------|------------------------|----------------------------------|--------------------|---------------------------------|
| Navajo/Apache Region | 5,132 | 23% | 65% | 1% | 8% | 1% |
| Navajo County | 8,739 | 15% | 31% | 1% | 52% | 1% |
| Apache County | 5,960 | 8% | 14% | <1% | 77% | <1% |
| Arizona | 455,715 | 45% | 40% | 5% | 6% | 3% |
| United States | 20,201,362 | 25% | 51% | 14% | 1% | 5% |

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Tables P12B-H

Table 5. Race and ethnicity of mothers giving birth in calendar year 2017

| GEOGRAPHY | TOTAL NUMBER OF BIRTHS IN 2017 | MOTHER WAS HISPANIC OR LATINA | MOTHER WAS WHITE, NOT HISPANIC | MOTHER WAS BLACK OR AFRICAN- AMERICAN | MOTHER WAS AMERICAN INDIAN OR ALASKAN | MOTHER WAS ASIAN OR PACIFIC ISLANDER |
|---------------------------------|---|--|---|--|--|---|
| Navajo/Apache Region | 859 | 18% | 63% | DS | 17% | 1% |
| Navajo County | 1,507 | 10% | 31% | 1% | 57% | 1% |
| Apache County | 946 | 4% | 16% | DS | 80% | DS |
| Arizona | 81,664 | 41% | 44% | 6% | 6% | 4% |

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Immigrant Families and Language Use

Table 6. Children (ages 0-5) living with parents who are foreign-born

| GEOGRAPHY | YOUNG CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES | YOUNG CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES WITH ONE OR TWO FOREIGN-BORN PARENTS | PERCENT OF YOUNG CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES WITH ONE OR TWO FOREIGN-BORN PARENTS |
|-----------------------------|---|--|---|
| Navajo/Apache Region | 5,022 | 426 | 8% |
| Navajo County | 8,770 | 325 | 4% |
| Apache County | 5,762 | 298 | 5% |
| Arizona | 498,102 | 130,705 | 26% |
| United States | 22,939,897 | 5,730,869 | 25% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B05009

Note: Children living in subfamilies are children who live together with one or two of their parents in a relative's household (such as a grandparent or aunt or uncle).

Table 7. Language spoken at home by persons ages 5 and older

| GEOGRAPHY | POPULATION (AGES 5 AND OLDER) | POPULATION (AGES 5+) WHO SPEAK ONLY ENGLISH AT HOME | POPULATION (AGES 5+) WHO SPEAK SPANISH AT HOME | POPULATION (AGES 5+) WHO SPEAK OTHER LANGUAGES AT HOME |
|-----------------------------|-------------------------------|---|--|--|
| Navajo/Apache Region | 67,760 | 86% | 9% | 5% |
| Navajo County | 99,971 | 63% | 6% | 31% |
| Apache County | 66,471 | 45% | 4% | 51% |
| Arizona | 6,375,189 | 73% | 21% | 6% |
| United States | 301,150,892 | 79% | 13% | 8% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B16001

Note: The most recent estimates from the American Community Survey (ACS) no longer specify the proportion of the population who speak a Native North American language for geographies smaller than the state.

Table 8. English-language proficiency for persons ages 5 and older

| GEOGRAPHY | POPULATION (AGES 5 AND OLDER) | POPULATION (AGES 5+) WHO SPEAK ONLY ENGLISH AT HOME | POPULATION (AGES 5+) WHO SPEAK ANOTHER LANGUAGE AT HOME, AND SPEAK ENGLISH "VERY WELL" | POPULATION (AGES 5+) WHO SPEAK ANOTHER LANGUAGE AT HOME, BUT DO NOT SPEAK ENGLISH "VERY WELL" |
|-----------------------------|-------------------------------|---|--|---|
| Navajo/Apache Region | 67,760 | 86% | 11% | 3% |
| Navajo County | 99,971 | 63% | 27% | 9% |
| Apache County | 66,471 | 45% | 41% | 14% |
| Arizona | 6,375,189 | 73% | 18% | 9% |
| United States | 301,150,892 | 79% | 13% | 9% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B16005

Table 9. Limited-English-speaking households

| GEOGRAPHY | TOTAL NUMBER OF HOUSEHOLDS | NUMBER OF "LIMITED ENGLISH SPEAKING" HOUSEHOLDS | PERCENT OF HOUSEHOLDS WHICH ARE "LIMITED ENGLISH SPEAKING" |
|-----------------------------|----------------------------|---|--|
| Navajo/Apache Region | 26,201 | 433 | 2% |
| Navajo County | 34,251 | 2,151 | 6% |
| Apache County | 19,530 | 2,755 | 14% |
| Arizona | 2,482,311 | 108,133 | 4% |
| United States | 118,825,921 | 5,305,440 | 4% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B16002

Family and Household Composition

Table 10. Living arrangements for children (ages 0-5)

| GEOGRAPHY | CHILDREN (0-5) LIVING IN HOUSEHOLDS | CHILDREN (0-5) LIVING WITH TWO PARENTS OR STEPPARENTS | CHILDREN (0-5) LIVING WITH ONE PARENT OR STEPPARENT | CHILDREN (0-5) LIVING WITH RELATIVES (NOT PARENTS) | CHILDREN (0-5) LIVING WITH NON- RELATIVES |
|-----------------------------|---|--|--|---|--|
| Navajo/Apache Region | 5,206 | 59% | 37% | 1% | 2% |
| Navajo County | 9,330 | 44% | 50% | 5% | 1% |
| Apache County | 6,119 | 34% | 60% | 4% | 2% |
| Arizona | 520,556 | 59% | 37% | 2% | 2% |
| United States | 23,817,787 | 62% | 34% | 2% | 2% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Tables B05009, B09001, & B17006

Table 11. Heads of households in which children (ages 0-5) live, 2010

| GEOGRAPHY | HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5) | MARRIED FAMILY HOUSEHOLDS | SINGLE-MALE HOUSEHOLDS | SINGLE-FEMALE HOUSEHOLDS |
|-----------------------------|---|------------------------------|---------------------------|-----------------------------|
| Navajo/Apache Region | 4,106 | 70% | 10% | 20% |
| Navajo County | 7,011 | 58% | 11% | 32% |
| Apache County | 4,729 | 53% | 12% | 35% |
| Arizona | 384,441 | 65% | 11% | 24% |
| United States | 17,613,638 | 67% | 9% | 24% |

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Tables P20 & P32

Table 12. Children (ages 0-5) living in the household of a grandparent, 2010

| GEOGRAPHY | POPULATION (AGES 0-5) | CHILDREN (0-5) LIVING IN A GRANDPARENT'S HOUSEHOLD | PERCENT OF CHILDREN (0-5) WHO LIVE IN A GRANDPARENT'S HOUSEHOLD |
|-----------------------------|-----------------------|--|---|
| Navajo/Apache Region | 6,166 | 824 | 13% |
| Navajo County | 10,550 | 2,799 | 27% |
| Apache County | 7,171 | 2,328 | 32% |
| Arizona | 546,609 | 74,153 | 14% |
| United States | 24,258,220 | 2,867,165 | 12% |

Source: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P41

Table 13. Grandparents responsible for grandchildren (ages 0-17) living with them

| GEOGRAPHY | GRANDCHILDREN UNDER 18 LIVING WITH GRANDPARENT HOUSEHOLDER | PERCENT OF GRANDCHILDREN UNDER 18 LIVING WITH A GRANDPARENT HOUSEHOLDER WHO IS RESPONSIBLE FOR THEM |
|-----------------------------|--|---|
| Navajo/Apache Region | 1,671 | 57% |
| Navajo County | 6,084 | 56% |
| Apache County | 4,949 | 50% |
| Arizona | 147,707 | 51% |
| United States | 5,781,786 | 49% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B10002

Note: This table includes both (a) grandchildren living with grandparents with no parent present and (b) grandchildren who live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent.

Economic Circumstances

Why it Matters

A family's economic stability is a powerful predictor of child well-being and is one of the key social determinants of health.³⁹ Factors contributing to economic stability—or lack thereof—include **poverty, food insecurity, employment, and housing instability.**⁴⁰

Poverty. Childhood poverty can negatively affect the way children's bodies grow and develop, including fundamental changes to the architecture of the brain.⁴¹ Children raised in poverty are at a greater risk of a host of negative outcomes including low birth weight, lower school achievement, and poor health.^{42,43,44,45,46} They are also more likely to remain poor later in life.^{47,48} As a benchmark, the 2019 Federal Poverty Guideline—the criterion used for establishing eligibility for some safety net programs—for a family of four was \$25,750.⁴⁹ However, the federal poverty guideline definition of poverty was developed in the 1950s, and estimates only what a family would need to earn to afford basic nutrition, without taking into account other costs of living; it is widely considered to be well below what a family actually needs to earn to make ends meet. The “self-sufficiency standard” attempts to estimate how much families need to earn to fully support themselves, accounting for local costs of housing, transportation, and child care, and other budget items.⁵⁰ The 2018 self-sufficiency standard for an Arizona family with two adults, one preschooler, and one school-age child was \$56,143—over twice the poverty threshold.⁵¹

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.

Food insecurity. A limited or uncertain availability of food is negatively associated with many markers of health and well-being for children, including heightened risks for developmental delays⁵² and being overweight or obese.⁵³ To help reduce food insecurity, there are a variety of federally-funded programs including the Supplemental Nutrition Assistance Program (SNAP),⁵⁴ the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC),⁵⁵ the National School Lunch Program,⁵⁶ the School Breakfast Program,⁵⁷ the Summer Food Service Program,⁵⁸ and the Child and Adult Care Food Program (CACFP).⁵⁹ However, only about 58 percent of food insecure households nationwide report participating in federally-funded nutrition assistance programs.⁶⁰

SNAP. Administered by the Arizona Department of Economic Security and also referred to as “Nutrition Assistance” and “food stamps,” SNAP has been shown to help reduce hunger and improve access to healthier food.⁶¹ SNAP benefits support working families whose incomes simply do not provide for all their needs. For low-income working families, the additional funds

available to access food from SNAP can help make a meaningful difference. For example, for a three-person family with one person who earns a minimum wage, SNAP benefits can boost take-home income by 10-20 percent.⁶²

WIC. Administered by the Arizona Department of Health Services, this federally-funded program serves pregnant, postpartum, and breastfeeding women, as well as infants and young children (under the age of five) who are economically disadvantaged (i.e., family incomes at or below 185 percent of the federal poverty level). The program offers funds for nutritious food, breastfeeding and nutrition education, and referrals to health and social services.⁶³

Participation in WIC has been shown to be associated with healthier births, lower infant mortality, improved nutrition, decreased food insecurity, improved access to health care, and improved cognitive development and academic achievement for children.⁶⁴

National School Lunch Program. Administered by the Arizona Department of Education, the National School Lunch Program provides free and reduced-price meals at school for students whose family incomes are at or less than 130 percent of the federal poverty level for free lunch, and 185 percent of the federal poverty level for reduced-price lunch.

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.⁶⁵ Unemployment can also put families at greater risk for stress, family conflict, and homelessness.⁶⁶ Note that this does not include persons who have dropped out of the labor force entirely, including those who wanted to but could not find suitable work and so have stopped looking for employment.⁶⁷

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.⁶⁸ Traditionally, housing has been deemed affordable for a family if it costs less than 30 percent of their annual income.⁶⁹ High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition, declines in mental health, and homelessness.^{70,71}

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. 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.⁷² The term "digital divide" refers to disparities in

communication and information technologies,⁷³ and the lack of sustained access to information and communication technologies in low-income communities is associated with economic and social inequality.⁷⁴ 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).⁷⁵ Nationally, Americans are increasingly reliant on smartphones as their sole source of internet access. Particularly for individuals who are younger, lower-income, and non-white, broadband service at home is less common and smartphone-only internet use is more common.⁷⁶ Households in rural areas typically experience more limited coverage from mobile networks and slower-speed internet services, as well as limited internet provider options which can result in higher monthly costs.^{77,78,79}

What the Data Tell Us

Poverty

- Nearly one of every five (18%) residents in the Navajo/Apache Region lives in poverty, similar to the state (17%) but lower than in Navajo (29%) and Apache (36%) counties. When it comes to young children, one in three (30%) lives in poverty in the region, higher than that of the total (all-age) population living in poverty (18%), but much lower than young children in Navajo (43%) and Apache (49%) counties. Twenty-six percent of young children across the state live in poverty (Figure 3).
- Across household types, median annual family income is lower in Navajo County and Apache County than in Arizona and the United States. Median income for married-couple families with children in Navajo County (\$63,813) is more than four times the median income for single female headed families (\$14,475). This gap is not as wide in Apache County, with median income for married-couple families with children (\$52,950) more than double the median income for single female headed families (\$21,601) (Table 14).
- Eligibility for some public assistance programs is determined by different poverty thresholds. For example, family income at or below 141 percent of the federal poverty threshold is one criterion for eligibility for Arizona Health Care Cost Containment System (AHCCCS)^{vi} for children ages 1 to 5, and at or below 147 percent of the federal poverty threshold for children under 1 year old.⁸⁰ In the Navajo/Apache Region, the percentage of families with young children who may qualify for AHCCCS (those under 130% of FPL and between 130% and 149% of FPL) is higher than the state overall (45% and 38%, respectively), but lower than in Navajo (57%) and Apache (62%) counties (Table 15 & Figure 4).
- Between 2015 and 2018, the number of families and young children receiving Temporary Assistance for Needy Families (TANF) declined in the region. In 2018, the percentages of families and young children participating in TANF were low for the region (2% and 1% respectively), Navajo County (2% for each), and state (3% for each) (Table 16 & Table 17).

Food Insecurity

- While participation in the Supplemental Nutrition Assistance Program (SNAP) by families and young children also declined between 2015 and 2018, participation in SNAP was still relatively high in the region for families (44%) and young children (45%), proportions comparable to the state, but much lower than in Navajo (63% and 64% respectively) and Apache counties (72% and 71% respectively) (Table 18 & Table 19).

^{vi} Arizona Health Care Cost Containment System (AHCCCS) is the name of Arizona's Medicaid program, which offers health care programs to Arizona residents.

- Since the 2015-2016 school year, the percentage of students eligible for free or reduced-price lunch in the Navajo/Apache Region has declined slightly, from 56 percent in 2015-2016 to 53 percent in 2018-2019. Conversely, the percentage of students eligible for free or reduced-price lunch in Navajo and Apache counties increased over the same time period (Table 20).

Employment

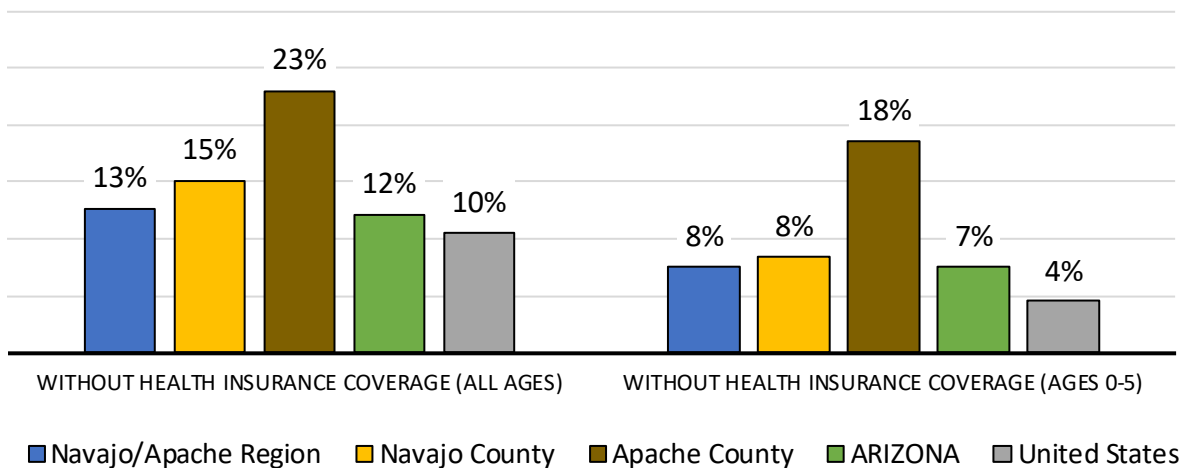
- Rates of adult employment in the Navajo/Apache Region (44%), and Navajo (41%) and Apache (34%) counties are lower than across the state (55%) and the US as a whole (59%). Between 2015 and 2017, adult unemployment rates decreased in Navajo County and Apache County, then leveled off in 2018 to 10.1 percent in Navajo County and 7.8 percent in Apache County. Across all years, unemployment rates in both counties were higher than across the state, with a 4.8 percent unemployment rate statewide in 2018 (Table 21).
- More than half of households with young children in the region (53%) have all present parents in the labor force. Eight percent of young children in the region live with one parent who is not in the labor force (Table 22).

Housing Instability

- One-quarter of households in the region spend 30 percent or more of their income on housing, a proportion higher than Navajo (23%) and Apache (15%) counties, but lower than state (31%) and national levels (32%) (Table 23).
- Sixty percent of households in the region have both a smartphone and computer, lower than state (67%) and national (66%) numbers but higher than in Navajo (49%) and Apache (33%) counties (Table 24). The majority (81%) of Navajo/Apache Region residents live in households with a computer and internet, similar to state (82%) and national (83%) proportions but higher than in Navajo (60%) and Apache (40%) counties (Table 25).
- For children specifically, household access to a computer and internet in the region is even higher (84%) (Table 26).
- Of people living in households with a computer and internet in the region, 16 percent rely solely on a cellular data plan (Table 27).

Poverty

Figure 3. Percent of population (all ages) and young children (ages 0-5) living in poverty



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B17001

Table 14. Median annual family income

| GEOGRAPHY | MEDIAN INCOME FOR ALL FAMILIES | MEDIAN INCOME FOR MARRIED-COUPLE FAMILIES WITH CHILDREN (0-17) | MEDIAN INCOME FOR FAMILIES WITH CHILDREN (0-17), SINGLE MALE HEAD | MEDIAN INCOME FOR FAMILIES WITH CHILDREN (0-17), SINGLE FEMALE HEAD |
|---------------|--------------------------------|--|---|---|
| Navajo County | \$46,034 | \$63,813 | \$32,255 | \$14,475 |
| Apache County | \$40,231 | \$52,950 | \$23,125 | \$21,601 |
| Arizona | \$63,812 | \$80,533 | \$38,650 | \$26,907 |
| United States | \$70,850 | \$91,621 | \$41,054 | \$26,141 |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B19126

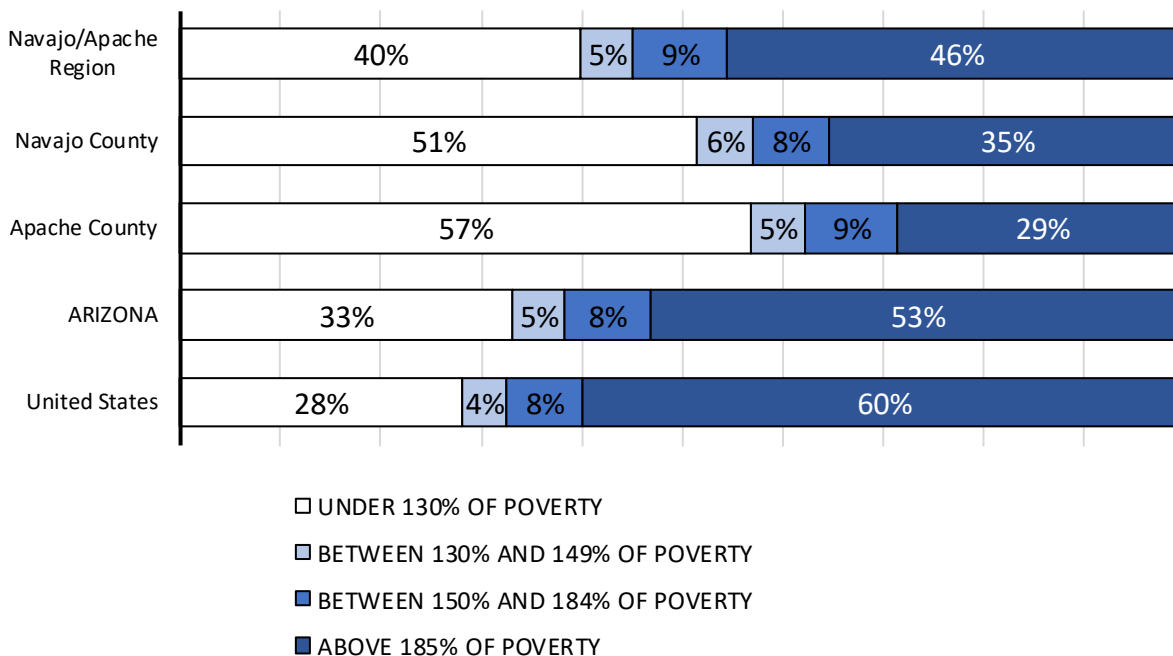
Table 15. Families with young children (ages 0-5) living at various poverty thresholds

| GEOGRAPHY | TOTAL NUMBER OF FAMILIES WITH YOUNG CHILDREN (AGES 0-5) | PERCENT UNDER 130% OF POVERTY | PERCENT BETWEEN 130% AND 149% OF POVERTY | PERCENT BETWEEN 150% AND 184% OF POVERTY | PERCENT ABOVE 185% OF POVERTY |
|-----------------------------|---|-------------------------------|--|--|-------------------------------|
| Navajo/Apache Region | 2,815 | 40% | 5% | 9% | 46% |
| Navajo County | 5,003 | 51% | 6% | 8% | 35% |
| Apache County | 2,581 | 57% | 5% | 9% | 29% |
| Arizona | 295,926 | 33% | 5% | 8% | 53% |
| United States | 13,951,604 | 28% | 4% | 8% | 60% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Tables B17001 & B17022

Note: Poverty refers to the poverty threshold used by the U.S. Census Bureau to determine whether or not a family lives in poverty based on their income. In 2017, the most recent year of ACS data used in this report, the poverty threshold for a family of four was \$24,848. For more information about poverty thresholds, see <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>

Figure 4. Families with young children (ages 0-5) living at various poverty thresholds



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Tables B17001 & B17022

Note: Poverty refers to the poverty threshold used by the U.S. Census Bureau to determine whether or not a family lives in poverty based on their income. In 2017, the most recent year of ACS data used in this report, the poverty threshold for a family of four was \$24,848. For more information about poverty thresholds, see <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>

Table 16. Families participating in the TANF program, fiscal years 2015 to 2018

| GEOGRAPHY | HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5) | NUMBER OF FAMILIES PARTICIPATING IN TANF | | | | PERCENT OF HOUSEHOLDS WITH YOUNG CHILDREN (0-5) PARTICIPATING IN TANF IN 2018 |
|-----------------------------|---|--|-----------|-----------|-----------|---|
| | | FY 2015 | FY 2016 | FY 2017 | FY 2018 | |
| Navajo/Apache Region | 4,106 | 93 | 97 | 81 | 66 | 2% |
| Navajo County | 7,011 | 219 | 191 | 164 | 152 | 2% |
| Apache County | 4,729 | 29 to 37 | 2 to 18 | 2 to 18 | 17 to 25 | DS |
| Arizona | 384,441 | 18,165 | 16,399 | 14,188 | 12,042 | 3% |

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Table 17. Children participating in the TANF program, Fiscal Years 2015 to 2018

| GEOGRAPHY | NUMBER OF YOUNG CHILDREN (AGES 0-5) IN THE POPULATION | NUMBER OF CHILDREN PARTICIPATING IN TANF | | | | PERCENT OF YOUNG CHILDREN (0-5) PARTICIPATING IN TANF IN 2018 |
|-----------------------------|---|--|------------|------------|-----------|---|
| | | FY 2015 | FY 2016 | FY 2017 | FY 2018 | |
| Navajo/Apache Region | 6,166 | 116 | 132 | 110 | 90 | 1% |
| Navajo County | 10,550 | 267 | 247 | 200 | 202 | 2% |
| Apache County | 7,171 | 34 to 42 | 42 to 50 | 2 to 18 | 2 to 18 | DS |
| Arizona | 546,609 | 23,862 | 22,326 | 19,614 | 16,634 | 3% |

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Food Insecurity

Table 18. Families participating in the SNAP program, Fiscal Years 2015 to 2018

| 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 2018 |
|-----------------------------|---|--|--------------|--------------|--------------|---|
| | | FY 2015 | FY 2016 | FY 2017 | FY 2018 | |
| Navajo/Apache Region | 4,106 | 2,033 | 2,028 | 1,960 | 1,807 | 44% |
| Navajo County | 7,011 | 5,024 | 4,872 | 4,667 | 4,437 | 63% |
| Apache County | 4,729 | 3,741 | 3,729 | 3,645 | 3,415 | 72% |
| Arizona | 384,441 | 179,988 | 172,014 | 164,092 | 151,819 | 39% |

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Table 19. Children participating in the SNAP program, Fiscal Years 2015 to 2018

| GEOGRAPHY | NUMBER OF YOUNG CHILDREN (AGES 0-5) IN THE POPULATION | NUMBER OF CHILDREN PARTICIPATING IN SNAP | | | | PERCENT OF YOUNG CHILDREN (0-5) PARTICIPATING IN SNAP IN 2018 |
|-----------------------------|---|--|--------------|--------------|--------------|---|
| | | FY 2015 | FY 2016 | FY 2017 | FY 2018 | |
| Navajo/Apache Region | 6,166 | 2,887 | 3,114 | 2,987 | 2,747 | 45% |
| Navajo County | 10,550 | 7,037 | 7,467 | 7,131 | 6,766 | 64% |
| Apache County | 7,171 | 5,249 | 5,554 | 5,408 | 5,102 | 71% |
| Arizona | 546,609 | 249,707 | 258,556 | 247,418 | 229,291 | 42% |

Sources: U.S. Census Bureau. (2010). 2010 Decennial Census, Summary File 1, Table P20 & Arizona Department of Economic Security, Division of Benefits and Medical Eligibility. (2019). Unpublished data received by request

Table 20. Percent of students (all grades) eligible for free or reduced-price lunch, 2015-16 to 2018-19

| GEOGRAPHY | STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2015-16) | STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2016-17) | STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2017-18) | STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (2018-19) |
|-----------------------------|---|---|---|---|
| Navajo/Apache Region | 56% | 55% | 56% | 53% |
| Navajo County | 71% | 72% | 74% | 73% |
| Apache County | 77% | 78% | 85% | 85% |
| Arizona | 58% | 57% | 57% | 56% |

Source: Arizona Department of Education. (2019). 2015-16 to 2018-19 Free & Reduced-Price Lunch Data. Custom tabulation of eligibility data

Employment

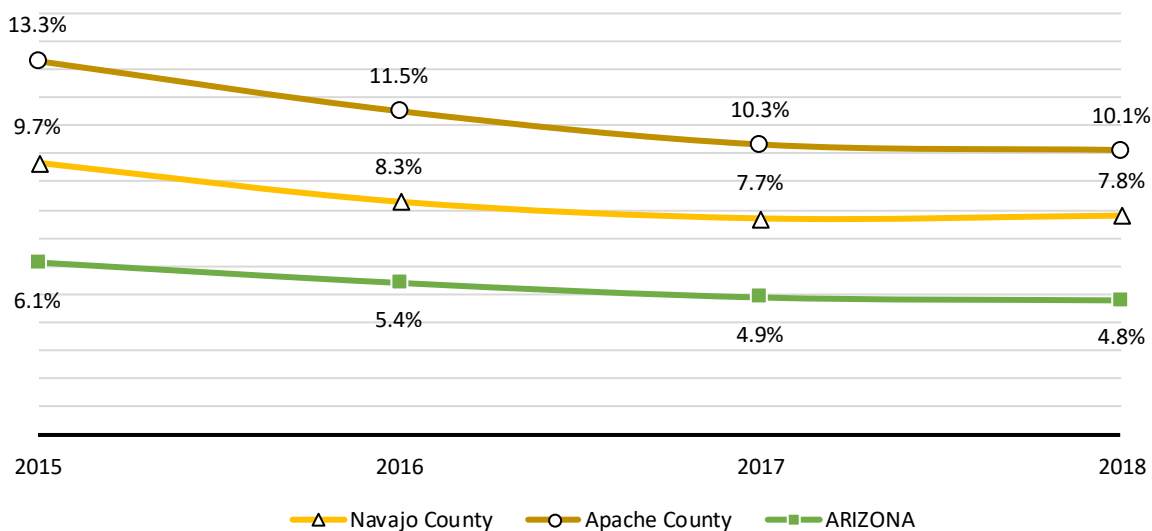
Table 21. Adult population (ages 16 and older) who are employed, unemployed, or not in the labor force

| GEOGRAPHY | TOTAL POPULATION (AGES 16 AND OLDER) | PERCENT WHICH IS EMPLOYED | PERCENT WHICH IS UNEMPLOYED | PERCENT WHICH IS NOT IN THE LABOR FORCE |
|-----------------------------|--------------------------------------|---------------------------|-----------------------------|---|
| Navajo/Apache Region | 56,858 | 44% | 5% | 51% |
| Navajo County | 81,333 | 41% | 8% | 51% |
| Apache County | 53,700 | 34% | 6% | 61% |
| Arizona | 5,371,341 | 55% | 4% | 40% |
| United States | 255,797,692 | 59% | 4% | 37% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B23025

Note: The labor force includes all persons who are currently employed, including those on leave, furlough, or temporarily laid off. Persons who are unemployed but actively looking for work are also considered to be in the labor force. Persons who are not working or looking for work (e.g., retired persons, stay-at-home parents, students) are considered to be "not in the labor force" in the American Community Survey.

Figure 5. Annual unemployment rates, not seasonally adjusted, 2015 to 2018



Source: Arizona Labor Statistics. (2019). Local Area Unemployment Statistics (LAUS). Retrieved from <https://laborstats.az.gov/local-area-unemployment-statistics>

Table 22. Parents of young children (ages 0-5) who are or are not in the labor force

| GEOGRAPHY | TOTAL NUMBER OF CHILDREN (AGES 0-5) LIVING IN FAMILIES OR SUBFAMILIES | WITH TWO PARENTS, BOTH IN LABOR FORCE | WITH TWO PARENTS, ONE IN LABOR FORCE AND ONE NOT | WITH TWO PARENTS, NEITHER IN LABOR FORCE | WITH ONE PARENT, IN LABOR FORCE | WITH ONE PARENT, NOT IN LABOR FORCE |
|-----------------------------|--|---|---|--|--|---|
| Navajo/Apache Region | 5,022 | 22% | 39% | 1% | 31% | 8% |
| Navajo County | 8,770 | 19% | 26% | 2% | 32% | 21% |
| Apache County | 5,762 | 10% | 23% | 3% | 34% | 30% |
| Arizona | 498,102 | 31% | 29% | 1% | 29% | 10% |
| United States | 22,939,897 | 38% | 26% | 1% | 27% | 8% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B23008

Note: The labor force includes all persons who are currently employed, including those on leave, furlough, or temporarily laid off. Persons who are unemployed but actively looking for work are also considered to be in the labor force. Persons who are not working or looking for work (e.g., retired persons, stay-at-home parents, students) are considered to be "not in the labor force" in the American Community Survey.

Housing Instability

Table 23. Households who are paying thirty percent or more of their income for housing

| GEOGRAPHY | TOTAL NUMBER OF OCCUPIED HOUSING UNITS | PERCENT OF HOUSING UNITS FOR WHICH HOUSING COSTS 30% OF INCOME OR MORE |
|-----------------------------|--|--|
| Navajo/Apache Region | 26,201 | 25% |
| Navajo County | 34,251 | 23% |
| Apache County | 19,530 | 15% |
| Arizona | 2,482,311 | 31% |
| United States | 118,825,921 | 32% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B25106

Table 24. Households with and without computers and smartphones

| GEOGRAPHY | TOTAL NUMBER OF HOUSEHOLDS | PERCENT WITH COMPUTER (BUT NO SMARTPHONE) | PERCENT WITH SMARTPHONE (BUT NO COMPUTER) | PERCENT WITH BOTH SMARTPHONE AND COMPUTER | PERCENT WITH NEITHER SMARTPHONE NOR COMPUTER |
|-----------------------------|----------------------------|---|---|---|--|
| Navajo/Apache Region | 26,201 | 17% | 10% | 60% | 14% |
| Navajo County | 34,251 | 13% | 11% | 49% | 27% |
| Apache County | 19,530 | 13% | 9% | 33% | 45% |
| Arizona | 2,482,311 | 12% | 9% | 67% | 12% |
| United States | 118,825,921 | 12% | 9% | 66% | 13% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28010

Note: In this table, "computer" includes both desktops and laptops.

Table 25. Persons (all ages) in households with and without computers and internet connectivity

| GEOGRAPHY | NUMBER OF PERSONS (ALL AGES) LIVING IN HOUSEHOLDS | PERCENT IN HOUSEHOLDS WITH COMPUTER AND INTERNET | PERCENT IN HOUSEHOLDS WITH COMPUTER BUT NO INTERNET | PERCENT IN HOUSEHOLDS WITHOUT COMPUTER |
|-----------------------------|---|--|---|--|
| Navajo/Apache Region | 69,952 | 81% | 9% | 9% |
| Navajo County | 105,153 | 60% | 15% | 24% |
| Apache County | 70,199 | 40% | 18% | 41% |
| Arizona | 6,656,124 | 82% | 9% | 9% |
| United States | 312,916,765 | 83% | 9% | 9% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28005

Table 26. Children (ages 0-17) in households with and without computers and internet connectivity

| GEOGRAPHY | NUMBER OF CHILDREN (AGES 0-17) LIVING IN HOUSEHOLDS | PERCENT IN HOUSEHOLDS WITH COMPUTER AND INTERNET | PERCENT IN HOUSEHOLDS WITH COMPUTER BUT NO INTERNET | PERCENT IN HOUSEHOLDS WITHOUT COMPUTER |
|-----------------------------|---|--|---|--|
| Navajo/Apache Region | 17,290 | 84% | 10% | 5% |
| Navajo County | 29,757 | 61% | 19% | 20% |
| Apache County | 20,306 | 43% | 21% | 36% |
| Arizona | 1,619,346 | 83% | 10% | 8% |
| United States | 73,392,369 | 85% | 9% | 5% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28005

Table 27. Households by type of internet access (broadband, cellular data, and dial-up)

| GEOGRAPHY | PEOPLE LIVING IN HOUSEHOLDS WITH COMPUTER AND INTERNET (ALL AGES) | PERCENT WITH FIXED BROADBAND WITH CELLULAR DATA PLAN | PERCENT WITH FIXED BROADBAND WITHOUT CELLULAR DATA PLAN | PERCENT WITH CELLULAR DATA PLAN, WITHOUT FIXED BROADBAND | PERCENT WITH DIAL-UP INTERNET ONLY |
|-----------------------------|---|--|---|--|------------------------------------|
| Navajo/Apache Region | 56,880 | 47% | 36% | 16% | 1% |
| Navajo County | 63,609 | 43% | 37% | 19% | 1% |
| Apache County | 28,288 | 36% | 46% | 15% | 3% |
| Arizona | 5,475,311 | 54% | 35% | 10% | 1% |
| United States | 258,531,929 | 55% | 35% | 10% | 1% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B28008

Educational Indicators

Why it Matters

Measures of educational engagement and achievement in a community have important implications for the developmental and economic resources available to children and families in that region. Individuals with higher levels of education tend to live longer and healthier lives.⁸¹ Indicators such as school attendance and absenteeism, achievement on standardized testing, high school graduation rates, and adult educational attainment can provide valuable information about a region's educational engagement and success.

School attendance and absenteeism. School attendance and academic engagement early in life can significantly impact the direction of a child's schooling trajectory. Chronic absenteeism is defined as missing more than 10 percent of the school days within a school year, and it affects even the youngest children, with more than 10 percent of US kindergarteners and first graders considered chronically absent.⁸² Poor school attendance can cause children to fall behind, leading to lower proficiency in reading and math and increased risk of not being promoted to the next grade.⁸³ Consistent school attendance is particularly important for children from economically disadvantaged backgrounds, the group of children most at risk for chronic absenteeism.^{84,85}

Achievement on standardized testing. A child's third-grade reading comprehension skills have been identified as a critical indicator of future academic success.⁸⁶ Students who are at or above grade level reading in third grade are more likely to go on to graduate high school and attend college.⁸⁷ The link between poor reading skills and risk of dropping out of high school is even stronger for children living in poverty. More than a quarter (26%) of children who were living in poverty and not reading proficiently in third grade did not finish high school. This is more than six times the high school dropout rate of proficient readers.⁸⁸

In 2010, the Arizona legislature, recognizing the importance of early identification and targeted intervention for struggling readers, enacted *Move on When Reading* legislation. As of 2015, the statewide assessment tool for English language arts (ELA), including reading and writing, is Arizona's Measurement of Education Readiness to Inform Teaching (AzMERIT).^{vii,89}

AzMERIT scores are used to determine promotion from the third grade in accordance with the *Move on When Reading* policy. *Move on When Reading* legislation states that a student shall not be promoted to fourth grade if their reading score falls far below the third-grade level, as established by the State Board of Education.⁹⁰ Exceptions exist for students identified with or being evaluated for learning disabilities and/or reading impairments, English language learners,

^{vii} AzMERIT was renamed AzM2, a change that will take effect during the 2019-20 school year.

and those who have demonstrated reading proficiency on alternate forms of assessment approved by the State Board of Education.

Graduation rates and adult educational attainment. Ultimately, adult educational attainment speaks to the assets and challenges of a community’s workforce, including those who are working with or on behalf of young children and their families. Adults who have 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.^{91,92} Children whose parents have higher levels of education are more likely to have positive outcomes related to school readiness and educational achievement, promoting academic success across generations.⁹³ Given 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

- In the 2018-2019 school year, 217 children were enrolled in preschool in the Navajo/Apache Region. Kindergarten through third grade enrollments for the region were all relatively similar, ranging from 887 to 951 children enrolled in each grade (Table 28).
- Kindergarten through 3rd grade chronic absence rates^{viii} increased overall from 2015-2016 to 2018-2019 at the regional, county, and state level. During the 2018-2019 school year, the Navajo/Apache Region had a 14 percent chronic absence rate, with 614 kindergarten through 3rd grade students in the region chronically absent (Table 29 & Table 30).
- By grade level, chronic absences ranged from seven percent to 19 percent in the Navajo/Apache Region. In the region and Navajo County, chronic absences were highest among 1st grade students (19% and 22%, respectively), while Apache County and state-level chronic absences were highest among kindergarteners (28% and 13%, respectively) (Table 31).

Achievement on Standardized Testing

- Fewer than half of 3rd grade students are meeting proficiency expectations for 3rd grade literacy. Slightly more than half are meeting proficiency expectations for math.
 - Arizona's Measurement of Education Readiness to Inform Teaching (AzMERIT) 3rd grade English Language Arts passing rates for the Navajo/Apache Region (44%) mirrored statewide passing rates in 2017-2018 but were higher than in Navajo (33%) and Apache (30%) counties (Table 32 & Figure 6).
 - AzMERIT 3rd grade English Language Arts passing rates have increased over time at the region, county, and state levels, with an increase from 38 percent passing in the region in 2015-2016 to 44 percent in 2017-2018 (Figure 7).
 - AzMERIT 3rd grade Math passing rates for the Navajo/Apache Region (53%) also mirrored statewide passing rates in 2017-2018, and were higher than county passing rates (42% Navajo County; 40% Apache County) (Table 33 & Figure 8).
 - AzMERIT 3rd grade Math passing rates have improved over time at the region, county, and state level, with regional passing rates increasing from 43 percent in 2015-2016 to 53 percent in 2017-2018 (Figure 9).

^{viii} Chronic absenteeism is defined as missing more than 10 percent of the school days within a school year.

Graduation Rates and Adult Educational Attainment

- Since 2015, both the four-year and five-year graduation rates have declined overall in the Navajo/Apache Region. In 2017, the four-year graduation rate for the region was 81 percent and the five-year graduation rate was 83 percent (Table 34, Table 35, & Table 36).
- The 7th-12th grade dropout rate for the Navajo/Apache Region remained constant at four percent from 2015-2016 to 2017-2018 (Table 37).
- A larger proportion of adults in the Navajo/Apache Region have more than a high-school education (62%) than in Navajo County (53%) and Apache County (46%), though the region is comparable to Arizona (62%) and the United States overall (60%) (Figure 10).
- This difference is also seen specifically in mothers giving birth, with a larger proportion of births in the Navajo/Apache Region to mothers with more than a high-school education (54%) than in Navajo County (45%) and Apache County (52%), although a slightly lower proportion than across the state (56%) (Table 38).

School Attendance and Absenteeism

Table 28. Students enrolled in preschool through 3rd grade, 2018-19

| GEOGRAPHY | PRESCHOOL | KINDERGARTEN | 1ST GRADE | 2ND GRADE | 3RD GRADE |
|-----------------------------|------------|--------------|------------|------------|------------|
| Navajo/Apache Region | 217 | 887 | 887 | 945 | 951 |
| Navajo County | 311 | 1,180 | 1,226 | 1,290 | 1,330 |
| Apache County | 166 | 739 | 701 | 797 | 752 |
| Arizona | 21,238 | 79,990 | 81,913 | 81,951 | 83,037 |

Source: Arizona Department of Education (2019). 2018-19 October 1 Enrollments. Custom tabulation of enrollment data facilitated by state agency staff

Note: Data on enrollments were calculated at the district-level. Where districts were split between regions, district enrollments were apportioned to regions based on the percentage of K-3 students in each region within the district. See appendix 3 for a full list of districts within the region, including split districts.

Table 29. Chronic absence rates, kindergarten through 3rd grade, 2015-16 to 2018-19

| GEOGRAPHY | CHRONIC ABSENCE RATE (2015-16) | CHRONIC ABSENCE RATE (2016-17) | CHRONIC ABSENCE RATE (2017-18) | CHRONIC ABSENCE RATE (2018-19) |
|-----------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Navajo/Apache Region | 11% | 12% | 15% | 14% |
| Navajo County | 15% | 17% | 18% | 18% |
| Apache County | 16% | 18% | 22% | 25% |
| Arizona | 9% | 10% | 11% | 12% |

Source: Arizona Department of Education. (2019). 2015-16 to 2018-19 Chronic Absenteeism Data. Unpublished data received by request

Note: The definition of chronic absenteeism used in this table includes children who are absent due to chronic illness.

Table 30. Chronic absence rates, kindergarten through 3rd grade, 2018-19

| GEOGRAPHY | TOTAL NUMBER OF STUDENTS | NUMBER OF STUDENTS WITH CHRONIC ABSENCES | CHRONIC ABSENCE RATE |
|-----------------------------|--------------------------|--|----------------------|
| Navajo/Apache Region | 4,450 | 614 | 14% |
| Navajo County | 6,048 | 1,101 | 18% |
| Apache County | 3,722 | 917 | 25% |
| Arizona | 402,206 | 46,482 | 12% |

Source: Arizona Department of Education. (2019). 2018-19 Chronic Absenteeism Data. Unpublished data received by request

Note: The definition of chronic absenteeism used in this table includes children who are absent due to chronic illness.

Table 31. Chronic absence rates for students by grade (Grade K-3), 2018 19

| GEOGRAPHY | CHRONIC ABSENCE RATE (KINDERGARTEN) | CHRONIC ABSENCE RATE (1ST GRADE) | CHRONIC ABSENCE RATE (2ND GRADE) | CHRONIC ABSENCE RATE (3RD GRADE) | CHRONIC ABSENCE RATE (K-3RD GRADE) |
|-----------------------------|-------------------------------------|----------------------------------|----------------------------------|----------------------------------|------------------------------------|
| Navajo/Apache Region | 7% | 19% | 16% | 13% | 14% |
| Navajo County | 13% | 22% | 20% | 17% | 18% |
| Apache County | 28% | 26% | 23% | 21% | 25% |
| Arizona | 13% | 12% | 11% | 10% | 12% |

Source: Arizona Department of Education. (2019). 2015-16 to 2018-19 Chronic Absenteeism Data. Unpublished data received by request

Note: The definition of chronic absenteeism used in this table includes children who are absent due to chronic illness.

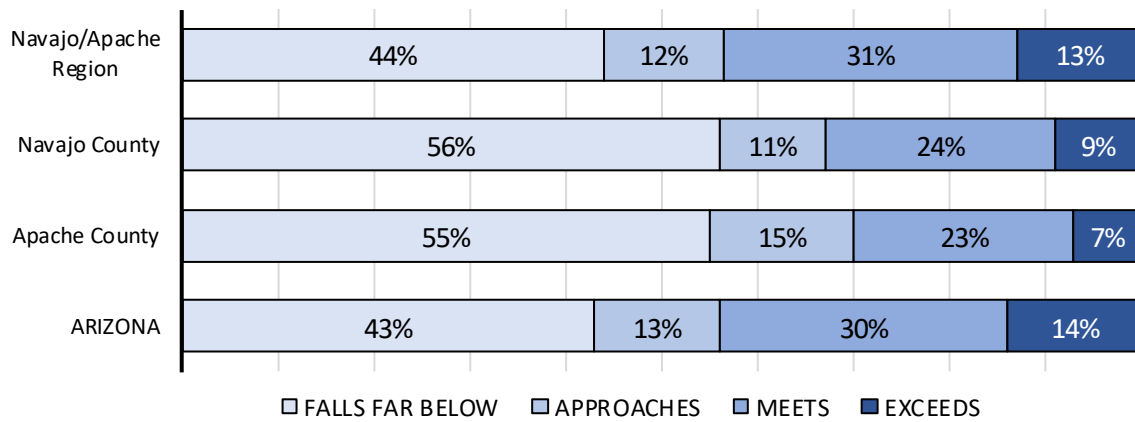
Achievement on Standardized Testing

Table 32. AzMERIT Assessment Results: 3rd Grade English Language Arts, 2017-18

| GEOGRAPHY | STUDENTS TESTED | FALLS FAR BELOW | APPROACHES | MEETS | EXCEEDS | PASSING |
|-----------------------------|-----------------|-----------------|------------|------------|------------|------------|
| Navajo/Apache Region | 986 | 44% | 12% | 31% | 13% | 44% |
| Navajo County | 1,325 | 56% | 11% | 24% | 9% | 33% |
| Apache County | 812 | 55% | 15% | 23% | 7% | 30% |
| Arizona | 84,922 | 43% | 13% | 30% | 14% | 44% |

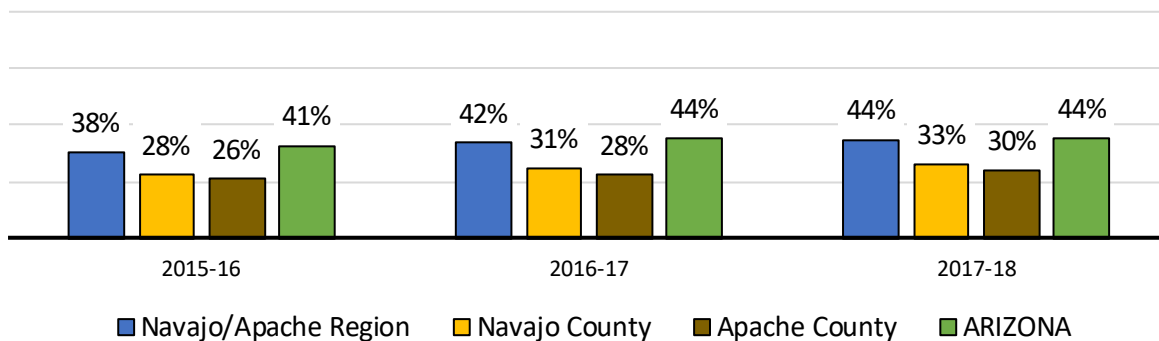
Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Figure 6. AzMERIT Assessment Results: 3rd Grade English Language Arts, 2017-18



Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Figure 7. Trends in passing rates for 3rd-grade English Language Arts AzMERIT, 2015-16 to 2017-18



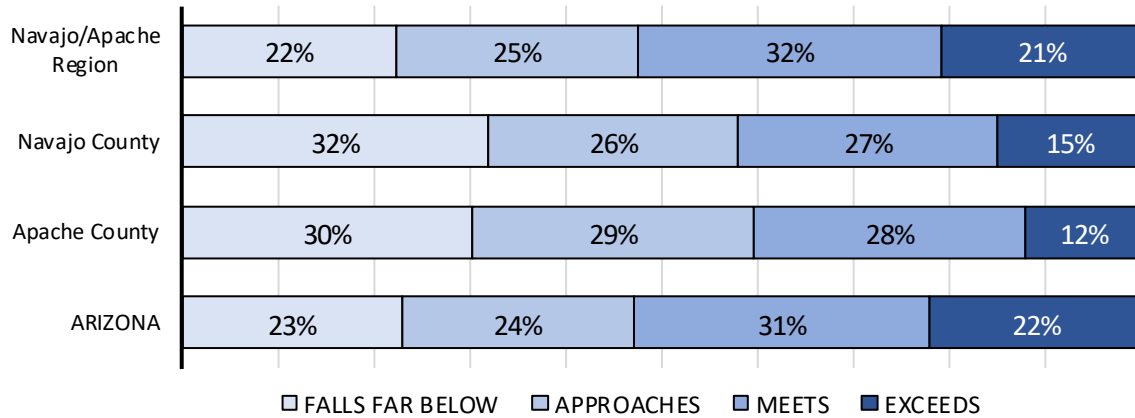
Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Table 33. AzMERIT Assessment Results: 3rd Grade Math, 2017-18

| GEOGRAPHY | STUDENTS TESTED | FALLS FAR BELOW | APPROACHES | MEETS | EXCEEDS | PASSING |
|-----------------------------|-----------------|-----------------|------------|------------|------------|------------|
| Navajo/Apache Region | 988 | 22% | 25% | 32% | 21% | 53% |
| Navajo County | 1,312 | 32% | 26% | 27% | 15% | 42% |
| Apache County | 815 | 30% | 29% | 28% | 12% | 40% |
| Arizona | 85,105 | 23% | 24% | 31% | 22% | 53% |

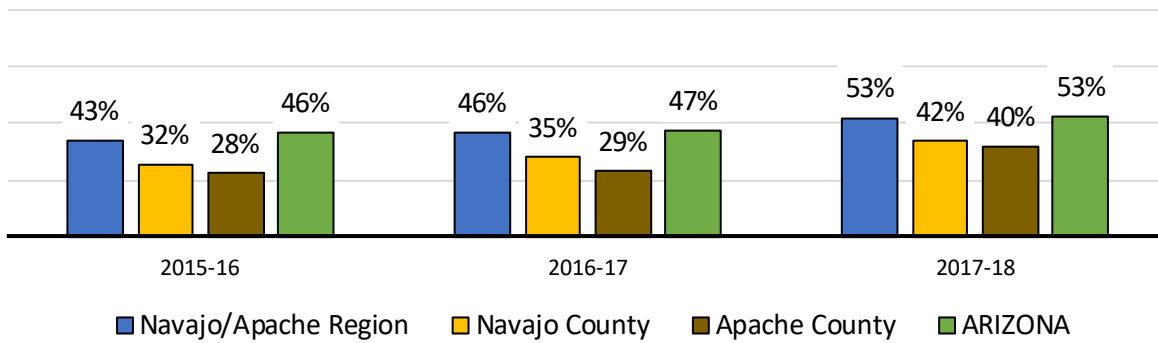
Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Figure 8. AzMERIT Assessment Results: 3rd Grade Math, 2017-18



Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Figure 9. Trends in passing rates for 3rd-grade Math AzMERIT, 2015-16 to 2017-18



Source: Arizona Department of Education. (2019). 2017-18 AzMERIT Assessment Results. Custom tabulation of assessment data

Graduation Rates and Adult Educational Attainment

Table 34. Graduation and dropout rates, 2017

| GEOGRAPHY | FOUR-YEAR SENIOR COHORT | FOUR-YEAR GRADUATES | FOUR-YEAR GRADUATION RATE | FIVE-YEAR GRADUATES | FIVE-YEAR GRADUATION RATE | DROPOUT RATE (7TH TO 12TH GRADES) |
|-----------------------------|-------------------------|---------------------|---------------------------|---------------------|---------------------------|-----------------------------------|
| Navajo/Apache Region | 1,140 | 921 | 81% | 953 | 83% | 4% |
| Navajo County | 1,517 | 1,187 | 78% | 1,229 | 81% | 6% |
| Apache County | 921 | 678 | 74% | 721 | 78% | 6% |
| Arizona | 84,802 | 66,363 | 78% | 70,178 | 82% | 5% |

Source: Arizona Department of Education. (2019). Cohort 2017 Four Year Graduation Rate Data, Cohort 2017 Five Year Graduation Rate Data, and Dropout Rates 2017. Custom tabulation of graduation and dropout data

Table 35. Trends in four-year graduation rates, 2015 to 2017

| GEOGRAPHY | FOUR-YEAR GRADUATION RATE (2015) | FOUR-YEAR GRADUATION RATE (2016) | FOUR-YEAR GRADUATION RATE (2017) |
|-----------------------------|----------------------------------|----------------------------------|----------------------------------|
| Navajo/Apache Region | 82% | 84% | 81% |
| Navajo County | 79% | 81% | 78% |
| Apache County | 76% | 74% | 74% |
| Arizona | 79% | 80% | 78% |

Source: Arizona Department of Education. (2019). Cohort 2014-2017 Four Year Graduation Rate Data. Custom tabulation of graduation data

Table 36. Trends in five-year graduation rates, 2015 to 2017

| GEOGRAPHY | FIVE-YEAR GRADUATION RATE (2015) | FIVE-YEAR GRADUATION RATE (2016) | FIVE-YEAR GRADUATION RATE (2017) |
|-----------------------------|----------------------------------|----------------------------------|----------------------------------|
| Navajo/Apache Region | 84% | 87% | 83% |
| Navajo County | 82% | 84% | 81% |
| Apache County | 80% | 79% | 78% |
| Arizona | 82% | 83% | 82% |

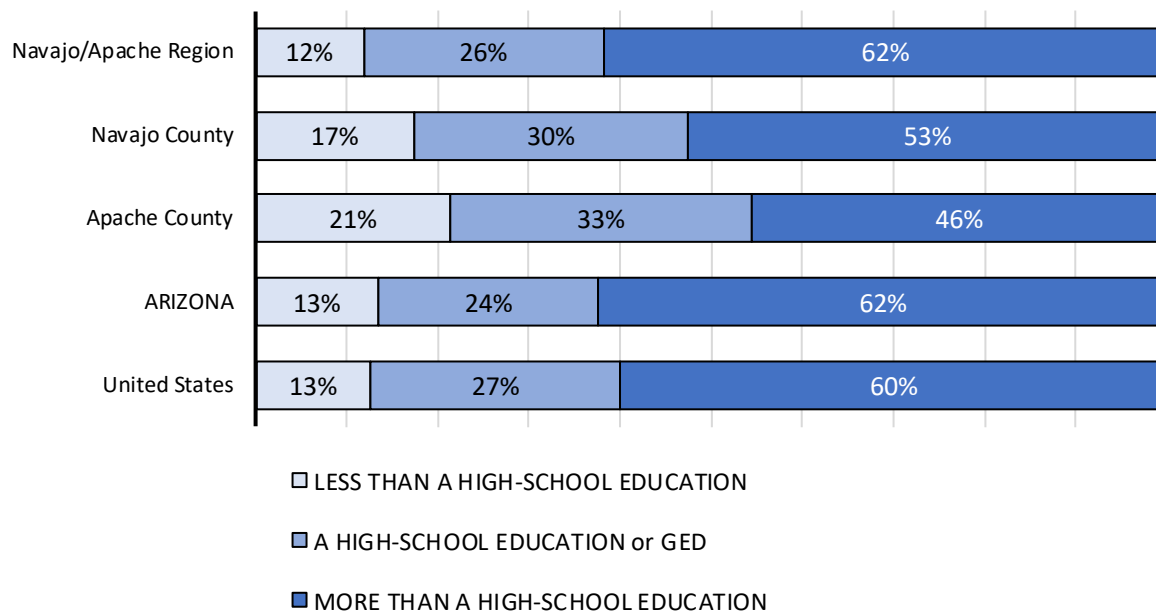
Source: Arizona Department of Education. (2019). Cohort 2014-2017 Five Year Graduation Rate Data. Retrieved from <https://www.azed.gov/accountability-research/data/>

Table 37. Trends in 7th-12th grade dropout rates, 2015-16 to 2017-18

| GEOGRAPHY | DROPOUT RATE (2015-16) | DROPOUT RATE (2016-17) | DROPOUT RATE (2017-18) |
|-----------------------------|------------------------|------------------------|------------------------|
| Navajo/Apache Region | 4% | 4% | 4% |
| Navajo County | 5% | 6% | 6% |
| Apache County | 6% | 7% | 6% |
| Arizona | 4% | 5% | 5% |

Source: Arizona Department of Education. (2019). 2015-16 to 2017-18 Dropout Rates. Retrieved from <https://www.azed.gov/accountability-research/data/>

Figure 10. Level of education for the adult population (ages 25 and older)



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B15002

Table 38. Level of education for mothers giving birth during calendar year 2017

| GEOGRAPHY | TOTAL NUMBER OF BIRTHS IN 2017 | MOTHER HAD LESS THAN A HIGH-SCHOOL EDUCATION | MOTHER HAD HIGH-SCHOOL DIPLOMA OR GED | MOTHER HAD MORE THAN HIGH-SCHOOL |
|-----------------------------|--------------------------------|--|---------------------------------------|----------------------------------|
| Navajo/Apache Region | 859 | 15% | 30% | 54% |
| Navajo County | 1,507 | 21% | 34% | 45% |
| Apache County | 946 | 17% | 31% | 52% |
| Arizona | 81,664 | 17% | 26% | 56% |

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Note: Due to a small number of births for which the mother's educational attainment is unknown, entries in this table may not sum to 100%

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.^{94,95} 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 18 months of age,⁹⁶ those disparities that persist until kindergarten tend to predict later academic problems.⁹⁷

Access to early care and education. Though high-quality early care and education can promote development, families often face barriers in accessing these opportunities for their children. Families living in rural areas are more likely to face an inadequate child care supply, but Arizona families in both urban and rural areas face a gap between the number of young children and the availability of licensed child care.^{98,99,100} In fact, Arizona has a deficit of about 22,230 licensed early care and education slots to meet the needs of working families, without accounting for parents continuing their own education, or those not in the workforce but seeking out early learning programs to help assure their preschool age children are able to make a strong start in school.¹⁰¹ Even when early education is available, the cost can be prohibitive. According to the U.S. Department of Education, only 19 percent of four-year-olds in Arizona are enrolled in publicly-funded free or reduced cost preschool programs, compared to 41 percent nationally.¹⁰² If not enrolled in publicly-funded programs, the annual cost of full-time center-based care for a young child in Arizona is nearly equal to the cost of a year at a public college.^{103,104}

Child care subsidies can be a support for families who have financial barriers to accessing early learning services.¹⁰⁵ In June 2019, for the first time since the Great Recession, the Arizona Department of Economic Security's (DES) child care subsidy waiting list was suspended, meaning all children who qualify for subsidies are able to receive them, assuming that they are able to find a provider.¹⁰⁶ This is due to \$56 million in additional federal funds from the Child Care and Development Fund (CCDF) that was authorized by the State Legislature, and the funding increase has also allowed DES to increase provider reimbursement rates, which may make it easier for families to use their child care subsidies.¹⁰⁷

High quality early care and education. In addition to the early experiences children have in their homes, high quality early care and education services can also promote physical, cognitive, and social-emotional development and health, particularly for children from disadvantaged backgrounds.^{108,109,110} Children whose education begins in 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.¹¹¹ This translates into a return on investment to society through increased educational achievement and employment, reductions in crime, and better overall health of children as they mature into adults.^{112,113} Not only does access to affordable, quality child care make a positive difference for children's health and development, it also allows parents to maintain stable employment and support their families.¹¹⁴

Establishing that available early care and education programs meet quality standards is important to ensure these early environments support positive outcomes for children's well-being, academic achievement, and success later in life.¹¹⁵ Providers are considered quality educational environments by the Arizona Department of Economic Security (DES) if they receive a Quality First three-star rating or higher (see below) or are accredited by a national organization, such as the Association for Early Learning Leaders or the National Association for the Education of Young Children (NAEYC)¹¹⁶.

High quality early education environments have teachers with more education, experience, and supports that increase their skills in developing positive teacher-child interactions, providing enriching age-appropriate experiences and guiding appropriate behaviors.¹¹⁷ These quality environments may be particularly important for children with challenging behaviors, because lower teacher-child ratios and access to professional development and early childhood mental health consultation can help avoid preschool expulsion.^{118,119,120}

Quality First is Arizona's Quality Improvement and Rating System (QIRS) for early child care and preschool providers.¹²¹ A Quality First Star Rating represents where along the continuum of quality (1 to 5 stars) a program was rated and how they are implementing early childhood best practices. One star indicates a program is participating in Quality First, is regulated, in good standing, and is making the commitment to work on quality improvement. Three stars indicate that a program is of good quality care, and families can be confident that children are well cared for in such an environment. Five stars indicate the highest level of quality attainable, where families will find low staff-child ratios and group sizes, highly educated personnel, and strong curriculum which optimizes children's comprehensive development. The number of providers across the state that meet quality standards (three-star rating or higher) has increased across the last 5 years such that 25 percent of the 857 participating providers in 2013 met or exceeded quality standards, and 76 percent of 1,032 participating providers in 2019 met or exceeded quality standards.¹²²

High quality early care and education practices, including lower teacher-child ratios, access to professional development, and early childhood mental health consultation, can help avoid preschool expulsion.^{123, 124} Nationally, preschool expulsions and suspensions occur at high rates and disproportionately impact children of color, specifically young Black boys.^{125,126} In 2016, an estimated 50,000 preschoolers were suspended and 17,000 preschoolers expelled nationwide, with Black children 2.2 times more likely to be suspended or expelled than other children.¹²⁷

The U.S. Department of Education Office of Civil Rights began collecting data on preschool suspension and expulsion in 2011 and, as a result of federal changes to the Child Care Development Block Grant in 2014, Arizona began collecting provider-reported data on early learning environment expulsion in 2017.^{128,129} Given the positive impact of early educational experiences on children’s cognitive and emotional development and the negative impact of suspension and expulsion on educational outcomes, it is essential to identify areas with higher rates of expulsion to provide targeted supports.¹³⁰

As an alternative to expulsion, early education providers in Arizona have an opportunity to identify young children as being at risk for expulsion and to receive consultation from experts to help intervene in problem behaviors. Consultation is provided through on-site mental health consultation, available for Quality First and some non-Quality First providers in most but not all regions in the state, as well as through a statewide DES-managed hotline. If that child is then able to remain in the center, this is documented as a prevented expulsion and their case is closed out. The reported number of prevented expulsions of young children receiving subsidies increased from seven in 2017 to 45 in 2018.

Young children with special needs. The availability of early learning opportunities and services for young children with special needs is an ongoing concern across the state, particularly in the more geographically remote communities and some tribal communities. Children with special health care needs are defined as “those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.”¹³¹ Adverse Childhood Experiences (ACEs)^{ix} include childhood experiences of abuse, neglect, and other forms of potential trauma. According to the National Survey of Children’s Health, children with special health care needs are more likely to experience more adverse childhood experiences than typically developing children,¹³² and are at an increased risk for maltreatment and neglect,^{133,134} suggesting they may particularly benefit from high quality teacher-child interactions in classrooms.^{135,136} Almost half (46%) of families with a child with special needs in Arizona have incomes below 200 percent of the federal poverty level, suggesting that even if they can identify an appropriate provider, affording quality care is likely to be a burden.¹³⁷

Ensuring all families have access to timely and appropriate screenings for children who may benefit from early identification of special needs can help improve outcomes for these children and their families. Timely intervention can help young children with, or at risk for, developmental delays improve language, cognitive, and socio-emotional development.^{138,139} It also reduces educational costs by decreasing the need for special education.¹⁴⁰ In Arizona,

^{ix} ACEs include 8 categories of traumatic or stressful life events experienced before the age of 18 years. The 8 ACE categories are sexual abuse, physical abuse, emotional abuse, household adult mental illness, household substance abuse, domestic violence in the household, incarceration of a household member, and parental divorce or separation.

services available to families with children with special needs include those provided through the Arizona Early Intervention Program (AzEIP),¹⁴¹ the Arizona Department of Education Early Childhood Special Education program,¹⁴² and the Division of Developmental Disabilities (DDD).¹⁴³

What the Data Tell Us

Access to Early Care and Education

- In the Navajo/Apache Region, 45 percent of children (ages 3 and 4) are enrolled in nursery school, preschool, or kindergarten. While this is a slightly larger proportion than in Navajo and Apache counties (43% for each) and across the state (38%), it is lower than across the country as a whole (48%) (Table 39).
- In the Navajo/Apache Region, nearly all (96%) licensed child care capacity is provided by child care centers, with the remainder provided by family child care providers (4%) (Table 40).
- The Navajo/Apache Region has a higher percentage of providers who are accredited (25%) than Navajo County (17%) or the state (10%), as well as a higher percentage of potential child care slots (provider capacity) with accredited providers (21%) than Navajo County (17%) and the state (12%) (Table 41).
- Median monthly child care costs for approved family homes are similar across the region, county, and state. Median costs for certified group homes are slightly lower in the Navajo/Apache Region compared to the state, whereas median costs for licensed centers in the region are at least \$160 less than the state. Overall in the region, licensed centers are the most expensive care setting for infants and 1 to 2 year olds, certified group homes are the most expensive care setting for 3 to 5 year olds, and approved family homes the least expensive care setting for all ages (Table 42).
- Child care costs are relatively more expensive in Navajo County and Apache County than across the state overall. At median levels, sending an infant to a licensed center requires around one-fifth (18% in Navajo County; 21% in Apache County) of a family's income. Given that almost one in five Navajo/Apache residents lives in poverty and one-quarter of households in the Navajo/Apache Region are spending 30 percent or more of their income on housing, this is a notable proportion of income needed to cover child care for families that may already have difficulty meeting their basic needs (Table 43).
- The large majority of children who are eligible for Department of Economic Security (DES) child care subsidies in the Navajo/Apache Region have received them in recent years, although the proportion has decreased from 94 percent in 2015 to 89 percent in 2018. This proportion is slightly lower than the state overall, where 92 percent of eligible children received child care subsidies in 2018 (Table 44).
- For Arizona Department of Child Safety (DCS)-involved children specifically, the proportion of eligible children receiving DES subsidies in the region is lower than for all eligible children and has also declined overall, from 82 percent in 2015 to 80 percent in 2018. This decline in DCS-involved children receiving subsidies was also seen at a state level, with 82 percent of DCS-involved children receiving subsidies in Arizona in 2018 compared to 91 percent in 2015 (Table 45).

- The proportion of eligible families not using DES child care subsidies has increased over time at the region, county, and state level. In 2018, eight percent of eligible families in the Navajo/Apache Region did not use their child care subsidies (Table 46).

High Quality Early Care and Education

- Quality educational environments are defined by the Department of Economic Security (DES) as providers that are accredited by a national organization or providers that have received a state-approved quality indicator that is recognized by the department. From 2017 to 2018, the number of children receiving subsidies in quality environments decreased in the Navajo/Apache Region and Navajo County, while increasing across the state. However, the number of Department of Child Safety (DCS) children in quality environments increased at the region, county, and state level during this time (Table 47).
- In 2019, a total of four child care providers in the Navajo/Apache Region participated in Quality First, all of which were quality-level settings (public 3-5 stars). A total of 103 children were enrolled at a Quality First provider site and forty-nine children received Quality First scholarships (Table 48 & Table 49).
- In 2018, no early learning programs in Navajo County or Apache County reported any expulsions of young children receiving child care subsidies to DES (Table 50).

Young Children with Special Needs

- The number of young children (ages 3-5) enrolled in special education increased slightly from 2015-2016 (173) to 2018-2019 (182) in the Navajo/Apache Region (Table 51).
- In school year 2018-2019, nearly half (46%) of the 182 children (3-5) enrolled in special education in the region were diagnosed with a speech or language impairment and 41 percent with a developmental delay (Table 52).
- Fifteen percent of students (grades 1-3) are enrolled in special education in the region, a rate slightly higher than the state (12%) and both counties (14% Navajo County; 11% Apache County) (Table 53).
- Special education enrollment for this age group has continued to increase in the region since 2015-2016 (11%), with 15 percent of children in first through third grades enrolled in special education in 2018-2019 (Table 54).
- From 2016 to 2017, the percentage of children (ages 0-2) who were referred to the Arizona Early Intervention Program (AzEIP) and found eligible decreased from 60 percent to 54 percent in the Navajo/Apache Region. Only 34 percent of referrals were found eligible in Apache County in 2017, down from 42 percent in 2016 (Table 55).
- From 2017 to 2018, the number of active AzEIP cases in the Navajo/Apache Region increased by seven percent, with a much greater increase in Apache County (19%) (Table 56).

- The number of children receiving services from the Division of Developmental Disabilities (DDD) has increased over time at the region, county, and state levels since 2015. In the Navajo/Apache Region, children ages 0-2 receiving DDD services have increased by 24 percent, with an increase of 181 percent in Navajo County over the same time period (Table 57 & Table 58).

Access to Early Care and Education

Table 39. School enrollment for children (ages 3 and 4)

| GEOGRAPHY | POPULATION OF CHILDREN (AGES 3-4) | NUMBER ENROLLED IN SCHOOL | PERCENT ENROLLED IN SCHOOL |
|-----------------------------|-----------------------------------|---------------------------|----------------------------|
| Navajo/Apache Region | 1,890 | 843 | 45% |
| Navajo County | 3,279 | 1,403 | 43% |
| Apache County | 2,173 | 937 | 43% |
| Arizona | 182,970 | 69,712 | 38% |
| United States | 8,190,503 | 3,892,317 | 48% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, Table B14003

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

Table 40. Number and licensed capacity of licensed or registered child care providers by type, 2018

| GEOGRAPHY | NANNIES OR INDIVIDUAL PROVIDERS | | CHILD CARE CENTERS | | FAMILY CHILD CARE PROVIDERS | | TOTAL PROVIDERS | |
|-----------------------------|---------------------------------|----------|--------------------|------------|-----------------------------|-----------|-----------------|------------|
| | NUMBER | CAPACITY | NUMBER | CAPACITY | NUMBER | CAPACITY | NUMBER | CAPACITY |
| Navajo/Apache Region | 0 | 0 | 9 | 620 | 3 | 24 | 12 | 644 |
| Navajo County | 0 | 0 | 13 | 749 | 5 | 38 | 18 | 787 |
| Apache County | 0 | 0 | 4 | 286 | 0 | 0 | 4 | 286 |
| Arizona | 26 | 90 | 1,527 | 182,561 | 656 | 3,871 | 2,209 | 186,522 |

Source: Arizona Department of Economic Security. (2019). 2018 Child Care Assistance Data. Unpublished data received by request

Table 41. Number and licensed capacity of nationally accredited child care providers, 2018

| GEOGRAPHY | NUMBER OF ACCREDITED PROVIDERS | PERCENT OF PROVIDERS WHO ARE ACCREDITED | CAPACITY IN ACCREDITED PROVIDERS | PERCENT OF PROVIDER CAPACITY WHICH IS WITH ACCREDITED PROVIDERS |
|-----------------------------|--------------------------------|---|----------------------------------|---|
| Navajo/Apache Region | 3 | 25% | 135 | 21% |
| Navajo County | 3 | 17% | 135 | 17% |
| Apache County | 0 | 0% | 0 | 0% |
| Arizona | 213 | 10% | 22,931 | 12% |

Source: Arizona Department of Economic Security. (2019). 2018 Child Care Assistance Data. Unpublished data received by request

Note: Table 41 shows the number of DES licensed or registered centers, homes, or individual providers listed in the CCR&R who have a national accreditation, such as NECPA—National Early Childhood Program Accreditation, CDA—Child Development Association, AMI—American Montessori International, or NAEYC—National Association for the Education of Young Children.

Table 42. Median monthly charge for full-time child care, 2018

| GEOGRAPHY | APPROVED FAMILY HOMES | | | CERTIFIED GROUP HOMES | | | LICENSED CENTERS | | |
|-----------------------------|-----------------------|--------------|--------------|-----------------------|--------------|--------------|------------------|--------------|--------------|
| | 1 TO 2 YEAR | 3 TO 5 YEAR | 3 TO 5 YEAR | 1 TO 2 YEAR | 3 TO 5 YEAR | 3 TO 5 YEAR | 1 TO 2 YEAR | 3 TO 5 YEAR | 3 TO 5 YEAR |
| | INFANTS | OLDS | OLDS | INFANTS | OLDS | OLDS | INFANTS | OLDS | OLDS |
| Navajo/Apache Region | \$400 | \$400 | \$400 | \$550 | \$520 | \$510 | \$650 | \$580 | \$500 |
| Navajo County | \$400 | \$400 | \$400 | \$550 | \$480 | \$480 | \$700 | \$550 | \$500 |
| Apache County | N/A | N/A | N/A | N/A | N/A | N/A | \$700 | \$560 | \$560 |
| Arizona | \$400 | \$400 | \$400 | \$600 | \$560 | \$560 | \$861 | \$760 | \$660 |

Source: Arizona Department of Economic Security. (2019). 2018 Child Care Assistance Data. Unpublished data received by request

Note: Approved family homes are family home child care providers who care for up to 4 children in their home and have completed the necessary steps to apply and be certified by DES or a tribal authority. Certified group homes are family home child care providers who care for 5-10 children in their home and are licensed ("certified") by ADHS or a tribal authority. Child care centers are child care providers who care for 10 or more children at a location separate from their residence and are licensed by ADHS or regulated by a military or tribal authority.

Table 43. Cost of center-based child care as a percentage of income, 2018

| GEOGRAPHY | MEDIAN FAMILY INCOME (ACS 2013-2017) | COST FOR AN INFANT | COST FOR A 1 TO 2 YEAR OLD CHILD | COST FOR A 3 TO 5 YEAR OLD CHILD |
|---------------|---|-----------------------|-------------------------------------|-------------------------------------|
| Navajo County | \$46,034 | 18% | 14% | 13% |
| Apache County | \$40,231 | 21% | 17% | 17% |
| Arizona | \$63,812 | 16% | 14% | 12% |

Sources: Arizona Department of Economic Security. (2019). 2018 Child Care Market Rate Survey. Unpublished data received by request & Arizona Department of Economic Security. (2019). 2018 Child Care Market Rate Survey Report. Retrieved from <https://des.az.gov/file/14277/download>

Table 44. Children receiving DES child care subsidies, 2015 to 2018

| GEOGRAPHY | NUMBER OF CHILDREN RECEIVING SUBSIDIES | | | | PERCENT OF ELIGIBLE CHILDREN RECEIVING SUBSIDIES | | | |
|---------------------------------|---|-----------|-----------|-----------|---|------------|------------|------------|
| | 2015 | 2016 | 2017 | 2018 | 2015 | 2016 | 2017 | 2018 |
| Navajo/Apache Region | 90 | 91 | 88 | 87 | 94% | 94% | 93% | 89% |
| Navajo County | 182 | 168 | 155 | 138 | 91% | 91% | 95% | 84% |
| Apache County | <10 | <10 | <10 | 12 | DS | DS | DS | 80% |
| Arizona | 19,040 | 17,784 | 16,922 | 19,813 | 94% | 93% | 93% | 92% |

Source: Arizona Department of Economic Security. (2019). 2015-2018 Child Care Assistance Data. Unpublished data received by request

Note: This table reflects children receiving subsidies who are not DCS-involved.

Table 45. DCS-involved children receiving DES child care subsidies, 2015 to 2018

| GEOGRAPHY | NUMBER OF DCS CHILDREN RECEIVING SUBSIDIES | | | | PERCENT OF DCS ELIGIBLE CHILDREN RECEIVING SUBSIDIES | | | |
|---------------------------------|---|-----------|-----------|-----------|---|------------|------------|------------|
| | 2015 | 2016 | 2017 | 2018 | 2015 | 2016 | 2017 | 2018 |
| Navajo/Apache Region | 54 | 78 | 90 | 78 | 82% | 83% | 78% | 80% |
| Navajo County | 88 | 108 | 111 | 100 | 87% | 87% | 83% | 79% |
| Apache County | <10 | 24 | 32 | 28 | DS | 83% | 91% | 78% |
| Arizona | 13,098 | 13,352 | 12,201 | 12,219 | 91% | 89% | 88% | 82% |

Source: Arizona Department of Economic Security. (2019). 2015-2018 Child Care Assistance Data. Unpublished data received by request

Table 46. Eligible families not using DES child care subsidies, 2015 to 2018

| GEOGRAPHY | FAMILIES NOT USING SUBSIDY, 2015 | FAMILIES NOT USING SUBSIDY, 2016 | FAMILIES NOT USING SUBSIDY, 2017 | FAMILIES NOT USING SUBSIDY, 2018 |
|-----------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Navajo/Apache Region | 4% | 4% | 6% | 8% |
| Navajo County | 7% | 8% | 6% | 13% |
| Apache County | 13% | 11% | 22% | 23% |
| Arizona | 6% | 6% | 7% | 8% |

Source: Arizona Department of Economic Security. (2019). 2015-2018 Child Care Assistance Data. Unpublished data received by request

High Quality Early Care and Education

Table 47. Children in quality educational environments, 2017 and 2018

| GEOGRAPHY | TOTAL NUMBER OF CHILDREN IN QUALITY ENVIRONMENTS, 2017 | TOTAL NUMBER OF CHILDREN IN QUALITY ENVIRONMENTS, 2018 | NUMBER OF DCS CHILDREN IN QUALITY ENVIRONMENTS, 2017 | NUMBER OF DCS CHILDREN IN QUALITY ENVIRONMENTS, 2018 |
|-----------------------------|--|--|--|--|
| Navajo/Apache Region | 57 | 53 | 28 | 35 |
| Navajo County | 94 | 82 | 40 | 50 |
| Apache County | 2 to 18 | 2 to 18 | <10 | <10 |
| Arizona | 13,706 | 17,295 | 6,063 | 6,938 |

Source: Arizona Department of Economic Security. (2019). Child Care Assistance Dataset. Unpublished data received by request

Note: These data only reflect children receiving child care subsidies from DES. Quality educational environments are defined by the Department of Economic Security as providers that are accredited by a national organization or providers that have received a state-approved quality indicator that is recognized by the department. More information about Arizona's quality educational environments can be found in the DES CCDF State Plan FY2019-FY2021, available at <https://des.az.gov/documents-center>

Table 48. First Things First Quality First child data, State Fiscal Year 2019

| GEOGRAPHY | QUALITY FIRST SCHOLARSHIPS: NUMBER OF CHILDREN SERVED | NUMBER OF CHILDREN ENROLLED AT A QUALITY FIRST PROVIDER SITE | NUMBER OF CHILDREN ENROLLED AT A QUALITY FIRST PROVIDER SITE WITH A PUBLIC 3-5 STAR RATING | PERCENT OF CHILDREN IN A QUALITY-LEVEL SETTING (PUBLIC 3-5 STARS) |
|-----------------------------|---|--|--|---|
| Navajo/Apache Region | 49 | 103 | 103 | 100% |
| Arizona | 9,179 | 62,215 | 45,278 | 73% |

Source: First Things First. (2019). Quality First, a Signature Program of First Thing First. Unpublished data received by request

Note: These data reflect regionally-funded Quality First provider sites and statewide-funded Quality First Redesign provider sites. Data reflect children enrolled at provider sites with a public rating. Star ratings are not publicly available when provider sites decline to publish their initial rating or when a rating is not yet assigned.

Table 49. First Things First Quality First child care provider data, State Fiscal Year 2019

| GEOGRAPHY | NUMBER OF CHILD CARE PROVIDERS SERVED | NUMBER OF CHILD CARE PROVIDERS SERVED WITH A PUBLIC 3-5 STAR RATING | PERCENT OF CHILD CARE PROVIDERS SERVED WITH A PUBLIC 3-5 STAR RATING |
|-----------------------------|---------------------------------------|---|--|
| Navajo/Apache Region | 4 | 4 | 100% |
| Arizona | 1,119 | 821 | 73% |

Source: First Things First. (2019). Quality First, a Signature Program of First Thing First. Unpublished data received by request

Note: These data reflect regionally-funded Quality First provider sites and statewide-funded Quality First Redesign provider sites. Data reflect children enrolled at provider sites with a public rating. Star ratings are not publicly available when provider sites decline to publish their initial rating or when a rating is not yet assigned.

Table 50. Number of children birth to five years old receiving subsidy expelled from an early learning program or expulsion was prevented, 2017 and 2018

| GEOGRAPHY | NUMBER OF CHILDREN EXPELLED IN 2017 | NUMBER OF CHILDREN EXPELLED IN 2018 | NUMBER OF EXPULSIONS PREVENTED IN 2017 | NUMBER OF EXPULSIONS PREVENTED IN 2018 |
|---------------|-------------------------------------|-------------------------------------|--|--|
| Navajo County | 0 | 0 | 0 | 0 |
| Apache County | 0 | 0 | 0 | 0 |
| Arizona | 27 | 57 | <10 | 45 |

Source: Arizona Department of Economic Security. (2019). 2017-2018 Child Care Assistance Data. Unpublished data received by request

Young Children with Special Needs

Table 51. Children (ages 3-5) enrolled in special education, 2015-16 to 2018-19

| GEOGRAPHY | CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2015-16) | CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2016-17) | CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2017-18) | CHILDREN (AGES 3-5) IN SPECIAL EDUCATION (2018-19) |
|-----------------------------|--|--|--|--|
| Navajo/Apache Region | 173 | 187 | 196 | 182 |
| Navajo County | 227 | 257 | 247 | 218 |
| Apache County | 80 | 112 | 125 | 117 |
| Arizona | 14,295 | 15,257 | 16,159 | 16,432 |

Source: Arizona Department of Education. (2019). 2015-16 to 2018-19 Special Education Enrollments. Unpublished data received by request

Table 52. Children (ages 3-5) enrolled in special education by type of disability, 2018-19

| GEOGRAPHY | NUMBER OF CHILDREN (AGES 3-5) ENROLLED | DEVELOPMENTAL DELAY | SPEECH OR LANGUAGE IMPAIRMENT | PRE-SCHOOL SEVERE DELAY | AUTISM | HEARING IMPAIRMENT | OTHER DISABILITIES |
|-----------------------------|--|---------------------|-------------------------------|-------------------------|-----------|--------------------|--------------------|
| Navajo/Apache Region | 182 | 41% | 46% | 6% | DS | DS | 7% |
| Navajo County | 218 | 41% | 44% | 10% | DS | DS | 6% |
| Apache County | 117 | 56% | 36% | DS | DS | DS | 9% |
| Arizona | 16,432 | 42% | 39% | 12% | 3% | 1% | 3% |

Source: Arizona Department of Education. (2019). 2018-19 Special Education Enrollments. Unpublished data received by request

Table 53. Students (grades 1-3) enrolled in special education, 2018-19

| GEOGRAPHY | TOTAL STUDENTS | STUDENTS IN SPECIAL EDUCATION | PERCENT OF STUDENTS IN SPECIAL EDUCATION |
|-----------------------------|----------------|-------------------------------|--|
| Navajo/Apache Region | 2,784 | 407 | 15% |
| Navajo County | 3,846 | 521 | 14% |
| Apache County | 2,250 | 249 | 11% |
| Arizona | 246,897 | 30,503 | 12% |

Source: Arizona Department of Education. (2019). 2018-19 Special Education Enrollments. Unpublished data received by request

Table 54. Percent of students (grades 1-3) enrolled in special education, 2015-16 to 2018-19

| GEOGRAPHY | STUDENTS IN SPECIAL EDUCATION (2015-16) | STUDENTS IN SPECIAL EDUCATION (2016-17) | STUDENTS IN SPECIAL EDUCATION (2017-18) | STUDENTS IN SPECIAL EDUCATION (2018-19) |
|-----------------------------|---|---|---|---|
| Navajo/Apache Region | 11% | 13% | 14% | 15% |
| Navajo County | 10% | 11% | 13% | 14% |
| Apache County | 9% | 11% | 11% | 11% |
| Arizona | 11% | 11% | 12% | 12% |

Source: Arizona Department of Education. (2019). 2015-16 to 2018-19 Special Education Enrollments. Unpublished data received by request

Table 55. Children referred to and found eligible for AzEIP, Federal Fiscal Years 2016 and 2017

| GEOGRAPHY | NUMBER OF CHILDREN (AGES 0-2) REFERRED TO AzEIP, FFY2016 | NUMBER OF CHILDREN (AGES 0-2) ELIGIBLE FOR AzEIP, FFY2016 | PERCENT OF REFERRALS FOUND ELIGIBLE, FFY2016 | NUMBER OF CHILDREN (AGES 0-2) REFERRED TO AzEIP, FFY2017 | NUMBER OF CHILDREN (AGES 0-2) ELIGIBLE FOR AzEIP, FFY2017 | PERCENT OF REFERRALS FOUND ELIGIBLE, FFY2017 |
|-----------------------------|--|---|--|--|---|--|
| Navajo/Apache Region | 145 | 87 | 60% | 138 | 75 | 54% |
| Navajo County | 363 | 186 | 51% | 393 | 211 | 54% |
| Apache County | 147 | 62 | 42% | 193 | 66 | 34% |
| Arizona | 16,063 | 9,383 | 58% | 16,344 | 9,770 | 60% |

Source: Arizona Department of Economic Security. (2019). AZEIP Service Dataset. Unpublished data received by request

Table 56. AzEIP caseloads, calendar years 2017 and 2018

| GEOGRAPHY | CUMULATIVE ACTIVE AzEIP CASES, 2017 | CUMULATIVE ACTIVE AzEIP CASES, 2018 | PERCENT CHANGE IN AzEIP CASELOADS FROM 2017 TO 2018 |
|-----------------------------|-------------------------------------|-------------------------------------|---|
| Navajo/Apache Region | 98 | 105 | +7% |
| Navajo County | 232 | 240 | +3% |
| Apache County | 95 | 113 | +19% |
| Arizona | 10,934 | 11,600 | +6% |

Source: Arizona Department of Economic Security. (2019). AZEIP Service Dataset. Unpublished data received by request

Table 57. Children (ages 0-2) receiving services from DDD, State Fiscal Years 2015 to 2018

| GEOGRAPHY | CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2015 | CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2016 | CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2017 | CHILDREN (AGES 0-2) RECEIVING DDD SERVICES, SFY2018 | PERCENT CHANGE FROM 2015 TO 2018 |
|-----------------------------|---|---|---|---|--|
| Navajo/Apache Region | 21 | 26 | 26 | 26 | +24% |
| Navajo County | 21 | 37 | 49 | 59 | +181% |
| Apache County | 12 | 13 | 14 | 14 | +17% |
| Arizona | 3,948 | 4,095 | 4,505 | 5,012 | +27% |

Source: Arizona Department of Economic Security. (2019). 2015-2018 Division Developmental Disabilities Data. Unpublished data received by request

Table 58. Children (ages 3-5) receiving services from DDD, State Fiscal Years 2015 to 2018

| GEOGRAPHY | CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2015 | CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2016 | CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2017 | CHILDREN (AGES 3-5) RECEIVING DDD SERVICES, SFY2018 | PERCENT CHANGE FROM 2015 TO 2018 |
|-----------------------------|---|---|---|---|--|
| Navajo/Apache Region | <10 | 10 | <10 | 11 | DS |
| Navajo County | <10 | <10 | <10 | 11 | DS |
| Apache County | <10 | <10 | <10 | <10 | DS |
| Arizona | 887 | 898 | 1,049 | 1,154 | +30% |

Source: Arizona Department of Economic Security. (2019). 2015-2018 Division Developmental Disabilities Data. Unpublished data received by request

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. Starting with the mother's health before pregnancy, many factors influence a child's health.¹⁴⁴ Exposures and experiences in utero, at birth, and during the early years set the stage for health and well-being throughout a child's life.^{145,146} Access to health insurance and preventive care influence not only a child's current health, but long-term development and future health.^{147,148,149}

Access to health services. The ability to obtain health care is critical for supporting the health of pregnant mothers and young children. Health care during pregnancy, or prenatal care, can reduce maternal and infant mortality and complications during pregnancy.^{150,151} 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.¹⁵² 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.^{153,154} Thus, access to health insurance is an indicator of children's access to health services. Children who lack health insurance are also more likely to be hospitalized and to miss school.¹⁵⁵

Maternal, infant, and child health. A number of factors occurring before conception and in utero influence child health, making characteristics of pregnant women important determinants of the birth and developmental outcomes of their children. Pregnancy during the teen years is associated with a number of health concerns for infants, including neonatal death, sudden infant death syndrome, and child abuse and neglect.¹⁵⁶ Teenaged mothers (and fathers) themselves are less likely to complete high school or college, and more likely to require public assistance and to live in poverty than their peers who are not parents.^{157,158,159}

In addition to age, a mother's health status before, during, and after pregnancy influences her child's health. Women who are obese before they become pregnant are at a higher risk of birth complications and neonatal and infant mortality than women who are normal weight before pregnancy.^{160,161} Babies born to obese women are at risk for chronic conditions later in life such as diabetes and heart disease.¹⁶² Preterm birth, in addition to being associated with higher infant and child mortality, often results in longer hospitalization, increased health care costs, and longer-term impacts such as physical and developmental impairments. Babies born at a low-birth weight (less than 5 pounds, 8 ounces) are also at increased risk of infant mortality and longer-term health problems such as diabetes, hypertension and cardiac disease.¹⁶³

Maternal mental health is a factor for children's well-being as well. Maternal depression during and after pregnancy negatively influences the mother's ability to maintain a healthy pregnancy as well as meet the demands of motherhood and form a secure attachment with her baby.^{164,}

¹⁶⁵ Quality preconception counseling and early-onset prenatal care can help reduce some of these risks for poor prenatal and postnatal outcomes by providing information, conducting screenings, and supporting an expectant mother's health and nutrition.¹⁶⁶

Substance use disorders. A mother's use of substances such as drugs and alcohol also has implications for her baby. Babies born to mothers who smoke are more likely to be born early (pre-term), have low birth weight, die from sudden infant death syndrome (SIDS) and have weaker lungs than babies born to mothers who do not smoke.^{167,168} 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.¹⁶⁹ This can create longer hospital stays, increase health care costs and increase complications for infants born with NAS. Infants exposed to cannabis (marijuana) in utero often have lower birth weights and are more likely to be placed in neonatal intensive care compared to infants whose mothers had not used the drug during pregnancy.¹⁷⁰

Parental substance abuse also has other impacts on family wellbeing. According to the National Survey of Children's Health, young children in Arizona are more than twice as likely to live with someone with a problem with alcohol or drugs than children in the U.S. as a whole (9.8 percent compared to 4.5 percent).¹⁷¹ 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.^{172,173} Substance abuse treatment and supports for parents and families grappling with these issues can help to ameliorate the short and long-term impacts on young children.¹⁷⁴

Nutrition and weight status. After birth, a number of factors have been associated with improved health outcomes for infants and young children. One factor is breastfeeding, which has been shown to reduce the risk of ear, respiratory and gastrointestinal infections, SIDS, overweight, and type 2 diabetes.¹⁷⁵ The American Academy of Pediatrics recommends exclusive breastfeeding for about 6 months, and continuing to breastfeed as new foods are introduced for 1 year or longer.¹⁷⁶

A child's weight status can have long-term impacts on health and well-being. Nationwide, an estimated 3 percent of children ages 2-19 are underweight, 16.6 percent are overweight, and 18.5 percent are obese.^{177,178} Obesity can have negative consequences on physical, social, and psychological well-being that begin in childhood and continue into and throughout adulthood.¹⁷⁹ Higher birth weight and higher infancy weight, as well as lower-socioeconomic status and low-quality mother-child relationships, have all been shown to be related to higher childhood weight and increased risk for obesity and metabolic syndrome (which is linked to an increase risk of heart disease, stroke, and diabetes).^{180, 181}

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.¹⁸² A national study showed that low-income children were more likely than higher-income children to have untreated cavities.¹⁸³ Despite high percentages of young Arizona children who have preventative dental care visits (68.4%) compared to the national average (57.8%), there is a relatively high percentage who have had decayed teeth or cavities (11.1%) compared to those across the nation overall (7.7%).¹⁸⁴ Low-income children in Arizona, specifically, are more likely to have untreated cavities and less likely to have had an annual dental visit than their higher-income peers.¹⁸⁵

First Things First's Oral Health strategy was able to provide 24,664 children birth to age 5 with a dental screening, and 16,837 children with a fluoride varnish in the Arizona State Fiscal Year 2019.¹⁸⁶ Many children had untreated tooth decay and other oral health needs identified through the screenings. Further, attempts were made to connect children to dental homes who either did not already have a dental home or who needed dental care.

Childhood immunizations. Immunization against preventable diseases protects children and the surrounding community from illness and potentially death. In order to ensure community immunity of preventable diseases, which helps to protect unvaccinated children and adults, rates of vaccination in a community need to remain high.¹⁸⁷

Illness and injury. Asthma is the most common chronic illness affecting children¹⁸⁸, and it is more prevalent among boys, Black children, American Indian or Alaska Native children, and children in low-income households.^{189,190} 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.¹⁹¹ Unintentional injuries are the leading cause of death for children in Arizona¹⁹² and nationwide.¹⁹³ It is estimated that as many as ninety percent of unintentional injury-related deaths could be preventable through better safety practices, such as use of proper child restraints in vehicles and supervision of children around water.¹⁹⁴ 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.^{195,196}

One useful metric 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 mothers and children fall in relation to these current national benchmarks (Healthy People 2020) 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 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.¹⁹⁷

What the Data Tell Us

Access to Health Services

- In the Navajo/Apache Region, 13 percent of people don't have health insurance coverage, a number similar to the state of Arizona overall (12%), but lower than in Navajo County (15%) or Apache County (23%) (Table 59).
- For young children specifically, health insurance coverage is slightly better than the overall population in the region and similar to the state, with eight percent of young children uninsured in the Navajo/Apache Region and seven percent of young children uninsured across the state. Navajo County has the same proportion of young children uninsured as the region, while Apache County has an elevated proportion (18% of young children uninsured) (Table 59 & Figure 11).
- More than half of births (57%) in the Navajo/Apache Region were covered by AHCCCS in 2017, a percentage slightly higher than the state (53%), but lower than Navajo (72%) and Apache (75%) counties. The proportion of self-paid births were comparable across the region, county, and state in 2017, with a lower proportion of births covered by the Indian Health Service (IHS) in the region and state (1% for each) than in Navajo County (3%) or Apache County (7%) (Table 60).

Maternal, Infant, and Child Health

- The Navajo/Apache Region had rates of prenatal care similar to Arizona as a whole, with one percent of births to mothers who had no prenatal care at all, 26.9 percent with no prenatal care in the first trimester, and six percent with fewer than five visits if they did have prenatal care, compared to state averages (3%, 26.4%, and 8% respectively). Neither the region nor the state met the Healthy People 2020 target of at least 77.9 percent of births to mothers who received prenatal care in the first trimester (Table 61).
- The proportion of babies born at low birth weight is slightly higher in the Navajo/Apache Region (8.7%) than in Apache County (7.7%) and the state (7.5%) and slightly lower than in Navajo County (9.7%). The region did not meet the Healthy People 2020 target of no more than 7.8 percent (Table 62).
- For rates of preterm birth, the Navajo/Apache Region (7.9%), along with the state (9.3%), met the Healthy People 2020 target of no more than 9.4 percent of births before 37 weeks gestation. Both counties exceeded this target (10.4% Navajo County; 9.9% Apache County) (Table 62).
- The Navajo/Apache Region did not meet the Healthy People 2020 target for maternal use of tobacco during pregnancy (1.4%), with 11.9 percent of births to mothers using tobacco while pregnant. This proportion was higher than across Navajo County (8%), Apache County (3.3%), and the state (4.7%) (Table 62).

- In 2017, Navajo County had an infant mortality rate (10 per 1,000 live births) that exceeded the Healthy People 2020 target (6.0 per 1,000 live births) and was higher than Apache County (6.3 per 1,000 live births) and state rates (5.6 per 1,000 live births) (Table 63).
- In 2016 and 2017, the rate of neonatal abstinence syndrome (i.e., opioid-addicted babies) in Navajo County (4.3 per 1,000 live births) was lower than the state rate (7.4 per 1,000 live births) (Table 64).

Substance Use Disorders

- Between June 2017 and June 2018, there were 123 suspected opioid overdoses among people of all ages in Navajo County and less than 10 in Apache County (Table 65).
- In 2017, there were less than 10 deaths directly attributed to opioids in both Navajo County and Apache County (Table 65).

Nutrition and Weight Status

- In Navajo County and Apache County, rates of breastfeeding for infants in Arizona's Special Supplemental Nutrition Program for Women, Infants and Children (WIC) are higher than across the state. While 83 percent of WIC infants in Navajo and Apache counties were breastfed at some point in infancy, rates of breastfeeding decline with the baby's age. Although the American Academy of Pediatrics recommends exclusive breastfeeding until six months of age, at six months of age, only 32 percent of infants in Navajo County and 40 percent in Apache County were breastfed and only eight percent had been exclusively breastfed at six months in both Navajo County and Apache County. At three months old, roughly one-third of WIC infants were exclusively breastfed in Navajo County (31%) and Apache County (37%). All of these proportions were higher than the state overall, however (Table 66).

Child Immunizations

- In the four-year period from 2015 to 2018, there were 184 cases of influenza in Navajo County and 160 in Apache County along with 95 cases of respiratory syncytial virus (RSV) in Navajo County and 152 in Apache County (Table 67).
- Across all required immunizations, with the exception of Hepatitis A, children in child care in the Navajo/Apache Region had similar vaccination rates to the state as a whole and met the Healthy People 2020 targets during the 2018-2019 school year (Table 68). However, the region fell below county and statewide immunization rates for kindergarten immunizations during this time and did not meet Healthy People 2020 targets (Table 69).

- In terms of immunization exemptions among children in child care, between 2016-2017 and 2017-2018 the region had higher rates of children receiving religious exemptions than across the state, but then had a lower proportion of religious exemptions (4.2%) than the state (4.5%) in 2018-2019. Across all years, the region had higher rates of exemptions from all required vaccines, with four percent of children in child care receiving exemptions from all required vaccines in the Navajo/Apache Region compared to three percent of children statewide in the 2018-2019 school year (Table 70).
- The Navajo/Apache Region had higher rates of children in kindergarten receiving personal belief exemptions and exemptions from all required vaccinations than statewide between the 2016-2017 and 2018-2019 school years. During the 2018-2019 school year, 14.1 percent of children in kindergarten received a personal belief exemption in the region compared to 5.9 percent of children statewide, and 10.2 percent of children in kindergarten received exemptions from all required vaccines in the Navajo/Apache Region compared to 3.8 percent statewide (Table 71).

Illness and Injury

- Reasons for non-fatal inpatient hospitalizations for unintentional injuries of young children in the Navajo/Apache Region aligned with the state, with falls (27% region; 33% state) and poisoning (22% region; 15% state) the most common. However, in both Navajo and Apache counties, the most common reason was burns (24% and 41%, respectively) (Table 72).
- Reasons for non-fatal emergency room visits were similar between region, counties, and state, with falls (43% for the region) the most common. The second most common differed, with “other” the second most common reason for the region and Navajo County, whereas being ‘struck by or against’ an object or person was the second most common reason for non-fatal emergency room visits in Apache County and across the state (Table 73).
- Between 2015 and 2017, there were 38 emergency room visits and 11 inpatient hospitalizations for asthma for young children in the Navajo/Apache Region. The average length of stay for asthma hospitalization (1.7 days) was lower for the region than the state (1.9 days) (Table 74).
- Between 2015 and 2017, there were 38 deaths of children in the Navajo/Apache Region, 71 percent of which were in young children (27 deaths). The proportion of child deaths that involved young children was the same in the Navajo/Apache Region and the state (71%), but higher than in Navajo County (68%) and Apache County (58%) (Table 75).

Access to Health Services

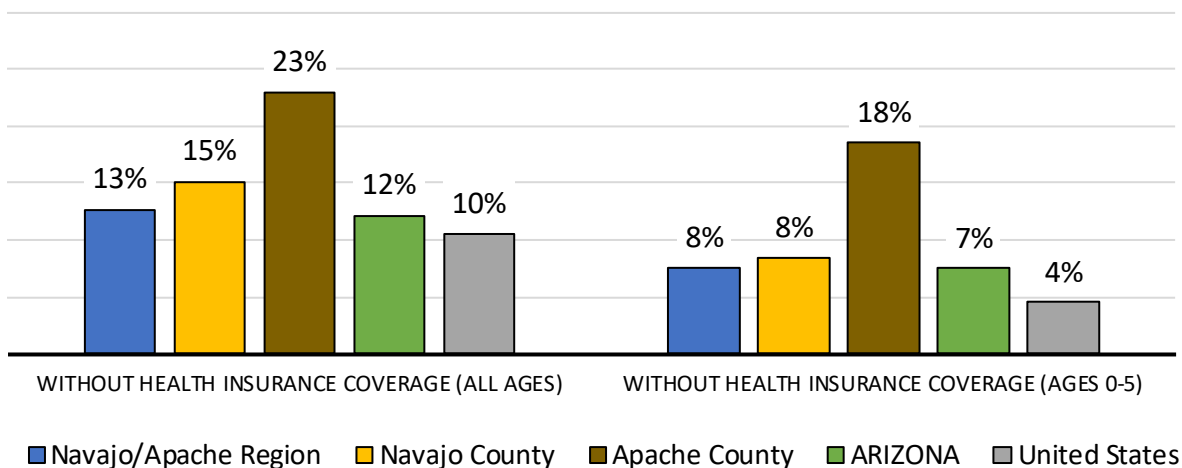
Table 59. Health insurance coverage

| GEOGRAPHY | POPULATION (ALL AGES) | PERCENT WITHOUT HEALTH INSURANCE COVERAGE (ALL AGES) | POPULATION OF YOUNG CHILDREN (AGES 0-5) | PERCENT WITHOUT HEALTH INSURANCE COVERAGE (AGES 0-5) |
|-----------------------------|-----------------------|--|---|--|
| Navajo/Apache Region | 70,298 | 13% | 5,212 | 8% |
| Navajo County | 105,552 | 15% | 9,336 | 8% |
| Apache County | 70,807 | 23% | 6,127 | 18% |
| Arizona | 6,701,990 | 12% | 520,741 | 7% |
| United States | 316,027,641 | 10% | 23,832,080 | 4% |

Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, 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" according to the U.S. Census Bureau.

Figure 11. Health insurance coverage for the population (all ages) and for young children (ages 0 to 5)



Source: U.S. Census Bureau. (2018). American Community Survey five-year estimates 2013-2017, 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" according to the U.S. Census Bureau.

Table 60. Payors for births during calendar year 2017

| GEOGRAPHY | TOTAL NUMBER OF BIRTHS IN 2017 | BIRTHS PAID BY | | |
|-----------------------------|--------------------------------|----------------|--------------------|-----------------|
| | | AHCCCS | BIRTHS PAID BY IHS | BIRTHS SELF-PAY |
| Navajo/Apache Region | 859 | 57% | 1% | 6% |
| Navajo County | 1,507 | 72% | 3% | 4% |
| Apache County | 946 | 75% | 7% | 4% |
| Arizona | 81,664 | 53% | 1% | 5% |

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Maternal, Infant, and Child Health

Table 61. Prenatal care for mothers giving birth during calendar year 2017

| GEOGRAPHY | TOTAL NUMBER OF BIRTHS IN 2017 | MOTHERS WHO HAD NO PRENATAL CARE | MOTHERS WHO HAD NO PRENATAL CARE IN FIRST TRIMESTER | MOTHERS WHO HAD FEWER THAN FIVE PRENATAL VISITS |
|-----------------------------|--------------------------------|----------------------------------|---|---|
| Navajo/Apache Region | 859 | 1% | 26.9% | 6% |
| Navajo County | 1,507 | 2% | 31.1% | 10% |
| Apache County | 946 | 2% | 27.6% | 11% |
| Arizona | 81,664 | 3% | 26.4% | 8% |
| Healthy People 2020 targets | | | 22.1% | |

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Table 62. Various risk factors for births during calendar year 2017

| GEOGRAPHY | TOTAL NUMBER OF BIRTHS IN 2017 | LOW BIRTH WEIGHT | PRETERM (LESS THAN 37 WEEKS) | NICU ADMISSIONS | MOTHER USED TOBACCO | MOTHER YOUNGER THAN 18 | MOTHER YOUNGER THAN 20 |
|-----------------------------|--------------------------------|------------------|------------------------------|-----------------|---------------------|------------------------|------------------------|
| Navajo/Apache Region | 859 | 8.7% | 7.9% | 10% | 11.9% | 2% | 7% |
| Navajo County | 1,507 | 9.7% | 10.4% | 8% | 8.0% | 3% | 10% |
| Apache County | 946 | 7.7% | 9.9% | 6% | 3.3% | 3% | 10% |
| Arizona | 81,664 | 7.5% | 9.3% | 7% | 4.7% | 2% | 6% |
| Healthy People 2020 targets | | 7.8% | 9.4% | | 1.4% | | |

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Table 63. Infant mortality, calendar year 2017

| GEOGRAPHY | INFANT DEATHS WITHIN SEVEN DAYS OF BIRTH, 2017 | INFANT MORTALITY RATE (WITHIN ONE YEAR; PER THOUSAND LIVE BIRTHS), 2017 |
|----------------------------|--|---|
| Navajo County | <6 | 10.0 |
| Apache County | <6 | 6.3 |
| Arizona | 234 | 5.6 |
| Healthy People 2020 target | | 6.0 |

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Table 64. Neonatal abstinence syndrome, calendar years 2016 and 2017

| GEOGRAPHY | NUMBER OF BABIES BORN WITH NEONATAL ABSTINENCE SYNDROME (NAS) | NAS RATE PER 1,000 LIVE BIRTHS |
|---------------|---|--------------------------------|
| Navajo County | 13 | 4.3 |
| Apache County | <6 | DS |
| Arizona | 1,228 | 7.4 |

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Substance Use Disorders

Table 65. Opioid overdoses and deaths, June 2017 to June 2018

| GEOGRAPHY | SUSPECTED OPIOID OVERDOSES, JUNE 2017 TO JUNE 2018 | DEATHS DIRECTLY ATTRIBUTED TO OPIOIDS, CALENDAR YEAR 2017 |
|---------------|---|--|
| Navajo County | 123 | <10 |
| Apache County | <10 | <10 |
| Arizona | 8,591 | 949 |

Source: Arizona Department of Health Services. (2018). Arizona Opioid Emergency Response Report, June 2017-June 2018. Retrieved from <https://www.azdhs.gov/documents/prevention/womens-childrens-health/injury-prevention/opioid-prevention/2017-opioid-emergency-response-report.pdf>

Nutrition and Weight Status

Table 66. Breastfeeding rates for infants in the WIC program, calendar year 2018

| GEOGRAPHY | WIC INFANTS EVER BREASTFED | WIC INFANTS BREASTFED AT 6 MONTHS | WIC INFANTS BREASTFED AT 12 MONTHS | WIC INFANTS EXCLUSIVELY BREASTFED AT 3 MONTHS | WIC INFANTS EXCLUSIVELY BREASTFED AT 6 MONTHS |
|---------------|-------------------------------|---|--|--|--|
| Navajo County | 83% | 32% | 16% | 31% | 8% |
| Apache County | 83% | 40% | 20% | 37% | 8% |
| Arizona | 77% | 26% | 14% | 13% | 3% |

Source: ADHS Office of Disease Prevention and Health Promotion. (2019). Arizona Health Status and Vital Statistics

Child Immunizations

Table 67. Cases of infectious diseases among young children (ages 0-5), 2015-2018 cumulative

| GEOGRAPHY | RESPIRATORY SYNCYTIAL | | | PERTUSSIS | HAEMOPHILUS | |
|---------------|--------------------------|-------------|-----------|-----------|-------------|-------|
| | INFLUENZA | VIRUS (RSV) | VARICELLA | | INFLUENZAE | MUMPS |
| Navajo County | 184 | 95 | <6 | <6 | <6 | <6 |
| Apache County | 160 | 152 | <6 | <6 | <6 | <6 |
| Arizona | 5,449 | 4,201 | 70 | 51 | 31 | <6 |

Source: Arizona Department of Health Services. (2019). 2015-2018 Child Infectious Disease Data. Custom data tabulation from requested data

Note: These numbers include both confirmed and probable cases. There were zero reported cases of meningococcal meningitis or measles.

Table 68. Children in child care with required immunizations, 2018-19

| GEOGRAPHY | NUMBER OF CHILDREN ENROLLED IN CHILD CARE | | | | | | | |
|---------------------------------|--|--------------|--------------|--------------|--------------|----------------|----------------|--------------|
| | | DTAP | POLIO | MMR | HIB | HEPATITIS A | HEPATITIS B | VARICELLA |
| Navajo/Apache Region | 717 | 92.6% | 94.4% | 95.0% | 94.3% | 79.4% | 94.3% | 95.0% |
| Navajo County | 724 | 94.1% | 95.4% | 96.1% | 95.6% | 80.5% | 96.1% | 96.3% |
| Apache County | 248 | 92.7% | 95.2% | 96.4% | 85.2% | 87.5% | 94.4% | 96.4% |
| Arizona | 86,829 | 92.4% | 94.2% | 94.9% | 94.2% | 85.5% | 93.3% | 94.7% |
| Healthy People 2020 targets | | 90.0% | 90.0% | 90.0% | 90.0% | 85.0% | 90.0% | 90.0% |

Source: Arizona Department of Health Services. (2019). 2018-19 Child Care Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Childcare Immunization Coverage by County, 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Note: The hepatitis A vaccine series (2 doses) is only required in Maricopa County child care settings, but is recommended in all other Arizona counties.

Table 69. Kindergarteners with required immunizations, 2018-19

| GEOGRAPHY | NUMBER OF CHILDREN ENROLLED IN KINDERGARTEN | | | | | |
|-----------------------------|---|--------------|--------------|--------------|--------------|--------------|
| | DTAP | POLIO | MMR | HEPATITIS B | VARICELLA | |
| Navajo/Apache Region | 775 | 81.4% | 83.0% | 82.1% | 86.2% | 88.1% |
| Navajo County | 1,013 | 88.5% | 89.3% | 88.4% | 91.0% | 92.6% |
| Apache County | 544 | 91.9% | 92.8% | 93.4% | 94.9% | 95.4% |
| Arizona | 79,981 | 92.7% | 93.3% | 93.0% | 94.4% | 95.6% |
| Healthy People 2020 targets | | 95.0% | 95.0% | 95.0% | 95.0% | 95.0% |

Source: Arizona Department of Health Services. (2019). 2018-19 Kindergarten Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Kindergarten Immunization Coverage by County, 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 70. Child care immunization exemption rates, 2016-17 to 2018-19

| GEOGRAPHY | RELIGIOUS EXEMPTION (2016-17) | RELIGIOUS EXEMPTION (2017-18) | RELIGIOUS EXEMPTION (2018-19) | EXEMPT FROM EVERY REQUIRED VACCINE (2017-18) | EXEMPT FROM EVERY REQUIRED VACCINE (2018-19) |
|---------------|-------------------------------|-------------------------------|-------------------------------|--|--|
| | Navajo/Apache Region | 5.5% | 6.4% | 4.2% | 5.3% |
| Navajo County | 3.2% | 4.4% | 3.0% | 3.5% | 2.9% |
| Apache County | 1.8% | 2.7% | 4.0% | 2.4% | 3.6% |
| Arizona | 3.9% | 4.3% | 4.5% | 2.9% | 3.0% |

Source: Arizona Department of Health Services. (2019). 2016-17 to 2018-19 Child Care Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Childcare Immunization Coverage by County, 2016-17 to 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Table 71. Kindergarten immunization exemption rates, 2016-17 to 2018-19

| GEOGRAPHY | PERSONAL BELIEF EXEMPTION (2016-17) | PERSONAL BELIEF EXEMPTION (2017-18) | PERSONAL BELIEF EXEMPTION (2018-19) | EXEMPT FROM EVERY REQUIRED VACCINE (2017-18) | EXEMPT FROM EVERY REQUIRED VACCINE (2018-19) |
|-----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|--|
| Navajo/Apache Region | 9.4% | 8.2% | 14.1% | 7.8% | 10.2% |
| Navajo County | 5.2% | 5.1% | 7.8% | 4.0% | 5.7% |
| Apache County | 2.3% | 2.5% | 6.1% | 2.3% | 4.4% |
| Arizona | 4.9% | 5.4% | 5.9% | 3.5% | 3.8% |

Source: Arizona Department of Health Services. (2019). 2016-17 to 2018-19 Kindergarten Immunization Data. Custom data tabulation from requested data; Arizona Department of Health Services. (2019). Kindergarten Immunization Coverage by County, 2016-17 to 2018-2019 School Years. Retrieved from <https://www.azdhs.gov/preparedness/epidemiology-disease-control/immunization/index.php#reports-immunization-coverage>

Illness and Injury

Table 72. Non-fatal hospitalizations of young children (ages 0-5) for unintentional injuries, 2015-2018 cumulative

| GEOGRAPHY | NUMBER OF NON-FATAL INPATIENT HOSPITALIZATIONS FOR CHILDREN (AGES 0-5), 2015-2018 TOTALS | MOST COMMON REASON FOR HOSPITALIZATION | SECOND MOST COMMON REASON FOR HOSPITALIZATION |
|-----------------------------|---|---|---|
| Navajo/Apache Region | 41 | Falls (27%) | Poisoning (22%) |
| Navajo County | 80 | Burns (24%) | Falls (20%) |
| Apache County | 37 | Burns (41%) | Poisoning (16%) |
| Arizona | 3,015 | Falls (33%) | Poisoning (15%) |

Source: Arizona Department of Health Services. (2019). 2015-2018 Child Injury Data. Unpublished data received by request

Table 73. Non-fatal emergency-room visits by young children (ages 0-5) for unintentional injuries, 2015-2018 cumulative

| GEOGRAPHY | NUMBER OF NON-FATAL EMERGENCY ROOM VISITS FOR CHILDREN (AGES 0-5), 2015-2018 TOTALS | MOST COMMON REASON FOR EMERGENCY ROOM VISIT | SECOND MOST COMMON REASON FOR EMERGENCY ROOM VISIT |
|-----------------------------|--|--|--|
| Navajo/Apache Region | 1,958 | Falls (43%) | Other Specified/Classifiable (13%) |
| Navajo County | 2,300 | Falls (41%) | Other Specified/Classifiable (13%) |
| Apache County | 1,190 | Falls (41%) | Struck by or against (14%) |
| Arizona | 181,068 | Falls (46%) | Struck by or against (14%) |

Source: Arizona Department of Health Services. (2019). 2015-2018 Child Injury Data. Unpublished data received by request

Note: "Struck by or against" denotes being struck by or against an object or person, not including vehicles.

Table 74. Asthma hospitalizations and emergency-room visits, 2015-2017 cumulative

| GEOGRAPHY | NUMBER OF INPATIENT HOSPITALIZATIONS FOR ASTHMA (AGES 0 TO 5, EXCEPT NEWBORNS), 2015-2017 TOTALS | AVERAGE LENGTH OF STAY (DAYS) FOR ASTHMA HOSPITALIZATION (AGES 0-5 EXCEPT NEWBORNS), 2015-2017 | NUMBER OF EMERGENCY ROOM VISITS FOR ASTHMA (AGES 0 TO 5, EXCEPT NEWBORNS), 2015-2017 TOTALS |
|-----------------------------|--|--|---|
| Navajo/Apache Region | 11 | 1.7 | 38 |
| Navajo County | 37 | 2.6 | 81 |
| Apache County | <6 | DS | 39 |
| Arizona | 2,232 | 1.9 | 12,812 |

Source: Arizona Department of Health Services. (2019). 2015-2017 Child Asthma Data. Unpublished data received by request

Table 75. Child mortality, 2015-2017 cumulative

| GEOGRAPHY | TOTAL NUMBER OF DEATHS OF YOUNG CHILDREN (AGES 0-4), 2015 TO 2017 | TOTAL NUMBER OF DEATHS OF CHILDREN (AGES 0-17), 2015 TO 2017 |
|-----------------------------|---|--|
| Navajo/Apache Region | 27 | 38 |
| Navajo County | 41 | 60 |
| Apache County | 38 | 65 |
| Arizona | 1,682 | 2,357 |

Source: Arizona Department of Health Services. (2019). 2015-2017 Child Mortality Data. Unpublished data received by request

Family Support and Literacy

Why it Matters

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 during a child's earliest years and lead to better social, physical, academic, and economic outcomes later in life.^{198,199,200,201} Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten, and elementary school.²⁰² Children benefit when their families have the knowledge, resources, and support to use positive parenting practices, and support their child's healthy development, nutrition, early learning, and language acquisition. Specifically, knowledge of positive parenting practices and child development has been identified as one of five key protective factors that improve child outcomes and reduce the incidence of child abuse and neglect.^{x,203}

Early literacy. Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten and elementary school.²⁰⁴ 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.²⁰⁵

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.^{206,207} 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.^{208,209} 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.²¹⁰

Communities may employ many resources to support families in engaging with their children, including through targeted programs like home visitation programs and "stay and play" programs, or participating in larger initiatives like Read On Arizona or the national "Reach Out & Read" program.²¹¹

Adverse childhood experiences. Unfortunately, not all children are able to begin their lives in positive, stable, nurturing environments. Experiences early in life can have lasting impacts on an individual's mental and physical health. Adverse Childhood Experiences (ACEs) have been linked

^x 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.

to future risky health behaviors (such as smoking, drug use, and alcoholism), chronic health conditions (including diabetes, depression, and obesity), poorer life outcomes (such as lower educational achievement and increased lost work time), and early death.²¹² 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.²¹³ Nationally and in Arizona, very young children are most at risk for child abuse, neglect, and fatalities from abuse and neglect. In 2017, children five years old and younger made up more than half (55%) of child maltreatment victims in Arizona.²¹⁴ Future poor health outcomes are also more likely as an individual's ACE score increases.²¹⁵ Children in Arizona are considerably more likely to have experienced two or more ACEs (27.3%), compared to children across the country (8.3%).²¹⁶ These children and their families may require specific, targeted resources and interventions in order to reduce harm and prevent future risk.²¹⁷

Mental and behavioral health. Behavioral health supports, both for children and caregivers, are often needed to address exposure to adverse childhood events. Infant and toddler mental health development involves the young child's developing capacity to "experience, regulate and express emotions; form close interpersonal relationships; and explore the environment and learn."²¹⁸ When young children experience stress and trauma they often suffer physical, psychological, and behavioral consequences and have limited responses available to react to those experiences. Understanding the behavioral health of mothers is also important for the well-being of Arizona's young children. Mothers dealing with behavioral health issues such as depression may not be able to perform daily caregiving activities, form positive bonds with their children, or maintain relationships that serve as family supports.²¹⁹

Child removals and foster care. There are situations where the harm in remaining with their family is determined to be too great to a child and they are removed from their home, either temporarily or permanently. In accordance with the Indian Child Welfare Act of 1978 (ICWA), many tribal governments manage their own child welfare systems that must work cooperatively with state systems.²²⁰ Children involved in foster care systems often have physical and behavioral health issues, in addition to the social-emotional needs brought on by being removed from a parent's care.²²¹ Foster parents often need education, support, and resources to ensure they are able to successfully care for foster children who may have these added health needs. According to a 2015 Arizona Department of Child Safety Independent Review, focusing on evidence-based targeted interventions for families at risk of child removal—including home visitation, positive parenting programs, and family-based therapy—may help lower this risk, thus reducing placements in foster care systems.²²²

What the Data Tell Us

Child Removals and Foster Care

- Between January 2018 and June 2018, there were 35 substantiated maltreatment reports in Navajo County and eight in Apache County. Of those substantiated reports, the majority were related to neglect (83% Navajo County; 75% Apache County), with a smaller proportion related to physical abuse (17% Navajo County; 25% Apache County) (Table 76).
- The statewide number of child removals by the Department of Child Safety (DCS) declined from 2015 to 2017 (Table 77 & Figure 12).
- Between January 2018 and June 2018, only five percent of DCS reports resulted in a child removal in Navajo County and 16 percent in Apache County, with 27 children removed in Navajo County and 18 in Apache County. While the percentage of children removed overall was the same for Apache County and the state (16%), there was a higher percentage of children with a prior removal in the last 24 months in Apache County (22%) than the state (9%). Navajo County had no children with a prior removal in the last 24 months (Table 78).
- While the number of foster placements declined from 2015 to 2018, the statewide number of licensed foster homes steadily increased during this time (Table 79 & Table 80).

Child Removals and Foster Care

Table 76. Substantiated maltreatment reports by type, January to June, 2018

| GEOGRAPHY | TOTAL SUBSTANTIATED MALTREATMENT REPORTS | PHYSICAL ABUSE | | | EMOTIONAL ABUSE |
|---------------|---|----------------|--------------|-------|--------------------|
| | | NEGLECT | SEXUAL ABUSE | ABUSE | |
| Navajo County | 35 | 83% | 17% | 0% | 0% |
| Apache County | 8 | 75% | 25% | 0% | 0% |
| Arizona | 3,104 | 83% | 13% | 4% | <1% |

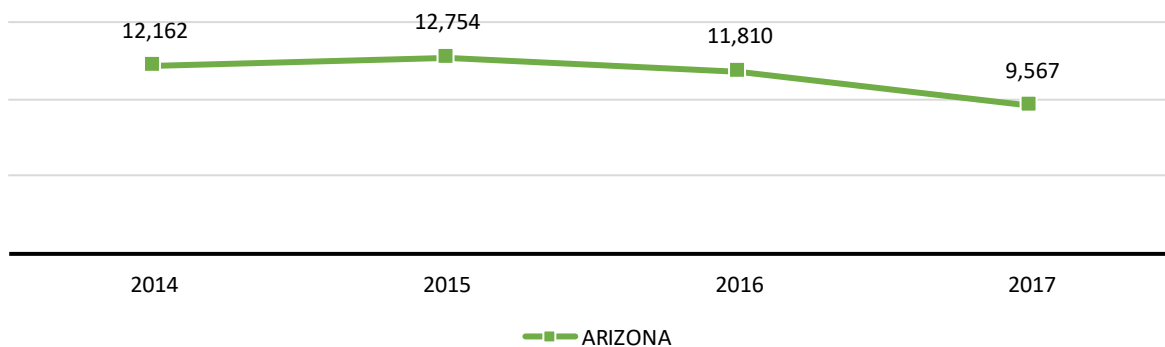
Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 77. Children removed by the Department of Child Safety (DCS), 2014 to 2017

| GEOGRAPHY | 2014 | 2015 | 2016 | 2017 |
|-----------|--------|--------|--------|-------|
| Arizona | 12,162 | 12,754 | 11,810 | 9,567 |

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Figure 12. Children removed by the Department of Child Safety (DCS), 2014 to 2017



Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 78. Children removed by the Department of Child Safety (DCS), January to June, 2018

| GEOGRAPHY | TOTAL REPORTS | NUMBER OF CHILDREN REMOVED | PERCENT OF CHILDREN REMOVED | NUMBER OF CHILDREN WITH PRIOR REMOVAL IN LAST 24 MONTHS | PERCENT OF CHILDREN WITH PRIOR REMOVAL IN LAST 24 MONTHS |
|---------------|---------------|----------------------------|-----------------------------|---|--|
| Navajo County | 493 | 27 | 5% | 0 | 0% |
| Apache County | 113 | 18 | 16% | 4 | 22% |
| Arizona | 30,943 | 4,797 | 16% | 434 | 9% |

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 79. Number of foster placements, 2015 to 2018

| GEOGRAPHY | 2015 | 2016 | 2017 | 2018 |
|-----------|--------|--------|--------|--------|
| Arizona | 17,592 | 18,906 | 16,899 | 14,929 |

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Table 80. Number of licensed foster homes, 2015 to 2018

| GEOGRAPHY | 2015 | 2016 | 2017 | 2018 |
|-----------|-------|-------|-------|-------|
| Arizona | 4,497 | 4,681 | 5,000 | 5,213 |

Source: Arizona Department of Child Safety. (2019). Semi-Annual Child Welfare Report. Retrieved from <https://dcs.az.gov/DCS-Dashboard>

Systems Coordination among Early Childhood Programs and Services

Why it Matters

From November 2016 to June 2017, First Things First convened the second Arizona Early Childhood Task Force, comprised of diverse leaders from across the state. The goal of the task force was to create an ambitious, yet attainable, statewide five-year plan for First Things First and Arizona’s early childhood system. Building from the model early-childhood system developed in 2010, the task force identified six desired outcomes, one of which is “When the early childhood system is successful, everyone will benefit from living in communities where the early childhood system is high-quality, centered on children and families, coordinated, integrated and comprehensive.” First Things First’s role in building this system is to foster cross-system collaboration among local, state, federal, and tribal organizations to improve the coordination and integration of programs, services, and resources for young children and their families.

Through system building, First Things First connects various components of the early childhood system to create a more holistic system that promotes shared results for children and families. Agencies that work together are often easier for families to access, and the services they provide are more responsive to those families’ needs. Coordination efforts may also increase agencies’ capacity to deliver services by identifying and addressing gaps in the service delivery continuum. By supporting a variety of coordination efforts, First Things First aims to create a high quality, interconnected, and comprehensive system of early-childhood service delivery that enhances children’s overall development and that is timely, culturally responsive, family driven, and community based. Determining how these efforts are affecting each of the 28 regions and their families can help inform services, programs, and policy decisions to benefit families and young children throughout the state.

What the Data Tell Us

Adverse Childhood Experiences (ACEs) has become the primary focus of a variety of sectors of the local community. The Navajo County Community Health Assessment and the Community Health Improvement Plan will begin to include specific data related to the birth to 5 population of children, their families and data points related to social determinants of health. Summit Healthcare Regional Medical Center has become the regional home for this work and they are approaching the scope of the data collection and resulting planning from the necessity to be inclusive of all of Navajo and Apache counties. There have been intentional community-level conversations about the necessity of using First Things First (FTF) data and the imperative need to include early childhood data in all community level strategic planning.

The Anna, Age Eight Institute for the Data-driven Prevention of Childhood Trauma in New Mexico is the framework that is being utilized to structure our community's work to move toward trauma-free communities. Dominic Cappello was the keynote speaker for the May 2019 Early Childhood Conference that the Navajo/Apache Regional Council funded and he ultimately stayed in the region for 4 extra days. Mr. Cappello engaged in the recording of a podcast on Adverse Childhood Experiences (ACEs) and conducted a community-level work session and training that launched our regions' ACEs movement. This work was then coined as the 10@100% Movement, which refers to the framework developed by The Anna, Age Eight Institute of 10 community sectors that must be adequate and accessible to all members of a community to move toward a trauma-free community. These ten sectors are defined as five necessary for survival: food, housing, medical and dental care, behavioral healthcare, and transportation; and five necessary for thriving communities: parent supports, early childhood learning, community schools, youth mentors, and job training. Well over 140 people attended this work session and training and remain engaged in this work. The outcome of this work session was the incorporation of the Anna Age Eight system framework into the ongoing community health data collection and planning work, resulting in the creation of sub-committee work groups formed to address community level ACEs. All of the regional and state-wide funded FTF grantees are engaged in this conversation. Also important to note that the inclusion of early childhood into each of these sub-committees is powerful. For this reason, the FTF-convened and facilitated collaborative meetings have been placed on hold with a plan to be reconvened once the membership of the ongoing 10@100% sub-committees has stabilized and new members can be added. The two FTF-convened collaborative meetings will work in alignment with the other 10@100% sub-committee groups, and each of the other groups will include early childhood in all of their decision making.

While the momentum of the inclusion of ACEs into multiple sectors of the community conversation has been strong, it has become necessary to reschedule the summer/fall 2019 High Quality Early Childhood Partners and the Birth to 5 Community Partners meetings to allow members to be engaged in the ACEs work. Partners are beginning to request that the next meetings be scheduled, so planning has begun for meetings to be held in spring 2020.

The loss of a well-respected, and deeply loved, member from the regional council and from the early childhood community has been difficult. Her HealthySteps team took on her case load of children amongst themselves so that children and families would not go unserved. The redistribution of staff to cover pediatric clinics sharply reduced their availability to attend community meetings. The lead coordinator of the Navajo-Apache-Gila (NAG) Oral Health Coalition had been progressively declining in health, and passed away in the fall of 2019, leading to the need to identify new leadership for the NAG Oral Health Coalition. The transition away from the founding coordinator has been a long-time in coming, but very difficult. The coalition has struggled to remain relevant and membership has declined over time. Therefore, a result of the Children's Health System Change consultative work over the course of SFY19 was the recommendation to include children's oral health in an existing robust collaborative group. An offer was extended to the Oral Health Coalition to embed it into the Birth to 5 Community Partners Group, as an early childhood health focused group.

Communication, Public Information and Awareness

Why it Matters

Public awareness of the importance of early childhood development and health is critical in building a comprehensive, effective early childhood system in Arizona. Building public awareness and support for early childhood impacts individual behaviors as well as the broader objectives of system building. For the general public, information and awareness is the first step in taking positive action in support of children birth to 5. This could include a range of actions—from influencing their personal networks by sharing early childhood information to actively encouraging community leaders to support programs and services for young children. For parents and other caregivers, awareness is the first step to engaging in programs or behaviors that will better support their child’s health and development.

There is no single communications strategy that will achieve the goal of making early childhood an issue that more Arizonans value and prioritize. Therefore, integrated strategies that complement and build on each other are key to any successful strategic communications effort. Employing a range of communications strategies to share information—from traditional broad-based tactics such as paid media advertising to grassroots, community-based tactics such as community outreach—ensures that diverse audiences are reached more effectively across multiple media platforms. A thoughtful and disciplined combination of methods of delivering information is required to ensure multiple messaging touch-points for diverse audiences: families, civic organizations, faith communities, businesses, local leaders, and others.

What the Data Tell Us

Since State Fiscal Year 2011, First Things First (FTF) has led a collaborative, concerted effort to build public awareness and support across Arizona employing integrated communications strategies that now include:

- strategic messaging and branding
- community outreach
- community awareness
- social media
- digital content marketing
- earned media
- paid media advertising

Progress toward building support for children birth to 5 can be measured by changes in awareness, attitudes and behaviors, as demonstrated through key results of a periodic statewide survey and through tactical impact measures. The most recent statewide survey was conducted in September 2018 and included a general phone survey as well as an online survey of parents of young children. Key results include the following:

- Those who agree that the state should ensure all children have access to early childhood services increased from 80 percent in 2012 to 84 percent in 2018.
 - Among parents, this measure increased from 81 percent in 2016 (the first available parent survey results) to 87 percent in 2018.
- Those who agree that a child who received early education and healthcare services before age 5 is more likely to succeed in school and beyond increased from 82 percent in 2012 to 88 percent in 2018.
 - Among parents, agreement increased from 85 percent in 2016 to 87 percent in 2018.
- Those who agree that the state should put the same priority on early education as it does on K-12 education increased from 62 percent in 2012 to 72 percent in 2018.
 - Among parents, agreement increased from 69 percent in 2016 to 74 percent in 2018.

While understanding and supporting early childhood in general is critical, it's also important that Arizonans have a trustworthy source of early childhood resources and know about the availability of early childhood resources, programs and tools. For this reason, building awareness of FTF as a credible source is critical. Results of the most recent statewide survey show that, while some progress has been made, there is still more to be done to increase awareness about FTF.

- In the 2018 general survey, 87 percent of respondents had never heard of FTF, compared to 89 percent in 2012.
 - Among parents specifically, more had heard of FTF, with 66 percent stating they had never heard of FTF, compared to 69 percent in 2016.

While this statewide survey offers a measure of broad changes in attitudes and awareness, specific tactical measures of awareness and support-building strategies employed by FTF offer another point of information. These include:

- FTF implemented three annual statewide awareness campaigns since the last regional needs and assets reporting period. The SFY17-SFY18 campaign—*Help Them Get There*—shared messaging about the importance of the early years for future school and life success and that parents’ everyday positive interactions with babies, toddlers and preschoolers promote healthy development. The SFY19 campaign—*Givers of Care*—focused specifically on the important role of caregivers and quality early learning environments.
- These paid campaigns reached a large number of Arizonans, measured through the total number of traditional and digital media impressions. Traditional media impressions refer to television, radio, cinema, and billboard ads, while digital media impressions refer to online ads which appear on both desktop and smartphone devices. These statewide impressions—which measure the estimated number of views of FTF ads—are detailed below.

Table 81. First Things First media awareness campaign impressions, SFY17-SFY19

| | SFY17 | SFY18 | SFY19 |
|-------------------------------|------------|-------------|------------|
| Traditional media impressions | 10 million | 17 million | 11 million |
| Digital media impressions | 66 million | 100 million | 76 million |

Source: *First Things First. (2019). Communications Strategy Data. Unpublished data received by request*

- In addition, targeted digital advertising allows geographically-based targeting of audiences within regions with the ability to measure the number of click-throughs that digital ads garnered. The click-throughs delivered viewers to the FTF website. In SFY19, in the Navajo/Apache Region, digital advertising led to a total of 11,059 click-throughs to the FTF website where families could access more information and resources.
- In the area of social media, engagement with FTF early childhood online platforms has grown over the years. Particular success has been seen in the growth of Facebook Page

Likes for FTF, which grew from just 3,000 in 2012 to 142,600 in 2019. Content is also distributed through Twitter, LinkedIn and Instagram.

- Since inception in SFY17, FTF’s digital content marketing strategy which targets parents and families with engaging and informative video and blog posts via website, social media, and email has expanded its reach. In SFY19, 40 original, high-quality content pieces were published.
- In SFY19, an online searchable database of early childhood programs funded by FTF in all the regions launched. In the first six months, over 24,187 visits were logged.

In addition, FTF began a community engagement effort in SFY14 to recruit, motivate and support community members to take action on behalf of young children. The community engagement program is led by community outreach staff in regions which fund the FTF Community Outreach strategy. This effort focuses on engaging individuals across sectors—including business, faith, K-12 educators, and civic organizations—in the work of spreading the word about the importance of early childhood as trusted, credible messengers in their communities.

Focused efforts to engage parents’ most trusted messengers—which include pediatricians—included creating and distributing a toolkit for health providers to help them better understand and share information on the statewide free Birth to 5 Helpline. This toolkit was also distributed to attendees of the annual conference of the Arizona Chapter of the American Academy of Pediatrics. Other statewide awareness partnerships included creation and distribution of a grocery list tip pad for parents and caregivers sharing Read On Arizona’s Smart Talk tips, a digital content sharing partnership with Expect More Arizona and partnering with the Arizona Association for the Education of Young Children on a social media campaign promoting Week of the Young Child.

Because Arizona is so vast—with more than 500,000 children under age 6 and nearly 400,000 households with kids under age 6—engaging others in spreading the word about early childhood is critical to reaching across diverse geographic areas and expanding our reach. Supporters and Champions—who are trained in early childhood messaging and effective ways to share early childhood information—reported a total of 940 positive actions taken on behalf of young children throughout Arizona in SFY19. These actions range from leading presentations in support of early childhood to sharing FTF’s early childhood resources with parents at community events. Table 82 shows total recruitment of Supporters and Champions through SFY19 and actions taken in SFY19.

Table 82. FTF engagement of early childhood supporters and champions, SFY19

| GEOGRAPHY | SUPPORTERS | CHAMPIONS | SUPPORTER AND CHAMPION ACTIONS IN SFY19 |
|-----------------------------|------------|-----------|---|
| Navajo/Apache Region | 131 | 58 | 47 |
| Arizona | 6,258 | 1,170 | 940 |

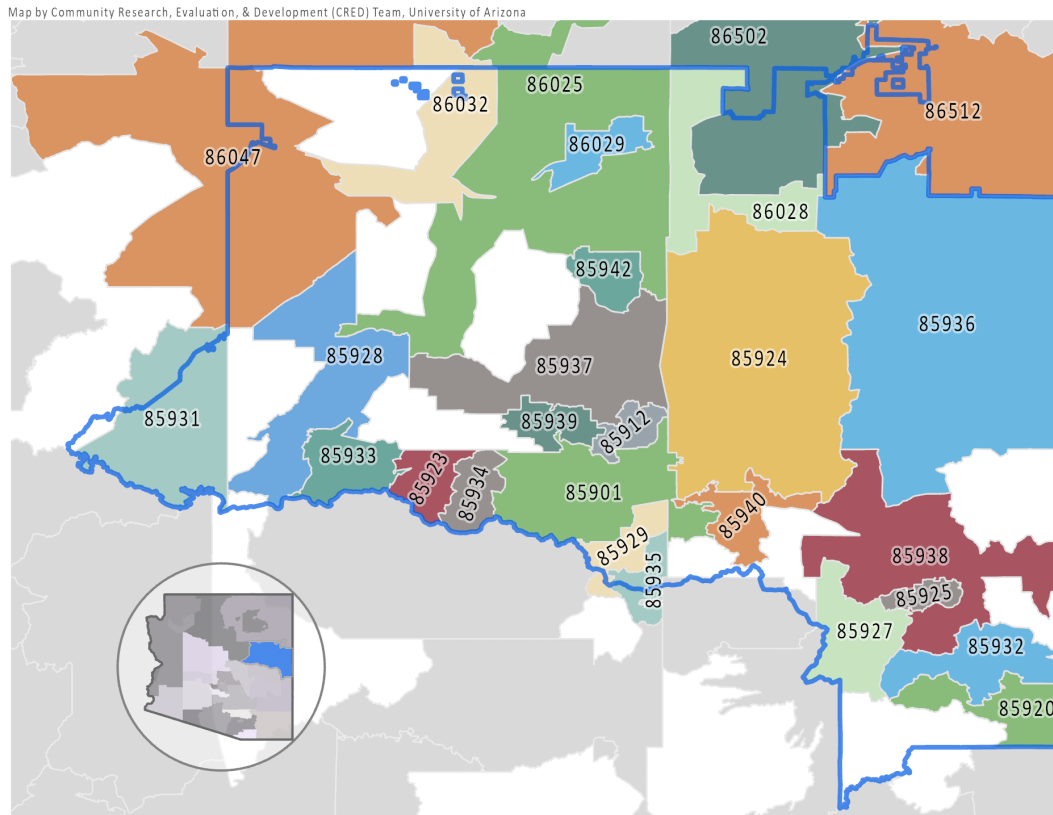
Source: First Things First. (2019). Communications Strategy Data. Unpublished data received by request

First Things First has also led a concerted effort to build awareness among policymakers at all levels (federal, tribal, state, and municipal) of the importance of early childhood. This includes: in-office meetings with elected leaders to provide general information on early childhood, as well as discuss the impact of proposed legislation; regular communication to policymakers with updates on early childhood research and the work of FTF (such as a quarterly email newsletter for policymakers and their staff); and site tours of FTF-funded programs to allow policymakers to see the impact of early childhood investments in their area. In SFY19, FTF also launched ACT4KIDS, a text-based system that alerts participants to timely developments in early childhood policy and opportunities to engage with policymakers. In its first nine months of implementation, more than 700 Arizonans had signed up to participate in ACT4KIDS.

In addition, FTF actively participates in the Arizona Early Childhood Alliance, comprised of more than 50 early childhood system leaders like United Way, the state affiliates of the National Association for the Education of Young Children, Southwest Human Development, Children’s Action Alliance, Read On Arizona, Stand for Children, Expect More Arizona, and the Helios Foundation, which represents a united voice of the early childhood community in advocating for early childhood programs and services. For the past three years, the Alliance has also led an annual Early Childhood Day at the legislature, which draws hundreds of Arizonans to the state Capitol to engage with policymakers and show their support for early childhood development and health.

Appendix 1: Map of zip codes of the Navajo/Apache Region

Figure 13. Map of the ZIP codes in the Navajo/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>)

Appendix 2: Zip Codes of the Navajo/Apache Region

Table 83. Zip Code Tabulation Areas in the Navajo/Apache Region

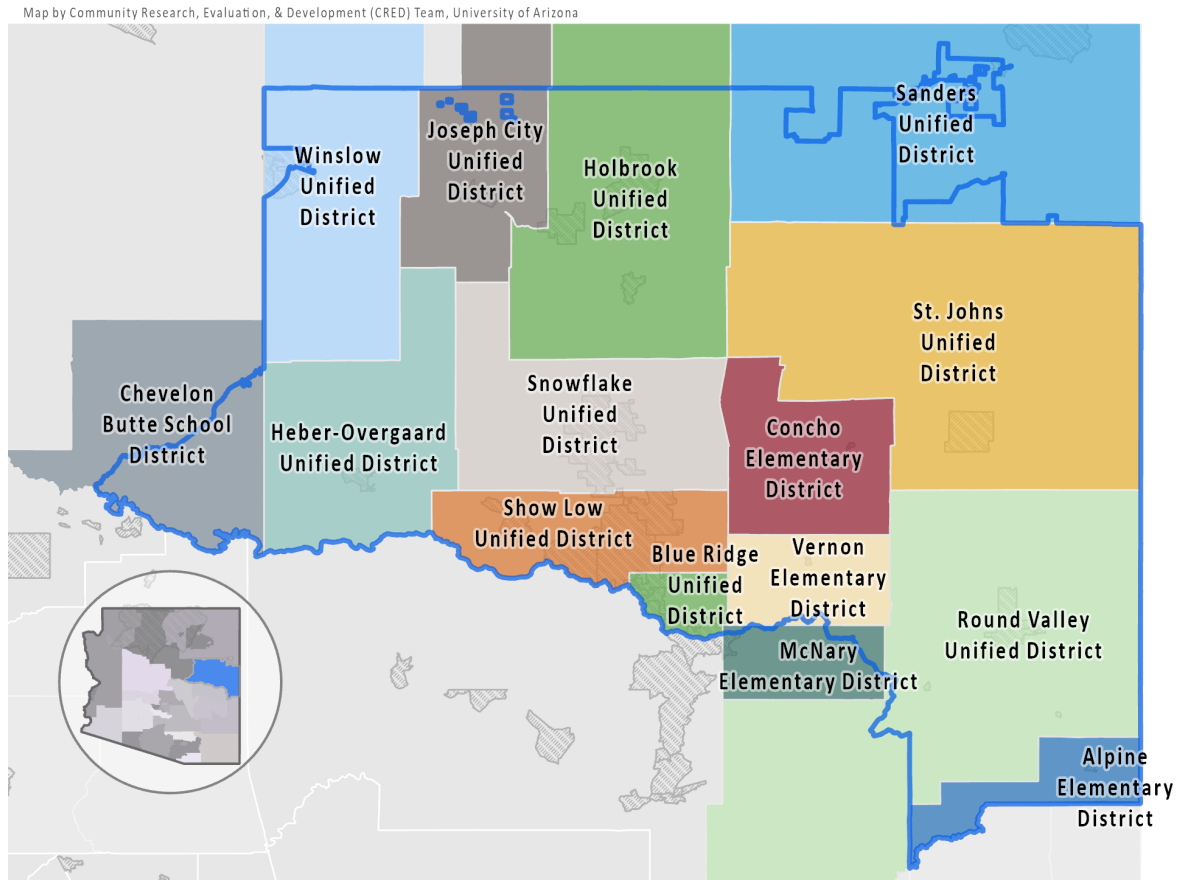
| ZIP CODE TABULATION AREA (ZCTA) | TOTAL POPULATION | POPULATION (AGES 0-5) | TOTAL NUMBER OF HOUSEHOLDS | HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5) | PERCENT OF ZCTA'S TOTAL POPULATION LIVING IN THE NAVAJO/ APACHE REGION | THIS ZCTA IS SHARED WITH |
|---------------------------------------|---------------------|--------------------------|----------------------------------|---|--|-----------------------------------|
| Navajo/Apache Region | 73,083 | 6,166 | 27,887 | 4,106 | | |
| 85901 | 17,207 | 1,289 | 7,009 | 883 | 100% | |
| 85912 | 178 | 12 | 80 | 10 | 100% | |
| 85920 | 464 | 14 | 236 | 11 | 100% | |
| 85923 | 621 | 61 | 214 | 39 | 100% | |
| 85924 | 2,683 | 121 | 1,232 | 79 | 100% | |
| 85925 | 4,893 | 503 | 1,740 | 344 | 100% | |
| 85927 | 176 | 2 | 89 | 2 | 100% | |
| 85928 | 1,102 | 98 | 423 | 56 | 100% | |
| 85929 | 8,308 | 631 | 3,304 | 459 | 100% | White Mountain Apache Tribe |
| 85931 | 203 | 6 | 104 | 3 | 98% | Coconino |
| 85932 | 364 | 10 | 179 | 9 | 100% | |
| 85933 | 3,033 | 156 | 1,428 | 94 | 100% | |
| 85934 | 574 | 43 | 228 | 28 | 100% | |
| 85935 | 4,432 | 290 | 1,830 | 199 | 94% | White Mountain Apache Tribe |
| 85936 | 4,293 | 365 | 1,404 | 237 | 100% | |
| 85937 | 7,638 | 838 | 2,613 | 525 | 100% | |
| 85938 | 2,366 | 235 | 935 | 157 | 100% | |
| 85939 | 4,400 | 515 | 1,390 | 334 | 100% | |
| 85940 | 1,443 | 104 | 559 | 74 | 100% | |
| 85942 | 80 | 11 | 32 | 4 | 100% | |

| ZIP CODE TABULATION AREA (ZCTA) | TOTAL POPULATION | POPULATION (AGES 0-5) | TOTAL NUMBER OF HOUSEHOLDS | HOUSEHOLDS WITH ONE OR MORE CHILDREN (AGES 0-5) | PERCENT OF ZCTA'S TOTAL POPULATION LIVING IN THE NAVAJO/ APACHE REGION | THIS ZCTA IS SHARED WITH |
|---------------------------------------|---------------------|--------------------------|----------------------------------|---|--|--------------------------------|
| Navajo/Apache Region | 73,083 | 6,166 | 27,887 | 4,106 | | |
| 86025 | 5,593 | 540 | 1,846 | 362 | 99% | Navajo Nation |
| 86028 | 47 | 2 | 29 | 1 | 100% | |
| 86029 | 320 | 18 | 91 | 13 | 100% | |
| 86032 | 1,463 | 199 | 453 | 113 | 97% | Navajo Nation |
| 86047 | 692 | 61 | 249 | 41 | 5% | Coconino & Navajo Nation |
| 86502 | 87 | 7 | 34 | 5 | 6% | Navajo Nation |
| 86512 | 422 | 35 | 155 | 24 | 17% | Navajo Nation |
| Other | 1 | 0 | 1 | 0 | | |

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

Appendix 3: School Districts in the Navajo/Apache Region

Figure 14. Map of school districts in the Navajo/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 84. School Districts/Local Education Authorities in the Navajo/Apache Region

| DISTRICT/LEA NAME | SCHOOLS IN DISTRICT/LEA | K-3RD GRADE STUDENTS IN DISTRICT/LEA | PERCENT OF K-3RD GRADE STUDENTS IN REGION | THIS DISTRICT IS SHARED WITH |
|---|-------------------------|--------------------------------------|---|------------------------------|
| Navajo/Apache Region | 48 | 3,861 | | |
| Snowflake Unified District | 6 | 715 | 100% | |
| Show Low Unified District | 7 | 678 | 100% | |
| Blue Ridge Unified School District No. 32 | 4 | 527 | 100% | |
| Holbrook Unified School District | 5 | 493 | 61% | Navajo Nation |
| Round Valley Unified District | 4 | 398 | 100% | |
| St Johns Unified District | 4 | 226 | 100% | |
| Edkey, Inc. - Sequoia Village School | 3 | 206 | 100% | |
| Sanders Unified District | 3 | 185 | 100% | |
| Heber-Overgaard Unified District | 4 | 151 | 100% | |
| Joseph City Unified District | 3 | 130 | 100% | |
| Concho Elementary District | 1 | 77 | 100% | |
| Vernon Elementary District | 1 | 49 | 100% | |
| Alpine Elementary District | 1 | 26 | 100% | |

Source: Arizona Department of Education. (2019). FY 2018 & FY 2019 Enrollment Data. Custom tabulation facilitated by agency staff

Note: This table only contains Districts/LEAs with enrolled K-3rd grade students physically located within regional boundaries. It does not reflect the residence of students that attend these schools. It does not include high school districts. These are the districts and charter operators from which data on preschool to 3rd grade students were drawn for the tables and figures presented in this report. The percentage shown in the "Percent of K-3rd grade students in the region" column was used to apportion district-level enrollment counts to the region. All other data were aggregated at the school level. The "Schools in district/LEA" and "K-3rd grade students in district/LEA" columns reflect totals for the district, not only the portion within the region. Winslow Unified District overlaps the Navajo/Apache Region, but all district schools are located in the Coconino Region. Chevelon Butte School District does not have any operating schools and instead coordinates transportation to cooperating schools in Heber-Overgaard Unified District, Pine Strawberry Elementary District, and Payson Unified District.

Appendix 4: Data Sources

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