

# # FIRST THINGS FIRST

White Mountain Apache Tribe Region



**2018 NEEDS AND ASSETS REPORT**

# **WHITE MOUNTAIN APACHE TRIBE REGIONAL PARTNERSHIP COUNCIL**

## **2018**

# **NEEDS AND ASSETS REPORT**

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Funded by

First Things First White Mountain Apache Tribe Regional Partnership Council



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Message from the Chair:

Since the inception of First Things First, the White Mountain Apache Tribe 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 programmatic and other systems-building 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 White Mountain Apache Tribe Regional Council would like to thank our Needs and Assets vendor, University of Arizona, for their knowledge, expertise and analysis of the White Mountain Apache Tribe 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 White Mountain Apache Tribe 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 on 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,



Laurel Endfield. Chair



# White Mountain Apache Tribe Regional Partnership Council

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# Introductory Summary and Acknowledgments

90 percent of a child's brain develops before kindergarten and the quality of a child's early experiences impact whether their brain will develop in positive ways that promote learning. 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 White Mountain Apache Tribe Region helps us in understanding the needs of young children, the resources available to meet those needs and gaps that may exist in those resources. An overview of this information is provided in the Executive Summary and documented in further detail in the full report.

The First Things First White Mountain Apache Tribe Regional Partnership Council recognizes the importance of investing in young children and ensuring that families and caregivers have options when it comes to supporting the healthy development of young children in their care. This report provides information that will aid the Council's funding decisions, as well as our work with community partners on building a comprehensive early childhood system that best meets the needs of young children in our community.

It is our sincere hope that this information will help guide community conversations about how we can best support school readiness for all children in the Yavapai region. This information may also be useful to stakeholders in our 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 our area.

## **Acknowledgments:**

We want to thank the Arizona Department of Economic Security and the Arizona Child Care Resource and Referral, the Arizona Department of Health Services, the Arizona Department of Education, the Census Bureau, the Arizona Department of Administration- Employment and Population Statistics, and the Arizona Health Care Cost Containment System, and Indian Health Services for their contributions of data for this report, and their ongoing support and partnership with First Things First on behalf of young children. Additionally, several local organizations contributed to the success of this report. The Council wishes to thank the White Mountain Apache Tribe Division of Health Programs, the Whiteriver Unified School District, White Mountain Apache Social Services, White Mountain Apache Tribe WIC, White Mountain Apache Tribe Child Find, Community Counts, and Apache Behavioral Health Service.

To the current and past members of the White Mountain Apache Tribe Regional Partnership Council, your vision, dedication, and passion have been instrumental in improving outcomes for young children and families within the region. Our current 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.

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# EXECUTIVE SUMMARY

This Needs and Assets Report is the sixth biennial assessment of early education, health, and family support in the First Things First White Mountain Apache Tribe Region.

## Population Characteristics

According to the U.S. Census, 2,003 children under the age of six resided in the White Mountain Apache Tribe Region in 2010, representing approximately 15 percent of the region's total population. The largest number of children (n=653) live in the Whiteriver area, representing about a third of the region's young children. According to the U.S. Census in 2010, 97 percent of children ages birth to 4 in the region were identified as American Indian, greater than the percentage in all Arizona reservations combined (92%), and the proportion of children who were identified as Hispanic or Latino (3%) was a third of that in all Arizona reservations combined (9%). In the White Mountain Apache Tribe Region, 38 percent of households have at least one child under 6 years of age.

According to the American Community Survey (ACS), 64 percent of children in the region live with a single parent, which is slightly lower than the proportion in all Arizona reservations combined (68%) but substantially higher than in the state as a whole (38%). The North Fork and East Fork-Fort Apache-Seven Mile-Turkey Creek areas had the highest percentages of children living with single parents (80% and 76%, respectively). The proportion of young children living in a grandparent's household in the region (41%) is similar to that in all Arizona reservations combined (40%). The highest rates of young children living in a grandparent's household were seen in Rainbow City (57%) and Cedar Creek (54%), where over half of young children lived with their grandparents.

Estimates from the ACS indicate that over half (54%) of residents age 5 and older in the White Mountain Tribe Region speak a Native North American language at home, a higher rate than across all Arizona reservations (50%). The percent of residents speaking Native North American languages at home were highest in the Rainbow City (69%) and Cibecue (69%) areas and lowest in the Hondah-McNary area (29%). Apache language instruction is imparted to children attending schools in the region, including at the early childhood learning centers (i.e. Head Start and FACE).

## Economic Characteristics

The median income for all families in the White Mountain Apache Tribe Region was \$30,784, according to recent estimates from the American Community Survey (ACS). The median income for families with married parents (husband-wife) and children under age 18 was higher (\$37,833); for households run by a single male in the White Mountain Apache Tribe Region lower, \$22,708; and much less for single female households, \$9,779. The low median income for single-householders in the region is a concern because the majority of young children (64%) live in single-parent households. Sixty percent of young children live in poverty in the region, higher than both the poverty rate among young children in all Arizona reservations (55%) and the rate statewide (29%). Nearly four out of five (79%) of families in the region with children aged four and under (58%) live below 185 percent of the federal poverty level (i.e., earned less than \$3,677 a month for a family of four), which is higher than the 77 percent across all Arizona reservations combined. In spite of this need, in the region, the number of children who received benefits from the White Mountain Apache Tribal TANF program on a yearly basis fell from 378 children in January 2013 to 259 children in January 2015, a 31 percent decrease.

Recent estimates from the ACS indicate that the unemployment rate in the White Mountain Apache Tribe Region was 42 percent, higher than the estimated unemployment rate for all Arizona Reservations (26%) and statewide (10%) rates. Overall, 76 percent of young children live with one or more parents who are in the labor force, which is higher than that seen in all Arizona reservations (64%). However, labor force participation among parents of young children varies by community.

Nutrition assistance programs, such as the Food Distribution Program on Indian Reservations (FDPIR), the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and the National School Lunch Program are important for helping those at risk of hunger. The number of young children participating in SNAP has declined since 2012, but this program still supports 1,746 young children in the region annually. Enrollment in the White Mountain Apache Tribe WIC program has also declined slightly between 2013 and 2015, though the program still served nearly 2,000 women, infants, and children in 2015. There is a relatively high availability of WIC authorized retailers in the region. The percentage of students were eligible for free and reduced price lunch rose from 87 percent in 2013 to 94 percent in 2016. Two programs that address food needs, the Summer Food Service Program (SFSP) and the Child and Adult Care Food Program (CACFP), served 19,701 (SFSP) and 76,344 (CACFP) meals in the region in 2015. Beyond federal nutrition assistance program, local efforts to build food sovereignty and restore traditional food ways in the community include Ndee Bikiyaa ("the People's Farm), a project of the White Mountain Apache Tribe Hydrology and Water Resources since 2009.

Residents of the region have a lower housing cost burden than residents of the state as a whole: only 16 percent of housing units in the region require their residents to contribute more than 30 percent of their household income toward housing, compared to 34 percent statewide. There is a need for more quality housing in the region as well as infrastructure improvements. Lack of transportation is one of the main challenges for families in the region as it represents a key barrier to family participation in programs and a reason for missing medical appointments or follow-up care.

### **Educational Indicators**

In the 2014-2015 school year, 15 percent of White Mountain Apache Tribe Region students attained a proficient or highly proficient score on the third grade math assessment, which was a lower passing rate than across Arizona as a whole (42%). Performance on the English language Arts (ELA) test was lower, with only 10 percent of students in the region demonstrating proficiency, compared to 40 percent statewide.

Rates of chronic absences among first through third graders in elementary school in the region have been consistently higher in 2014 (42%) and 2015 (45%) than in the state as a whole (34% and 36%, respectively). The high school drop-out rate at Alchessay High School increased slightly from a low of 14 percent in 2013 to 18 percent in 2015, and has consistently been much higher than the state rate of 3 to 4 percent. However, between 2013 and 2014, the four-year graduation rate increased by nearly 20 percentage points. In 2015, two out of three high school seniors at Alchessay High School graduated on time. Over a third of adults have at least some college or professional education, or a Bachelor's or advanced degree in the region (36%), nearly the same percentage as in all Arizona reservations. However, educational attainment varies by community.

### **Early Learning**

Altogether, early care and education providers in the region have the capacity to serve 478 young children. Most of this capacity is for the preschool age group, particularly four-year-olds. White Mountain Apache Head Start alone has the capacity to serve 79 percent of the estimated 321 four-year-olds in the region according to the 2010 Census. Combined with other providers, there is capacity to serve all of the four-year-olds in the region. However,

opportunities for early care and education for children ages three and younger are much more limited. Beyond formal early care and education providers, many parents may rely on informal care arrangements for child care.

Participation in the White Mountain Apache Head Start program is cost-free for all children enrolled. Similarly, children with special needs enrolled in Whiteriver Elementary School receive services at no cost to their families. Typically-developing children enrolled in the preschool programs at Seven Mile School do pay a fee of \$10 per day. Families in the White Mountain Apache Tribe Region who do not qualify for child care assistance are paying more than the recommended 10 percent of income on child care (between 14 and 16 percent of the median family income, depending on the child's age).

Educational attainment among teachers and staff at early care and education centers in the region is high. All of the early care and education programs in the area have opportunities of professional development for their staff. In addition to a hands-on learning opportunity for high school students at Alcheyay High School, there are a number of professional development opportunities in early childhood in the region. Northland Pioneer College (NPC) has campuses in both Navajo and Apache Counties with a center in Whiteriver.

The number of children from the White Mountain Apache Tribe Region referred to AzEIP each year from FY 2013 to FY 2015 decreased steadily from 83 in FY 2013 to fewer than 25 in FY 2015. During this same period, the number of children served each year by the AzEIP provider in the region ranged from between 12 and 28 in FY 2013 to between 3 and 27 in FY 2014 and FY 2015. A national study suggests that about 13 percent of children ages 0 to 2 would typically qualify for early intervention services, which suggests that at least 136 young children in the region would be likely to benefit annually. Fewer than 25 children ages 0-2 were served by the Division of Developmental Delays in the region between 2013 and 2015, while no children ages 3-5 were served in the region in that same period. Data from the White Mountain Apache Tribe Child Find program show that in 2015, more than 100 children between the ages of three and five were identified as disabled, and all of them received services through tribal Child Find. A major strength of the services for children with special developmental and health care needs in the region is the strong collaboration and trust developed between providers and the community. However, the lack of services for children who had special needs but did not meet the eligibility criteria for services through AzEIP or the school district is a challenge.

### **Child Health**

Health care services are available to residents from the White Mountain Apache Tribe Region through Whiteriver Hospital and the Cibecue Health Center, both of which are part of the Indian Health Service (IHS) Whiteriver Service Unit. Between October 2013 and September 2015 there were 14,498 IHS active users from the White Mountain Apache Tribe within the Whiteriver Service Unit. Of those, 1,898 were children ages birth to 5. According to estimates from the American Community Survey (ACS), 14 percent of young children in the region were estimated to be uninsured, along with 26 percent of the total population (the U.S. Census Bureau does not consider coverage by IHS to be insurance coverage).

In 2014, 305 babies were born to mothers residing in the White Mountain Apache Tribe Region. Thirty-five percent of new mothers in the region had a high school diploma or GED. More than two-thirds of mothers (71%) in the region were not married (45% statewide), and one out of every 20 mothers (5%) in the region were age 17 or younger (2% statewide). Since 2012, more than 90 percent of births in the region have been covered by AHCCCS.

A lower proportion of mothers in the region reported smoking (0.7%) than across the state (4.6%). The percentage of children enrolled in the White Mountain Apache Tribe WIC program who were exposed to smoking in the household decreased from 2 percent in 2011 to 0 percent in 2015. In the region, 28 percent of women enrolled in WIC were

overweight, and 40 percent were obese, for a total of 68 percent who were overweight or obese before becoming pregnant. Of those with known prenatal care status, 64.2 percent of pregnant women obtained prenatal care during the first trimester, compared to 71.7 percent in the state. Sixteen percent of babies in the White Mountain Apache Tribe Region were born to mothers who had had fewer than five prenatal care visits.

Thirteen percent of babies born in the region in 2014 were born premature, compared to nine percent statewide. In the same year, 11.1 percent of babies in the region were low birth weight, compared to seven percent across the state. In 2015, 13.4 percent of newborns did not pass initial hearing screenings, compared to the state where 3.8 percent of newborn did not pass initial screenings. Two percent of newborns required diagnostic evaluation and 0.7 percent had confirmed hearing loss, nearly triple that of newborns statewide. Of the infants enrolled in the White Mountain Apache Tribe WIC program in 2015, 76 percent were ever breastfed, higher than the rate for infants enrolled in WIC statewide (71.2%).

Data provided by IHS for children from the White Mountain Apache Tribe show that in the period between October 2013 and September 2015, 65.8 percent of children 19 to 35 months old were fully immunized. However, despite low immunization rates for younger children, nearly all children in kindergarten were fully immunized. Rates of personal exemptions for vaccinations among children in child care (1.2%) and kindergarten (0.0%) in the region were much lower than exemption rates at the state level (3.5% and 4.5% respectively).

Data from IHS indicates that a total of 1,492 unique children (79%) ages birth to 5 received topical fluoride applications between October 2013 and September 2015 from the White Mountain Apache Tribe.

An estimated 20.6 percent of children (ages 2-5) from the White Mountain Apache Tribe seen at the IHS Whiteriver Service Unit were obese. Data on the weight status of children in the region were also available from the White Mountain Apache Tribe WIC program. In 2015, 24 percent of the children (ages 2 to 4) participating in the program were obese and an additional 22 percent were overweight. Obesity is linked to diabetes, which is high in the White Mountain Apache Tribe. Nearly one in five adults over the age of 20 (18.4%) seen at IHS between October 2013 and September 2015 had been diagnosed with Type II Diabetes.

### **Family Support and Literacy**

A lack of parental engagement and involvement is one of the major challenges to supporting children in the region. There is a need for more community events for young children and their families and additional parent resources.

Child welfare services in the region are overseen by the White Mountain Apache Tribe Social Services Department. Services supporting children in the child welfare system are also available through the tribally-operated Our Children's Shelter, a group home that can house up to 12 children aged birth through 18 years. In calendar year 2015, there were 308 substantiated cases of child abuse and neglect that involved children birth to 17, an increase from 284 in 2014. In 2015, 137 children were removed by Tribal Child Protective Services (CPS), up from 107 in 2014. Over the course of 2014 and 2015, there were 872 children birth to 17 who were considered wards of the tribe. The number of foster homes available in the region increased in 2015. Key informants indicated that residents in the region are concerned about the capacity of Tribal CPS to respond to reports of child abuse or neglect, particularly in the more remote parts of the reservation.

Data on the number of juvenile and domestic violence-related reports available from the White Mountain Apache Tribe Police Department showed a substantial decrease in the number of domestic violence arrests from 2013 to 2015; this decrease, however, may not be due to a decline in domestic violence-related incidents, but rather to over-stretched police resources. Data on juvenile arrests ran counter to the decrease in domestic violence reports, as the

number of juvenile arrests increased dramatically from 2013 to 2015. Each year from 2012 to 2015, fewer than 25 pregnant or parenting women in the White Mountain Apache Tribe Region received publically-funded behavioral health services. Fewer than 25 children ages 0 to 5 in the region received publically-funded behavioral health in that same period.

### **Communication, Public Information, and Awareness**

Since state fiscal year 2011, First Things First has led a collaborative, concerted effort to build public awareness and support across Arizona. In addition, First Things First began a community engagement effort in SFY2014 to recruit, motivate and support community members to take action on behalf of young children. In addition to these strategic communications efforts, First Things First has also led a concerted effort of policymaker awareness-building throughout the state. The Arizona Early Childhood Alliance represent the united voice of the early childhood community in advocating for early childhood programs and services. Finally, First Things First recently launched enhanced online information for parents of young children, including the more intentional and strategic placement System Coordination among Early Childhood Programs and Services

### **System Coordination among Early Childhood Programs and Services**

Efforts are being made toward coordination and collaboration between early childhood education programs and services but there is room for improvement. The strongest coordination was seen between providers of services for children with special developmental and health care needs. Service providers in the region have a good awareness of each other's programs and services and there is a regular practice of referring families within the region. Further work is needed in facilitating inter-agency meetings in a way that does not burden staff who already have extensive time commitment.



# 2018 NEEDS AND ASSETS REPORT

## About this Report

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 publically available sources, including the 2010 U.S. Census, the American Community Survey (ACS), and the Arizona Department of Administration (ADOA). Additionally, this report includes findings from qualitative and quantitative data collection conducted specifically for this report including key informant interviews with representatives from tribal agencies and departments in 2016, as well as relevant data from the 2014 Parent and Caregiver Survey that gathered information from parents and caregivers of children birth to 5 in the region. The White Mountain Apache Tribal Council approved the collection of data for this report as indicated on Resolution No. 12-2015-241 adopted on December 2, 2015. Regional Partnership Council members and other participating key stakeholders were involved in a facilitated discussion on October 3, 2016, to allow them to share their local knowledge and perspective in interpreting the data in this report. Feedback from participating session members are also included as key informant perspectives within this report, as appropriate.

In most of the tables in this report, the top row of data corresponds to the First Things First White Mountain Apache Tribe Region. When available, the next few rows show data for the various communities within the region, while the last two rows present data that are useful for comparison purposes: all Arizona reservations combined, and the state of Arizona. Not all data will be available at a First Things First (FTF) regional level because not all data sources analyze their data based on FTF regional boundaries. When regional data are unavailable, this will be noted by N/A.

This report follows the First Things First Data Dissemination and Suppression Guidelines. Throughout this report, suppressed counts will appear as either <10 or <25 in data tables, and percentages that could easily be converted to suppressed counts will appear as **DS** (data suppressed). The signifier **N/A** indicates where data is not available for a particular geography. Please also note that some data, such as that from the American Community Survey, are estimates that may be less precise for small areas. For more detailed information on data sources, methodology, suppression guidelines, and limitation, please see the Appendices section.

## Description of the Region

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

The boundaries of the First Things First White Mountain Apache Tribe Region are the same as the White Mountain Apache Reservation (sometimes called Fort Apache). The region covers more than 2,500 square miles in Apache,

Gila, and Navajo counties. There are twelve reservation communities identified by the U.S. Census: Canyon Day; Carrizo; Cedar Creek; Cibecue; East Fork; Fort Apache; Hondah-McNary; North Fork; Rainbow City; Seven Mile; Turkey Creek; and Whiteriver. The largest of these communities, Whiteriver, serves as the capital. Please note that U.S. Census communities are defined differently than tribal council districts.

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

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

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

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

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

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

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

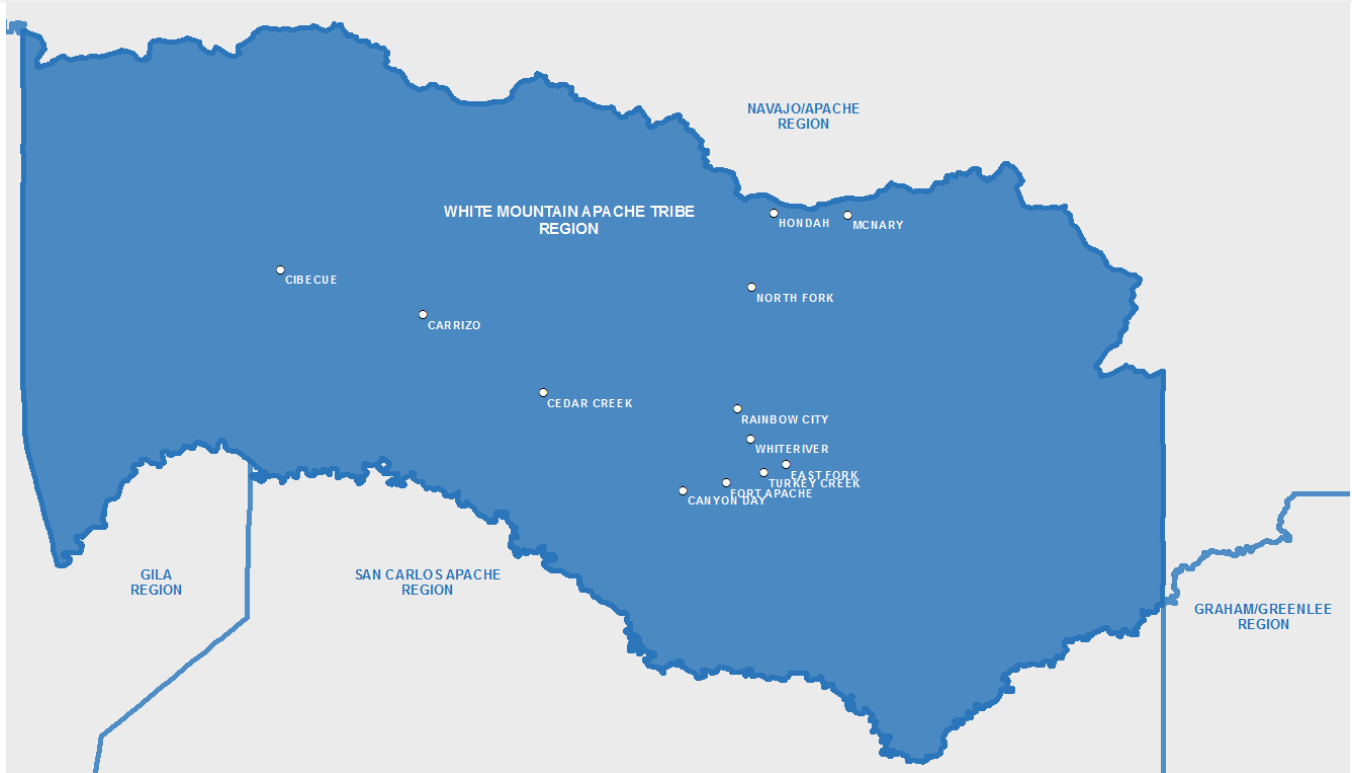
The **North Fork** sub-region is defined as the North Fork CDP.

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

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

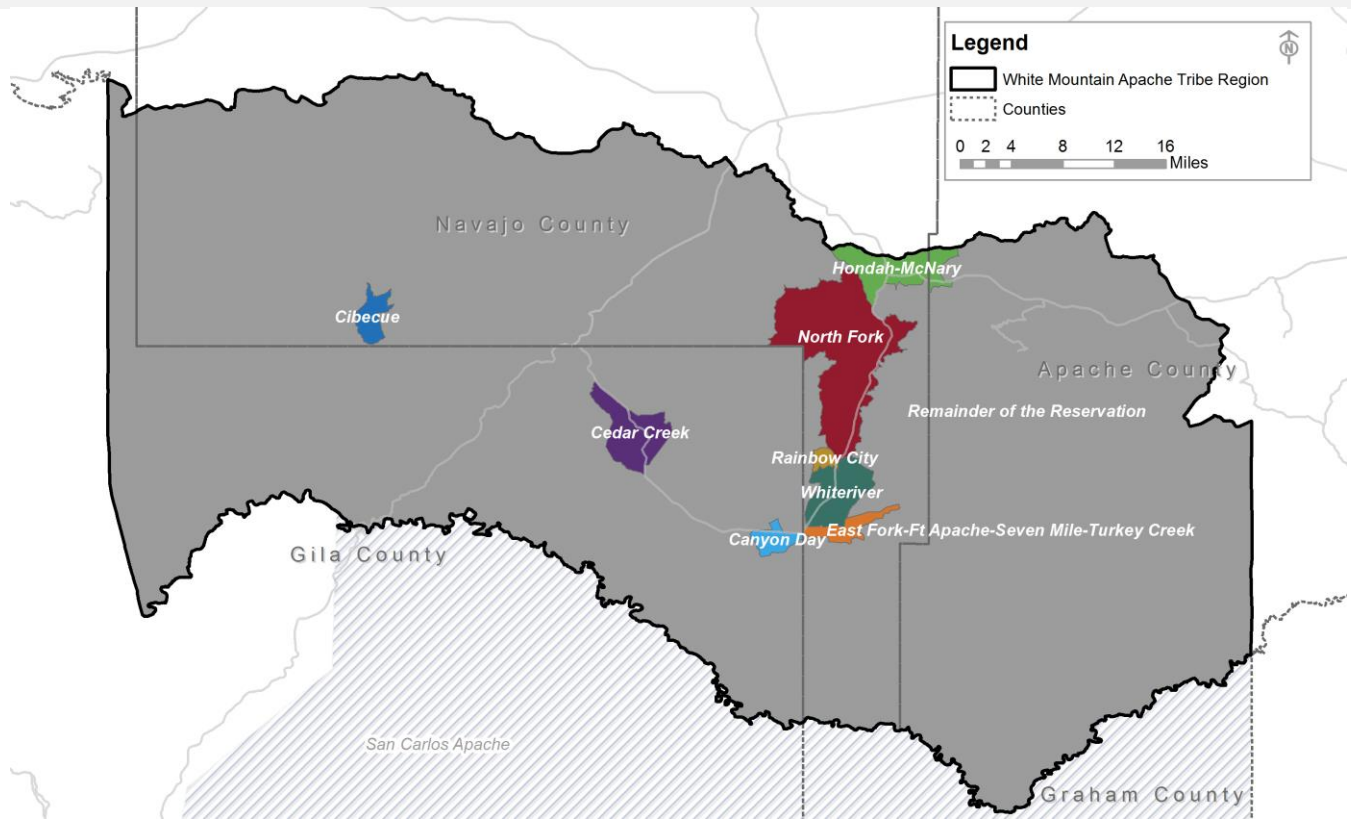
The **Remainder of the Region** sub-region encompasses the portions of the region not falling within the sub-regions described above, including the unincorporated communities of Oak Creek, Grasshopper, Forrestdale, and Hawley Lake. The CDP of Carrizo falls within this sub-region due to its small population that makes many American Community Survey estimates unreliable for this geography.

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



Source: *First Things First* (2016).

Figure 2. Sub-regions in the White Mountain Apache Tribe First Things First Region



Source: Map produced by CRED.



## POPULATION CHARACTERISTICS

## Why Population Characteristics Matter

Knowing the characteristics of families living within a region, and how they change over time, is important for understanding the resources and supports needed by those families.<sup>1</sup> The number of young children and families in a region, their ethnic composition, and the languages they speak can influence the type and location of services within a region such as schools, health care facilities and services, and social services and programs. Some families, such as migrant farmworkers and recently arrived refugees, may have distinct needs for their young children. Accurate and up-to-date information about population characteristics such as these can lead to the development or continuation of relevant resources and assure that they align with the needs of families in the region. Appropriately locating resources and services can support positive child outcomes. Disparities in access to jobs, food resources, schools, health care facilities and providers, and social services have been associated with a number of poor outcomes for children including infant mortality, obesity, and health insurance coverage, among others.<sup>2</sup>

An understanding of the supports and resources *within* a family is another key to helping young children achieve the best possible developmental outcomes.<sup>3,4</sup> Children living with and being cared for by someone other than their parents, such as relatives or close friends, is known as kinship care and is increasingly common.<sup>5</sup> Extended, multigenerational families and kinship care are more typical in Native communities.<sup>6,7</sup> Children in kinship care often face special needs as a result of trauma, and these families often require additional support and assistance to help children adjust and provide the best possible home environment.<sup>8</sup> Caring for young children may pose a particular challenge for aging grandparents, as they often lack information on resources, support services, benefits, and policies available to aid in their caregiving role.<sup>9</sup> Understanding the makeup of families in a region can help better prepare child care, school and agency staff to engage with diverse families in ways that support positive interactions with staff and within families to enhance each child's early learning.<sup>10</sup>

Recognizing variations in regional language use and proficiency is also important to ensuring appropriate access to services and resources and identifying needed supports. Mastery of the language spoken in the home is related to school readiness and academic achievement.<sup>11</sup> Those children who engage in dual language learning have cognitive, social-emotional and learning benefits in early school and throughout their lifetimes.<sup>12</sup> Although dual language learning is an asset, some children come from limited English speaking households (that is, a household where none of the adult members speak English very well). Language barriers for these families can limit access to health care and social services, and can provide challenges to communication between parents and teachers, doctors and other providers, which can affect the quality of services children receive.<sup>13</sup> Assuring that early childhood resources and services are available in a language accessible to the child and caregivers is essential. Although Spanish is the most common second language spoken, Arizona is also home to a large number of Native communities, with numerous Native languages spoken by families in those communities. Language preservation and revitalization are recognized by the U.S. Department of Health & Human Services as keys to strengthening culture in Native communities and to encouraging communities to move toward social unity and self-sufficiency.<sup>14</sup> Special consideration should be given to respecting and supporting the numerous Native languages spoken, particularly in tribal communities around the state.

## What the Data Tell Us

### Demographics

According to the U.S. Census, 2,003 children under the age of six resided in the White Mountain Apache Tribe Region in 2010 (see Table 1). The region population of all ages was 13,049 in that same year, meaning that fifteen percent of residents were young children (Table 3). The largest number of children (n=653) live in the Whiteriver area, representing about a third of the region's young children.

Since the turn of the century, Arizona as a whole saw a 19 percent increase in the number of young children. In the White Mountain Apache Tribe Region, the population of young children increased by 26 percent between 2000 and 2010, greater than the increase seen statewide (Table 2). Given the increase in the number of young children between 2000 and 2010, it is likely that the number of young children will continue to grow in the coming decades.

According to the U.S. Census in 2010, 97 percent of children ages birth to 4 in the region were identified as American Indian, greater than the percentage in all Arizona reservations combined (92%) (Figure 3). In the White Mountain Apache Tribe Region, the proportion of children who were identified as Hispanic or Latino (3%) was a third of that in all Arizona reservations combined (9%, see Table 5).

Among adults the overall ethnic/racial breakdown in the region looked very similar to that in children: 94 percent of residents 18 and older identify as American Indian alone (not Hispanic or Latino), compared to 88 percent in all reservations combined (Table 4). Two percent of adults in the region are White non-Hispanic, compared to five percent in all Arizona reservations.

Table 1. Population of Young Children (Ages 0 to 5) in the 2010 Census

	Ages 0-5	Age 0	Age 1	Age 2	Age 3	Age 4	Age 5
White Mountain Apache Tribe	2,003	333	344	369	326	321	310
Canyon Day	199	43	34	41	25	30	26
Cedar Creek	52	13	10	11	5	3	10
Cibecue	259	40	50	48	43	41	37
East Fork-Ft Apache-Seven Mile-Turkey Creek	261	54	39	50	36	39	43
Hondah-McNary	191	33	27	35	37	34	25
North Fork	185	24	30	34	32	38	27
Rainbow City	150	24	31	23	27	23	22
Whiteriver	653	92	109	120	114	104	114
Remainder of the Region	53	10	14	7	7	9	6
All Arizona Reservations	20,511	3,390	3,347	3,443	3,451	3,430	3,450
ARIZONA	546,609	87,557	89,746	93,216	93,880	91,316	90,894

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

Table 2. Change in Population of Young Children (Ages 0 to 5), 2000 to 2010 Census

	Number of children (ages 0-5) in 2000 Census	Number of children (ages 0-5) in 2010 Census	Percent change in population (ages 0-5), 2000 to 2010
White Mountain Apache Tribe	1,594	2,003	+26%
All Arizona Reservations	N/A	20,511	N/A
ARIZONA	459,141	546,609	+19%

Source: U.S. Census Bureau (2000). 2000 Decennial Census, SF 1, Table P014



Table 3. Population (All Ages) in the 2010 Census

	All ages	Ages 0 to 5	Children (ages 0-5) as a percentage of the total population
White Mountain Apache Tribe	13,409	2,003	15%
Canyon Day	1,209	199	16%
Cedar Creek	318	52	16%
Cibecue	1,713	259	15%
East Fork-Ft Apache-Seven Mile-Turkey Creek	1,843	261	14%
Hondah-McNary	1,340	191	14%
North Fork	1,417	185	13%
Rainbow City	968	150	15%
Whiteriver	4,104	653	16%
Remainder of the Region	497	53	11%
All Arizona Reservations	178,131	20,511	12%
ARIZONA	6,392,017	546,609	9%

Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P1

Table 4. Race and Ethnicity of the Adult Population (Ages 18 and Older) in the 2010 Census

	Number of persons (ages 18 and older)	Hispanic or Latino	White alone (not Hispanic or Latino)	American Indian alone (not Hispanic or Latino)	African-American alone (not Hispanic or Latino)	Asian or Pacific Islander (not Hispanic or Latino)
White Mountain Apache Tribe	8,341	2%	2%	94%	0%	1%
Canyon Day	776	1%	0%	98%	0%	0%
Cedar Creek	189	3%	4%	92%	0%	0%
Cibecue	1,057	2%	1%	95%	0%	2%
East Fork-Ft Apache-Seven Mile-Turkey Creek	1,169	3%	1%	95%	0%	0%
Hondah-McNary	773	9%	4%	83%	0%	0%
North Fork	918	1%	7%	90%	0%	1%

Rainbow City	618	1%	1%	97%	0%	0%
Whiteriver	2,505	2%	1%	96%	0%	1%
Remainder of the Region	336	2%	8%	87%	0%	0%
All Arizona Reservations	117,049	5%	5%	88%	0%	0%
ARIZONA	4,763,003	25%	63%	4%	4%	3%

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

Note: Entries may sum to less than 100% because persons who report two or more race categories are not included here.

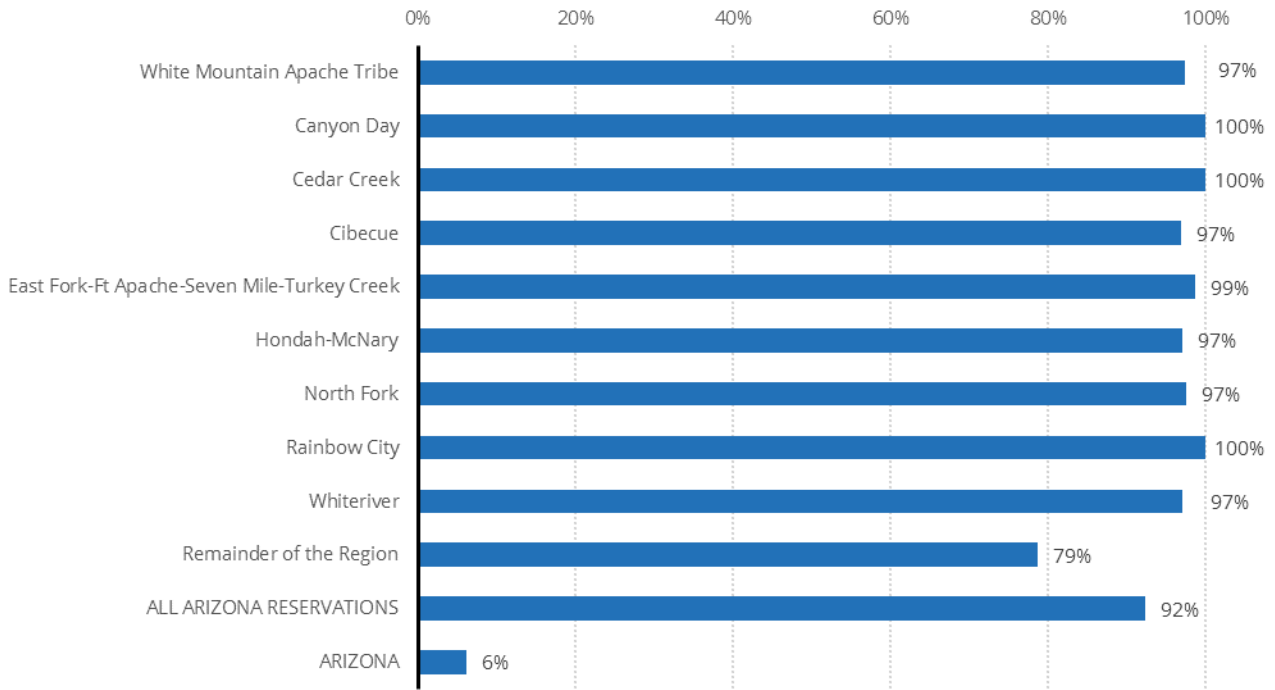
Table 5. Race and Ethnicity of the Population of Children (Ages 0 to 4) in the 2010 Census

	Population of children (ages 0-4)	Hispanic or Latino	White alone (not Hispanic or Latino)	American Indian	African-American	Asian or Pacific Islander
White Mountain Apache Tribe	1,693	3%	1%	97%	0%	0%
Canyon Day	173	1%	0%	100%	0%	0%
Cedar Creek	42	0%	0%	100%	0%	0%
Cibecue	222	2%	0%	97%	0%	2%
East Fork-Ft Apache-Seven Mile-Turkey Creek	218	3%	0%	99%	0%	0%
Hondah-McNary	166	8%	2%	97%	0%	0%
North Fork	158	5%	1%	97%	0%	0%
Rainbow City	128	0%	0%	100%	0%	0%
Whiteriver	539	3%	0%	97%	0%	0%
Remainder of the Region	47	4%	13%	79%	2%	2%
All Arizona Reservations	17,061	9%	1%	92%	0%	0%
ARIZONA	455,715	45%	40%	6%	5%	3%

Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Tables P12B, P12C, P12D, P12E, P12H, and P12I

Note: Entries may sum to more than 100% because persons who report two or more race categories could be counted twice.

Figure 3. Percent of Children (Ages 0 to 4) Reported to be American Indian in the 2010 Census



Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P12C

### Living Arrangements

Based on data from the 2010 U.S. Census, in the White Mountain Apache Tribe Region, 38 percent of households have at least one child under 6 years old, a higher proportion when compared to all Arizona reservations (26%) (Table 6). According to the American Community Survey, 64 percent of children in the White Mountain Apache Tribe Region live with a single parent, which is slightly lower than the proportion in all Arizona reservations (68%) but substantially higher than in the state as a whole (38%). About six percent of children ages birth to 5 are in kinship arrangements, with extended families members caring for them (Figure 4). Living arrangements for young children varied by community. The North Fork and East Fork-Fort Apache-Seven Mile-Turkey Creek areas had the highest percentages of children living with single parents (80% and 76%, respectively). Canyon Day and Hondah-McNary had the highest percentages of young children living with two married parents (63% and 43%, respectively). The highest percentages of young children in kinship care arrangements lived in the Remainder of the Region (21%) and in Cibecue (18%).

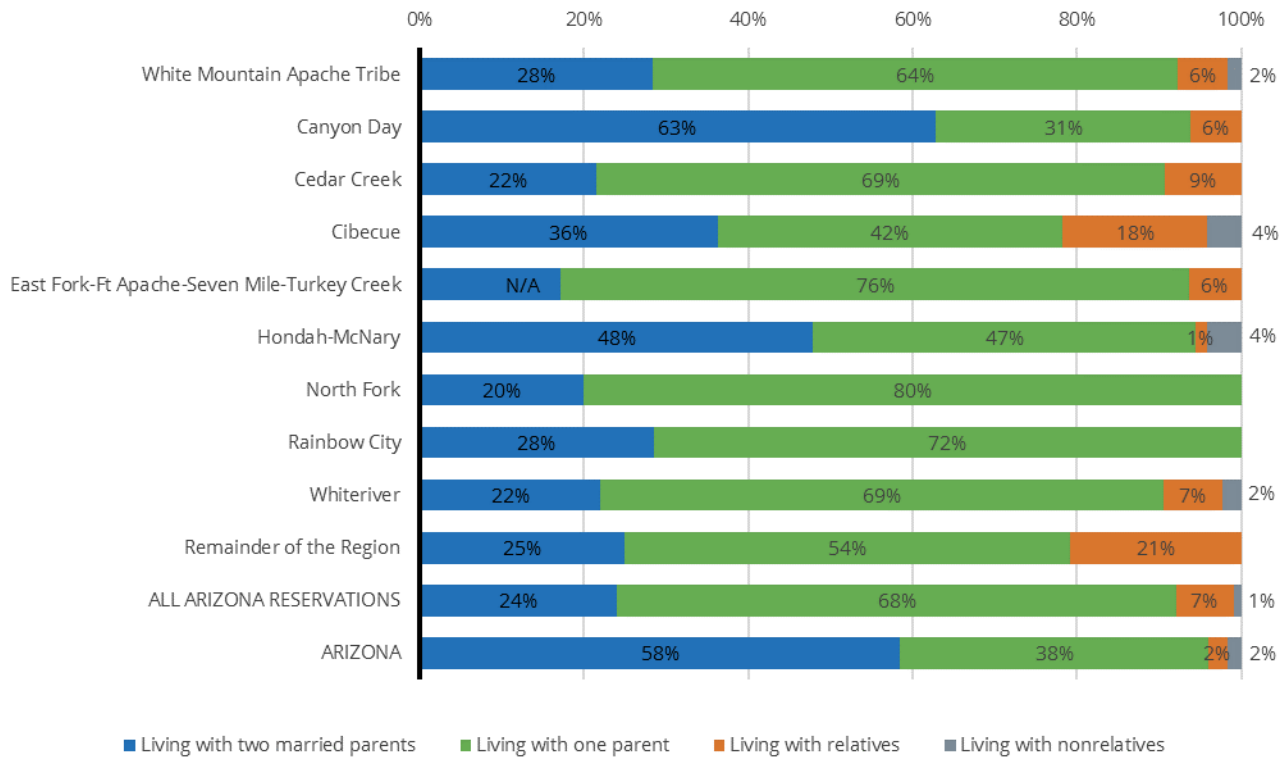
The proportion of young children living in a grandparent’s household in the region (41%) is about the same of that in all Arizona reservations combined (40%) but much higher than the state (14%) (Figure 5). It is important to note that these households may be multigenerational – i.e., the grandparent is considered the head-of-house, but the child’s parent may also live there. Extended families that involve multiple generations and relatives along both vertical and horizontal lines are an important characteristic of many American Indian families. The strengths associated with this open family structure—mutual help and respect—can provide members of these families with a network of support which can be very valuable when dealing with socio-economic hardships.<sup>15</sup> The highest rates of young children living

in a grandparents household were seen in Rainbow City (57%) and Cedar Creek (54%), where over half of young children lived with their grandparents. The 2016-2017 Head Start Community Assessment contained a question about grandparents caring for grandchildren.<sup>16</sup> Fifteen percent of respondents surveyed reported that they were a grandparent caring for their grandchild. Of those grandparents, half (47%) reported caring for their grandchild since birth, nearly a quarter (24%) reported caring for their grandchild for more than year, and over a quarter (29%) reported caring for their grandchild for less than a year.

Table 7 provides more information about the estimated 1,821 children ages 0 to 17 living with grandparents in the White Mountain Apache Tribe Region. Nine percent of these children who live with their grandparents do not have a parent present in the household, and eighty-two percent live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent. This indicates that, where children are living with their grandparents, a higher proportion of those grandparents are directly involved in raising their grandchildren in the White Mountain Apache Tribe Region than grandparents across the state.

The East Fork-Fort Apache-Seven Mile-Turkey Creek area had the highest percentage of grandchildren living with their grandparents without a parent present (21%), followed by Cibecue (14%), and Whiteriver (11%). In the East Fork-Fort Apache-Seven Mile-Turkey Creek, Rainbow City, and Whiteriver areas, nearly all grandchildren living with a grandparents household had their grandparents assume responsibility for their care. Figure 6 shows a map of the geographic distribution of young children (birth to 5) living with their grandparents and the percent of grandparents who are responsible for their grandchildren (birth to 17).

Figure 4. Living Arrangements for Young Children (Ages 0 to 5)



Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Tables B05009, B09001, B17006

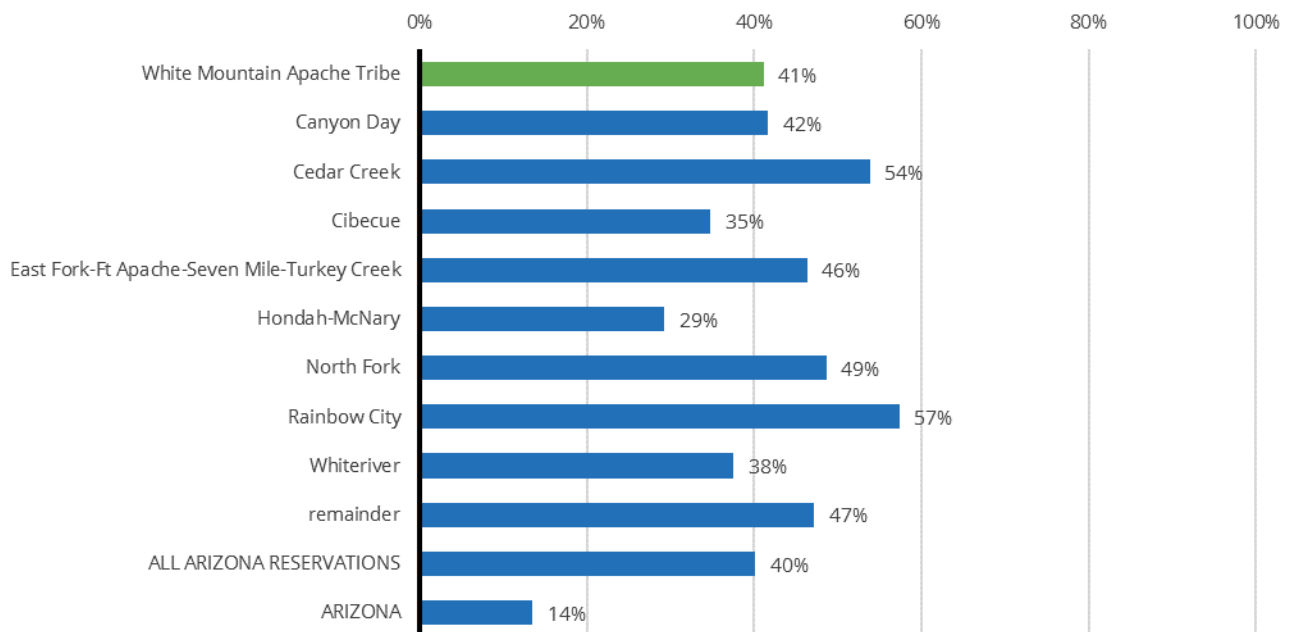
Table 6. Composition of Households in the 2010 Census

	Total number of households	Total number of households with child(ren) under 6 years old	Percent of households with child(ren) under 6 years old	Households with child(ren) under 6 years old, husband-wife householders	Households with child(ren) under 6 years old, single male householder	Households with child(ren) under 6 years old, single female householder
White Mountain Apache Tribe	3,301	1,267	38%	46%	11%	43%
Canyon Day	298	113	38%	50%	12%	37%
Cedar Creek	78	31	40%	58%	13%	29%
Cibecue	419	172	41%	51%	6%	42%
East Fork-Ft Apache-Seven Mile-Turkey Creek	432	163	38%	45%	10%	45%
Hondah-McNary	335	129	39%	46%	14%	40%
North Fork	364	121	33%	50%	12%	37%

Rainbow City	223	100	45%	40%	12%	48%
Whiteriver	1,007	403	40%	42%	11%	47%
Remainder of the Region	145	35	24%	37%	9%	54%
All Arizona Reservations	50,140	13,115	26%	45%	13%	42%
ARIZONA	2,380,990	384,441	16%	65%	11%	24%

Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P20

Figure 5. Children (Ages 0 to 5) Living in a Grandparent's Household in the 2010 Census



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

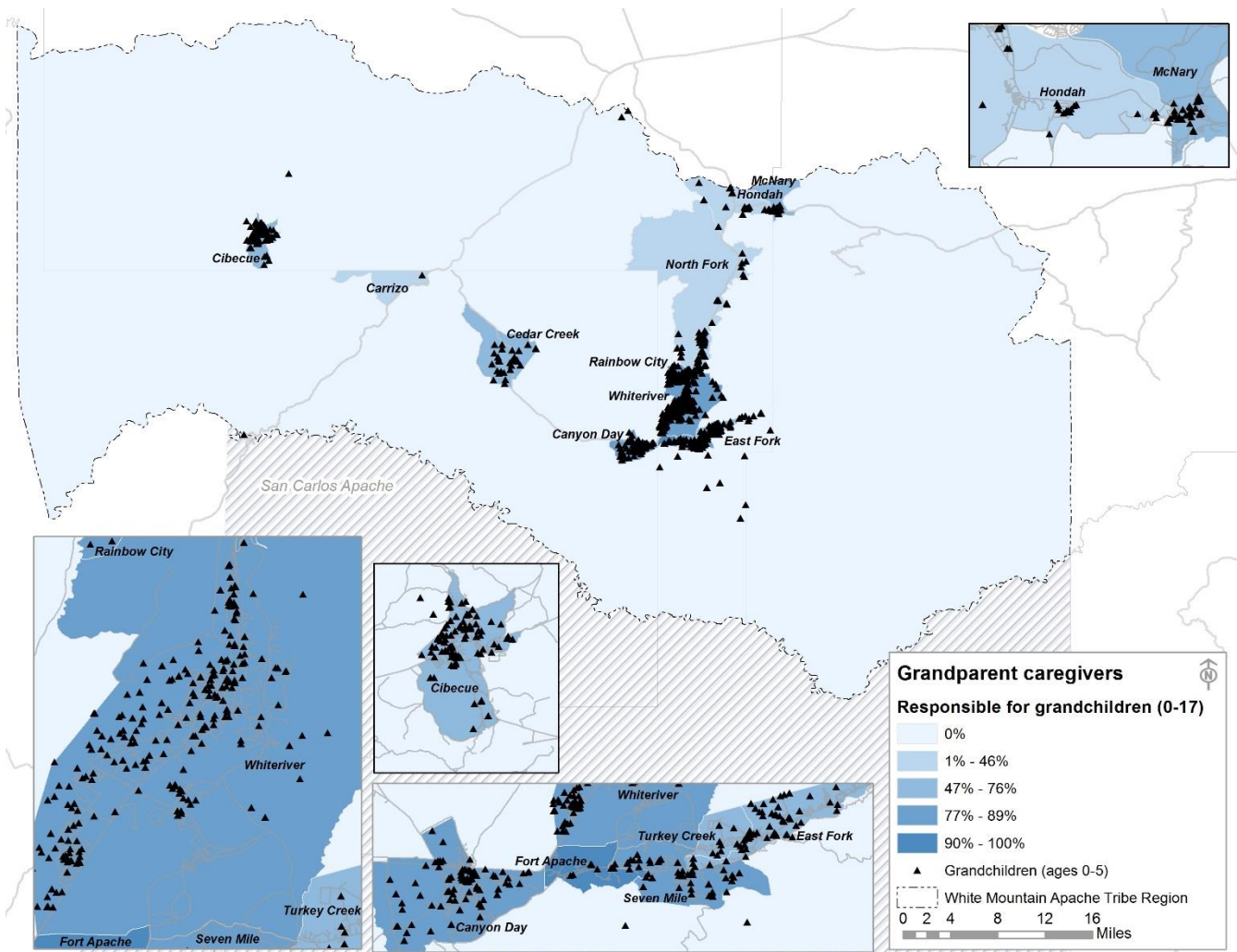
Table 7. Children (Ages 0 to 17) Living in a Grandparent's Household

	Number of children (ages 0-17) living in a grandparent's household	Percent of children (0-17) living in a grandparent's household and the grandparent is responsible for the child	Percent of children (0-17) living in a grandparent's household and the grandparent is responsible for the child (with no parent present)
White Mountain Apache Tribe	1,821	82%	9%
Canyon Day	186	86%	7%

Cedar Creek	105	69%	0%
Cibecue	111	80%	14%
East Fork-Ft Apache-Seven Mile-Turkey Creek	240	93%	21%
Hondah-McNary	87	76%	0%
North Fork	263	60%	0%
Rainbow City	122	93%	0%
Whiteriver	643	92%	11%
Remainder of the Region	64	42%	8%
All Arizona Reservations	17,774	58%	12%
ARIZONA	140,038	53%	14%

Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B10002

Figure 6. Map of Grandchildren (ages 0-5) living in a Grandparent's Household and the Percent of Grandparents Responsible for Grandchildren (ages 0-17)



Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P4; U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B10002. Map produced by CREC.

Note: Darker blue colors represent areas with higher percentages of grandparents that are financially responsible for their grandchildren that live with them. Triangles represent the geographic distribution of young grandchildren living in a grandparent's household.

## Language Use

Estimates from the American Community Survey indicate that over half (54%) of residents age 5 and older in the White Mountain Tribe Region speak a Native North American language at home, a higher rate than across all Arizona reservations (50%). (Table 8). The percent of residents speaking Native North American languages at home were highest in the Rainbow City (69%) and Cibecue (69%) areas and lowest in the Hondah-McNary area (29%). The 2015-2016 and 2016-2017 Head Start Community Assessment asked parents and caregivers of children enrolled at White Mountain Apache Head Start about the language they use most at home. Among respondents to the survey, only 16 percent in 2015-2016 and 13 percent in 2016-2017 reported speaking Apache most at home (see Figure 7). Another 4 percent in 2015-2016 and 6 percent in 2016-2017 reported speaking Navajo or another native language most at home. The difference between the percent of people reporting speaking native languages at home in the Head Start Community Assessments and the American Community Survey could be due to several factors. First, parents of



young children may be less likely to speak Apache or other native languages at home compared to older generations. Second, while many people speak some Apache or other native languages at home, these languages may not be the primary language spoken at home.

Four percent of those who speak a language other than English at home indicated that they do not speak English “very well,” compared to 13 percent in all Arizona reservations combined (Table 9). However, this percentage was higher in Cedar Creek (10%), Cibecue (10%), and the remainder of the region outside town boundaries (19%). At a household level, three percent of households in the region were classified as limited-English-speaking; in all Arizona reservations combined, the proportion is much higher (11%) (Table 10). In the Cedar Creek (8%), Canyon Day (6%), and remainder of the region (6%) the share of limited-English-speaking households is higher. Overall, four out of five households (81%) in the White Mountain Apache Tribe Region report speaking a language other than English at home.

Language revitalization efforts in the White Mountain Apache Tribe Region are conducted through the Johnson O’Malley (JOM) Program, a federal program that provides services to Indian children in public schools located on or near reservations. The White Mountain Apache Tribe JOM Program incorporates a number of services in White Mountain Apache Tribe Region public schools, including cultural identity and language preservation programs for students. The JOM program also supervises the White Mountain Apache Tribal Youth Council, which seeks to meet the needs of White Mountain Apache youth and promote youth leadership development, higher education, cultural awareness, and good citizenship and service.<sup>17</sup>

Apache language teachers teach classes in all three elementary schools, the junior high school, and high school in the Whiteriver Unified School District. However, the leadership of the district hopes to expand the Apache language program to provide multiple levels of coursework and develop a set curriculum. In the early care and education setting, language instruction through vocabulary, singing, and dancing is provided at White Mountain Apache Head Start centers and through the FACE program at John F. Kennedy Day School. Key informants in the region recognize the need to expand language revitalization programs, as they note that it is rare to see entire family units speaking Apache. One key informant noted that while many parents speak Apache, it is not common for them to speak Apache with their children. Key informants in the region hope to see more encouragement for families to speak Apache at home and for schools to be able to then nurture that language development.

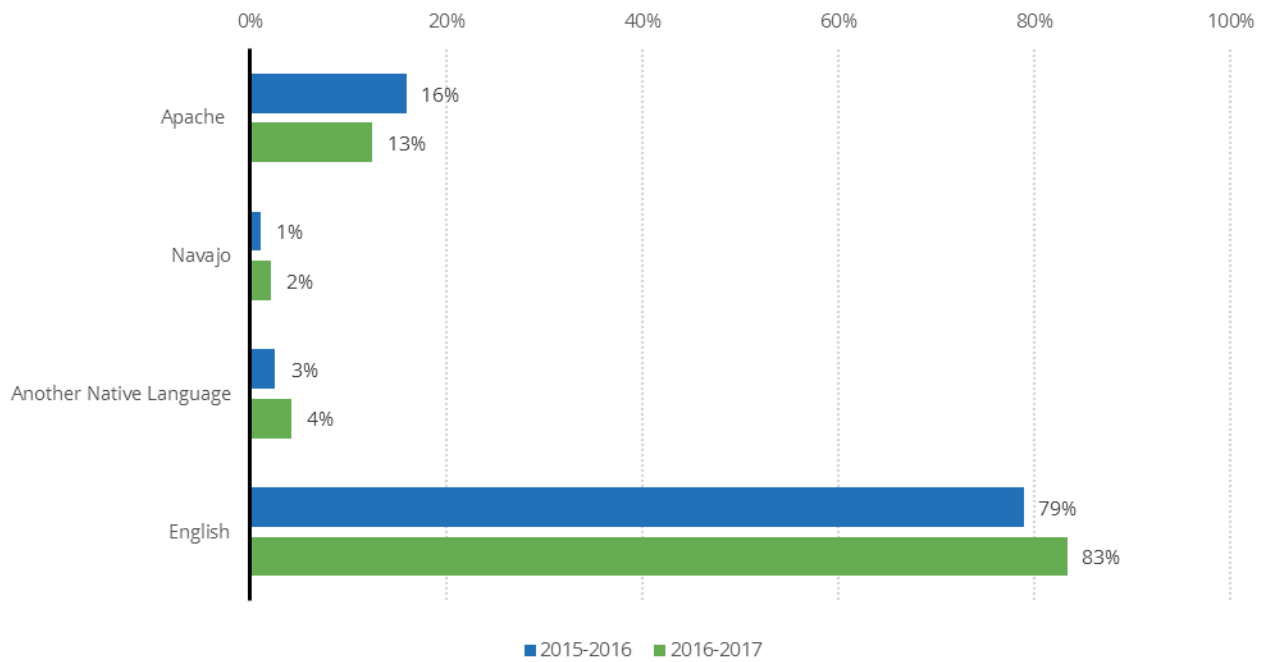
Table 8. Language Spoken at Home (Ages 5 and Older)

	Estimated population (ages 5 and older)	Speak Only English at home	Speak Spanish at home	Speak a native North American language at home	Speak another language at home
White Mountain Apache Tribe	13,179	44%	1%	54%	0%
Canyon Day	1,140	42%	0%	58%	0%
Cedar Creek	391	53%	0%	47%	0%
Cibecue	1,647	30%	1%	69%	0%
East Fork-Ft Apache-Seven Mile-Turkey Creek	1,680	41%	0%	59%	0%
Hondah-McNary	1,396	65%	5%	29%	1%
North Fork	1,536	49%	1%	48%	2%
Rainbow City	1,068	31%	0%	69%	0%
Whiteriver	3,858	46%	1%	53%	0%
Remainder of the Region	463	41%	2%	56%	2%
All Arizona Reservations	169,020	45%	4%	50%	1%
ARIZONA	6,120,900	73%	20%	2%	5%

Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B16001

Note: The percentages above may not add to 100% due to rounding.

Figure 7. Responses to “What language do you use most at home?”



Source: White Mountain Apache Head Start (2016). 2015-2016 Head Start Community Assessment & 2016-2017 Head Start Community Assessment. Received by request.

Table 9. Proficiency in English (Ages 5 and Older)

	Population (ages 5 and older)	Speak Only English at home	Speak another language at home, and speak English "very well"	Speak another language at home, and do not speak English "very well"
White Mountain Apache Tribe	13,179	44%	52%	4%
Canyon Day	1,140	42%	51%	7%
Cedar Creek	391	53%	36%	10%
Cibecue	1,647	30%	61%	10%
East Fork-Ft Apache-Seven Mile-Turkey Creek	1,680	41%	57%	2%
Hondah-McNary	1,396	65%	33%	2%
North Fork	1,536	49%	50%	1%
Rainbow City	1,068	31%	69%	0%
Whiteriver	3,858	46%	52%	3%

Remainder of the Region	463	41%	40%	19%
All Arizona Reservations	169,020	45%	42%	13%
ARIZONA	6,120,900	73%	17%	9%

Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B16001

Note: The percentages above may not add to 100% due to rounding.

Table 10. Limited-English-Speaking Households

	Number of households	Households which speak a language other than English	Limited-English-speaking households
<b>White Mountain Apache Tribe</b>	<b>3,482</b>	<b>81%</b>	<b>3%</b>
Canyon Day	300	82%	6%
Cedar Creek	114	79%	8%
Cibecue	439	90%	4%
East Fork-Ft Apache-Seven Mile-Turkey Creek	482	87%	2%
Hondah-McNary	416	63%	1%
North Fork	422	82%	2%
Rainbow City	217	89%	0%
Whiteriver	976	80%	2%
Remainder of the Region	116	84%	6%
All Arizona Reservations	47,892	73%	11%
ARIZONA	2,387,246	27%	5%

Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B16002

Note: Households are counted as speaking a language other than English if any member of the household speaks a language other than English.



## ECONOMIC CIRCUMSTANCES

## Why Economic Circumstances Matter

The economic well-being of a family is a powerful predictor of child well-being. Children raised in poverty are at a greater risk of adverse outcomes including low birth weight, lower school achievement, and poor health.<sup>18,19,20,21,22</sup> They are also more likely to remain poor later in life.<sup>23</sup> More than a quarter (26%) of Arizona's children lived in poverty in 2014, compared to just over a fifth (21%) six years earlier.<sup>24</sup>

Poverty rates alone do not tell the full story of economic vitality in a region. Income and unemployment rates are also important indicators. According to the National Center for Children in Poverty, families typically need an income of about twice the federal poverty level to meet basic needs.<sup>25</sup> As a benchmark, the 2015 Federal Poverty Guideline for a family of four was \$24,250; a typical family of four making less than \$48,500 is likely struggling to make ends meet. Under- and unemployment can affect a family's ability to meet the expenses of daily living, and their access to resources needed to support their children's well-being and healthy development. A parent's job loss can affect children's school performance, leading to poorer attendance, lower test scores, and higher risk of grade repetition, suspension or expulsion.<sup>26</sup> Unemployment can also put families at greater risk for stress, family conflict, and homelessness.<sup>27</sup>

Housing instability and homelessness can have deleterious effects on the physical, social-emotional, and cognitive development of young children.<sup>28</sup> Housing that requires more than 30 percent of a household's income is an indicator of a housing affordability problem in a region, leaving inadequate funds for other family necessities, such as food and utilities.<sup>29</sup> High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition and homelessness.<sup>30</sup> Examining indicators related to housing quality, costs, and availability can reveal additional factors affecting the health and well-being of families in a region.

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 supportive services to children and families. Eligibility is based on citizenship or qualified resident status, Arizona residency, and limits on resources and monthly income. In 2014, seven out of 10 TANF participants in Arizona were children, and the average monthly benefit was \$93.<sup>31</sup>

Other public assistance programs available in Arizona affect access to food. Food insecurity – a limited or uncertain availability of food – is negatively associated with many markers of health and well-being for children, including a heightened risk for developmental delays.<sup>32</sup> Food insecurity is also associated with overweight and obesity.<sup>33</sup> The Supplemental Nutrition Assistance Program (SNAP, also referred to as "Nutrition Assistance" and "food stamps") has been shown to help reduce hunger and improve access to healthier food.<sup>34</sup> SNAP benefits support working families whose incomes simply do not provide for all their needs. For low-income working families, the additional income to access food from SNAP is substantial. For example, for a three-person family with one person whose wage is \$10 per hour, SNAP benefits boost take-home income by ten to 20 percent.<sup>35</sup>

In addition to SNAP, food banks and school-based programs such as the National School Lunch Program<sup>36</sup> and Summer Food Service Program<sup>i</sup> are important resources aimed at addressing food insecurity by providing access to free and reduced-price food and meals in both community and school settings. The National School Lunch Program<sup>37</sup> provides free or reduced-price meals at school for students whose families' incomes are less than or at 130 percent of the federal poverty level (FPL) for free lunch and 185 percent of the FPL for reduced price lunch.

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<sup>i</sup> For more information on Summer Food Service Program, see <http://www.azsummerfood.gov/>

Another food and nutrition resource, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) program, is a federally-funded program which serves economically disadvantaged pregnant, postpartum, and breastfeeding women, as well as infants and children under the age of five. The program offers supplemental nutritious food, breastfeeding and nutrition education, and referrals to health and social services.<sup>ii</sup> In Arizona in 2015, half of all children aged birth through four were enrolled in WIC.<sup>38</sup> Participation in WIC has been shown to be associated with healthier births, lower infant mortality, improved nutrition, decreased food insecurity, improved access to health care and improved cognitive development and academic achievement for children.<sup>39</sup>

## What the Data Tell Us

### Income

The median income for all families in the White Mountain Apache Tribe Region was \$30,784, according to recent estimates from the American Community Survey (Table 11). The median income for families with married parents (husband-wife) and children under age 18 was higher (\$37,833), and single-parent families made substantially less. The median income for households run by a single male in the White Mountain Apache Tribe Region was \$22,708 and \$9,779 for single female households. The low median income for single-householders in the region is a concern because the majority of young children (64%) live in single-parent households (see Figure 4 above). According to data from the 2016-2017 Head Start Community Assessment, 15 percent of parents and caregivers surveyed reported having no household income, 36 percent reported having a household income of \$1,000 or less per month, and 32 percent reported having an income of \$1,000 to \$1,500 per month.<sup>40</sup> This means that more than half of Head Start families surveyed lived on an annual income of \$12,000 or less, and another third lived on an annual income of \$12,000 to \$18,000.

Table 11. Median Annual Family Income

	Median family income for all families	Median family income for husband-wife families with child(ren) under 18	Median family income for single-male-householder families with child(ren) under 18	Median family income for single-female-householder families with child(ren) under 18
White Mountain Apache Tribe	\$30,784	\$37,833	\$22,708	\$9,779
All Arizona Reservations	N/A	N/A	N/A	N/A
ARIZONA	\$59,088	\$73,563	\$37,103	\$25,787

Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B19126

Note: Reliable median income estimates were not available for the sub-regions in the White Mountain Apache Tribe

### Poverty

<sup>ii</sup> For more information on the Arizona WIC Program, visit <http://azdhs.gov/prevention/azwic/>; For information on the ITCA WIC Program, visit [http://itcaonline.com/?page\\_id=53](http://itcaonline.com/?page_id=53)

According to the American Community Survey (ACS), about nearly half (46%) of the total (all-age) population of the White Mountain Apache Tribe Region lives in poverty, a proportion which was higher than across all Arizona reservations combined (42%) and substantially higher than the state (18%) (Table 12). Poverty rates were higher among young children in the region (60%), higher than the poverty rate among young children in all Arizona reservations (55%) and much higher than the rate statewide (29%). The rate of young children in poverty was higher still in the Cedar Creek area, where 86 percent of children were in poverty, and the East Fork-Fort Apache- Seven Mile-Turkey Creek (67%), Cibecue (66%), and Hondah-McNary (65%) areas. Figure 8 shows a map of the population in poverty in the region.

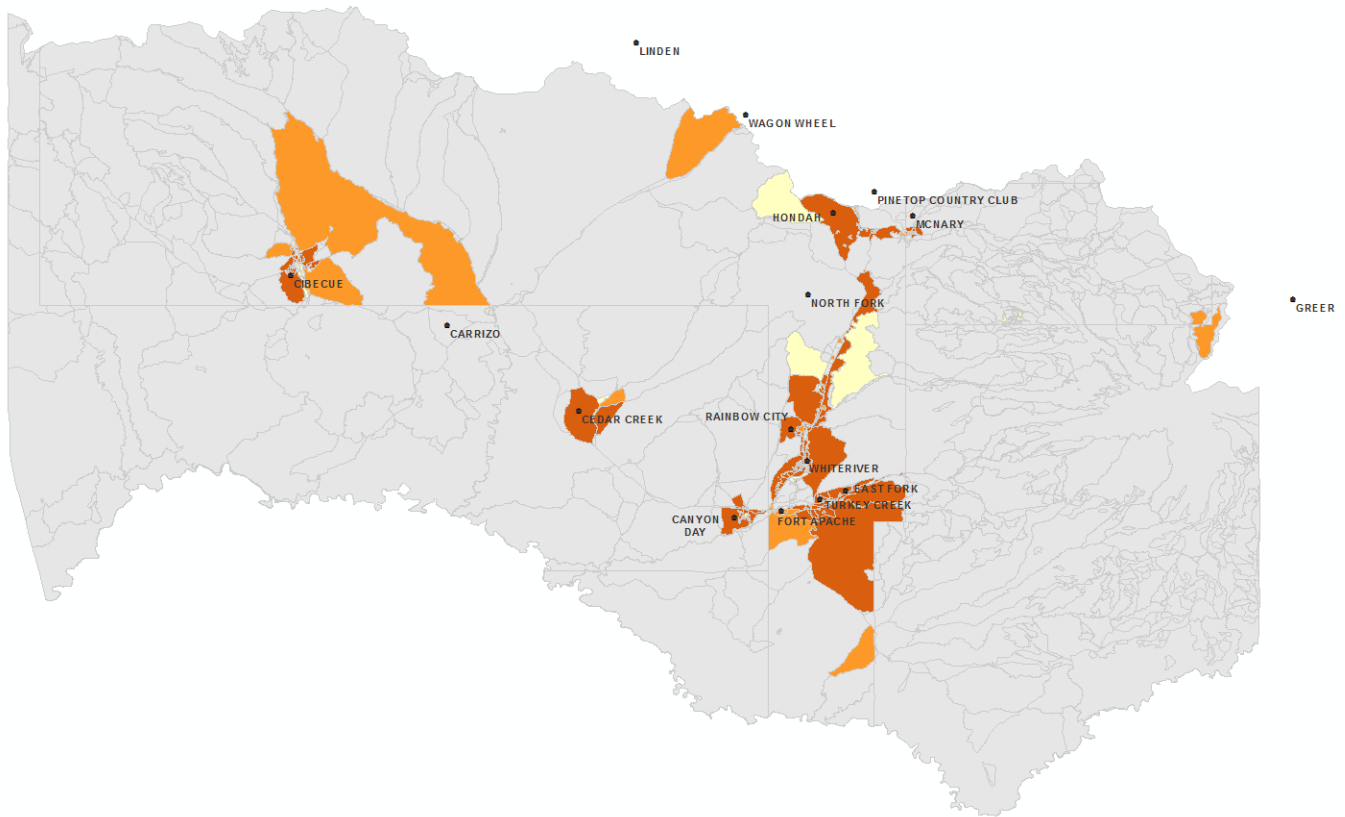
In addition to the families whose incomes fall below the federal poverty level, a proportion of households in the region and county are considered low-income (i.e., near but not below the federal poverty level (FPL)). Nearly four out of five (79%) of families in the region with children aged four and under (58%) live below 185 percent of the FPL (i.e., earned less than \$3,677 a month for a family of four), which is higher than the 77 percent across all Arizona reservations combined (Table 13). There are even higher percentages of low-income families in the Whiteriver (93%), Cedar Creek (90%), and Cibecue (85%) areas.

The TANF/Cash Assistance program can be an important short-term support to families in dire financial need. In recognition of tribal sovereignty, the U.S. Department of Health and Human Services, Administration for Children and Families (ACF), which is the federal agency in charge of overseeing the TANF program, gives federally recognized tribes the option to administer their own TANF program. Tribes must submit a three-year Tribal TANF plan to ACF for review and approval. Approved Tribal TANF programs then receive a portion of the state TANF block grant funding from the state where the tribes are located.<sup>41</sup> Tribal TANF programs have more flexibility to design their programs to meet TANF requirement compared to state programs. These programs are allowed to extend the program's 60-month time limit on receipt of TANF cash assistance on reservation with high unemployment rates. They also may set their own work participation rates, work hour requirements, and definitions of allowable work activities, and determine their own types of support to provide clients. This flexibility allows programs to find creative ways to define allowable work activities that reflect both economic reality and tribal cultural values, such as including engagement in cultural activities in self-sufficiency plans.<sup>42</sup> Currently six tribes in Arizona manage their own Tribal TANF programs, including the White Mountain Apache Tribe, which has operated its Tribal TANF Program since 1997.

The number of young children supported by the White Mountain Apache Tribe TANF program has steadily declined in recent years in the White Mountain Apache Tribe Region. The number of children who received tribal TANF benefits fell from 378 children in January 2013 to 259 children in January 2015, a 31 percent decrease (Figure 9). This means that while 19 percent of children in the region received tribal TANF in January 2013 (based on the number of young children in the region reported by the 2010 Census), only 13 percent did in 2015 (see Table 14). Key informants in the region indicated that part of the reason for the decrease in children receiving tribal TANF between 2014 and 2015 was a change in eligibility requirements.



Figure 8. Map of the Population in Poverty in the White Mountain Apache Tribe Region



Legend	# of Census Blocks	Poverty 0-5	Population 0-5	% Poverty
High Poverty-High Population	134	950	1,711	56%
High Poverty-Low Population	9	17	27	64%
Low Poverty-High Population	9	13	35	0%
Low Poverty-Low Population	134	123	230	53%
No Poverty	1,680	0	0	0%
<b>Total</b>	<b>1,966</b>	<b>1,103</b>	<b>2,003</b>	<b>55%</b>

Source: First Things First (2016). Map produced by First Things First.

Note: Census 2010 census block data were utilized for the population of children 0-5. The 2007-2011 American Community Survey (ACS) data were used to obtain poverty numbers and assign them to census blocks because these estimates align better with the Census 2010 population of children 0-5. Those census blocks with the number of children 0-5 below the median were assigned to the "low population" category; while census blocks with the number of children 0-5 above the median were assigned to the "high population" category. The same process was independently followed with the poverty indicator to arrive at the "low poverty" and "high poverty" categories. The combination of these categories was ultimately used to assign a geographical area to one of the categories listed below.

Table 12. Persons Living in Poverty

	Number of persons (all ages) for whom poverty status is known	Persons (all ages) below poverty level	Number of young children (ages 0-5) for whom poverty status is known	Young children (ages 0-5) below poverty level
White Mountain Apache Tribe	14,608	46%	1,897	60%
Canyon Day	1,243	36%	113	50%
Cedar Creek	511	61%	130	86%
Cibecue	1,772	69%	185	66%
East Fork-Ft Apache-Seven Mile-Turkey Creek	1,864	42%	221	67%
Hondah-McNary	1,563	34%	206	65%
North Fork	1,763	40%	275	46%
Rainbow City	1,188	39%	144	53%
Whiteriver	4,222	49%	599	58%
Remainder of the Region	482	56%	24	46%
All Arizona Reservations	183,508	42%	19,679	55%
ARIZONA	6,411,354	18%	522,513	29%

Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B17001

Table 13. Ratio of Income to Federal Poverty Level (FPL) for Families with Young Children (Ages 0 to 4)

	Estimated number of families with children (ages 0-4)	Families with children (ages 0-4) below 100% FPL	Families with children (ages 0-4) below 130% FPL	Families with children (ages 0-4) below 150% FPL	Families with children (ages 0-4) below 185% FPL
White Mountain Apache Tribe	955	58%	65%	70%	79%
Canyon Day	67	40%	46%	57%	63%
Cedar Creek	48	77%	90%	90%	90%
Cibecue	121	81%	81%	85%	85%
East Fork-Ft Apache-Seven Mile-Turkey Creek	110	61%	69%	76%	81%
Hondah-McNary	85	53%	58%	68%	72%
North Fork	151	48%	48%	48%	66%

Rainbow City	74	41%	41%	41%	51%
Whiteriver	290	59%	73%	81%	93%
Remainder of the Region	9	44%	100%	100%	100%
All Arizona Reservations	9,560	51%	62%	68%	77%
ARIZONA	301,165	27%	35%	41%	49%

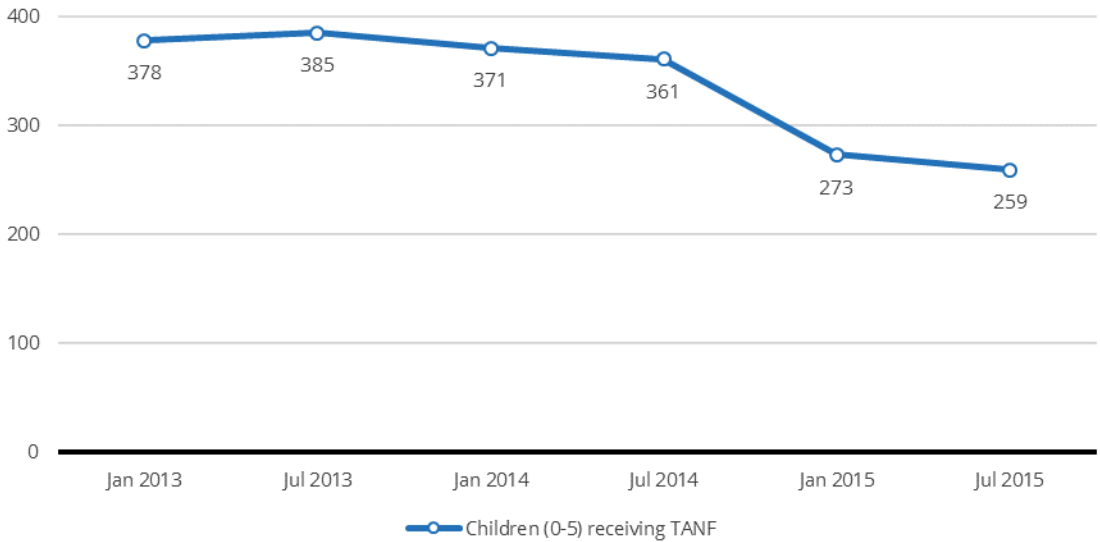
Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B17022

Table 14. Number of Children (Ages 0 to 5) Receiving Tribal Temporary Assistance to Needy Families (TANF), January 2013 to July 2015

	Jan 2013	Jul 2013	Jan 2014	Jul 2014	Jan 2015	Jul 2015	Change Jan 2013 - Jan 2015
Children (0-5) receiving TANF	378	385	371	361	273	259	-31%
Estimated Percent of Children (0-5) receiving TANF	19%	19%	19%	18%	14%	13%	N/A

Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P14. Arizona Department of Economic Security (2016). [Family Assistance Administration dataset]. Unpublished data.

Figure 9. Number of Children (Ages 0 to 5) Receiving Tribal Temporary Assistance to Needy Families (TANF), January 2013 to July 2015



Source: White Mountain Apache Tribe Social Services (2016). [TANF data]. Unpublished data.

## Employment and Unemployment

Enterprises of the White Mountain Apache Tribe include the Hon-Dah Resort, Casino, and Conference Center, the Fort Apache Timber Company (FATCO), and Sunrise Ski Resorts. Hon-Dah, located outside Pinetop, Arizona, offers lodging, accommodations for 120 RVs, entertainment, and meeting space. FATCO manages the tribe's timber resources and provides a number of services, including automotive repair, welding, road work, heavy equipment rentals, scaling services, boiler work, electrical services, and transportation services, which provide employment and job training opportunities for residents of the community. Sunrise Park Resort is the largest ski resort in Arizona and offers a number of recreation activities, including skiing and snowboarding, tubing, and a zip line. Lodging is available at the Sunrise Park Lodge, and dining opportunities provided by the White Mountain Apache Culinary team has been nationally recognized work in Western Apache cooking and Native American cuisine.<sup>43</sup> The White Mountain Apache Tribe Community Development Corp. (CDC) owns and manages cabins for vacation rents at Hawley Lake. The White Mountain Apache Tribe Game and Fish Department sells hunting permits, fishing licenses, and camping and rafting permits.

Recent estimates from the 2010-2014 American Community Survey (ACS) indicate that the unemployment rate in the White Mountain Apache Tribe Region was 42 percent (see Figure 10). This rate is higher than the estimated unemployment rate for All Arizona Reservations (26%) and much higher than that seen statewide. The Arizona Department of Administration, Employment and Population Statistics produces annual unemployment rates for cities and towns as part of their local area unemployment statistics (LAUS) calculations. LAUS data, however, are not available for tribal communities in the state, including the White Mountain Apache Tribe.<sup>iii</sup> Information from the 2016-2017 Head Start Community Assessment suggests that unemployment is a major challenge in the region. Only one in four respondents (25%) reported being employed full-time, with another 15 percent reporting temporary, seasonal, or part-time work (see Figure 11). Forty-seven percent of respondents reported being unemployed or laid off is a slightly higher percentage than that seen in the ACS estimate.

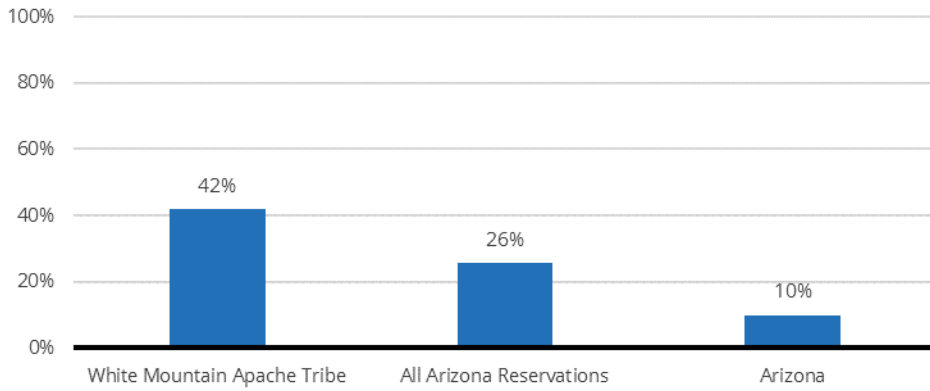
For young children living with both parents in the region, 28 percent live with both parents and at least one of them is in the labor force, compared to 24 percent across all Arizona reservations combined (Table 15).<sup>iv</sup> Twenty-one percent of children live with a single parent who is not in the labor force, meaning they are neither employed nor looking for work, which is lower than the percentage seen in all Arizona reservations (34%). Overall, 76 percent of young children live with one or more parents who are in the labor force, which is higher than that seen in all Arizona reservations (64%). However, labor force participation among parents of young children is varied by community. A higher percentage of young children live with one or more parents in the labor force in the Rainbow City (100%), Canyon Day (90%), East Fork-Fort Apache-Seven Mile- Turkey Creek (86%), and Cibecue (80%) areas than in the region as a whole. In the Cedar Creek (35%), Whiteriver (60%), and Hoday-McNary (69%) areas the percent of young children with one or more parents in the labor force was lower than that in the region as a whole. In addition to unemployment, the lack of child care, or the prohibitive cost of child care, can keep parents from participating in the labor force.<sup>44</sup> This may be true in the case of young children who live with a single parent who is not in the labor force.

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<sup>iii</sup> The definitions of the areas for which the Arizona Local Area Unemployment Statistics calculate unemployment rates places follow Census definitions of cities and towns. Geographic definitions were revised by the Bureau of Labor Statistics in 2016 and recalculated for the periods of 1976-2016. Tribal unemployment statistics as well as estimates for small towns and places are no longer available.

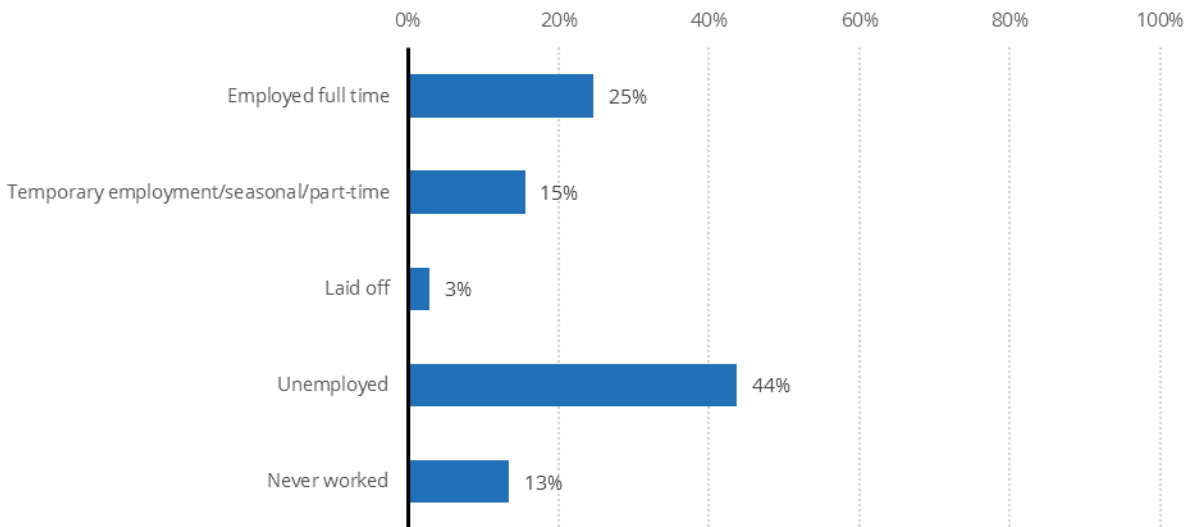
<sup>iv</sup> Note: "In the labor force" includes persons who are employed and persons who are unemployed but looking for work. Persons who are "not in the labor force" include stay-at-home parents, students, retirees, and others who are not working or looking for work.

Figure 10. Average Unemployment Rate, ACS 2010-2014 Estimate



Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table S2301.

Figure 11. Responses to “Employment Status”



Source: White Mountain Apache Head Start (2016). 2016-2017 Head Start Community Assessment. Received by request.

Table 15. Parents of Young Children (Ages 0 to 5) Who Are or Are Not in the Labor Force

	Estimated number of children (ages 0-5) living with one or two parents	Children (ages 0-5) living with two parents who are both in the labor force	Children (ages 0-5) living with two parents, one in the labor force, and one not	Children (ages 0-5) living with two parents, neither in the labor force	Children (ages 0-5) living with a single parent who is in the labor force	Children (ages 0-5) living with a single parent who is not in the labor force
White Mountain Apache Tribe	1,778	19%	9%	3%	48%	21%
Canyon Day	106	50%	0%	17%	23%	10%
Cedar Creek	118	19%	4%	0%	15%	61%
Cibecue	151	25%	11%	10%	44%	9%
East Fork-Ft Apache-Seven Mile-Turkey Creek	207	13%	5%	0%	68%	14%
Hondah-McNary	203	49%	1%	1%	19%	30%
North Fork	275	14%	3%	3%	55%	25%
Rainbow City	144	16%	13%	0%	72%	0%
Whiteriver	555	6%	17%	1%	53%	23%
Remainder of the Region	19	0%	32%	0%	68%	0%
All Arizona Reservations	18,293	13%	11%	2%	40%	34%
ARIZONA	510,658	31%	29%	1%	29%	10%

Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B23008

Note: "In the labor force" includes persons who are employed and persons who are unemployed but looking for work. Persons who are "not in the labor force" include stay-at-home parents, students, retirees, and others who are not working or looking for work.

Note: The percentages above may not add to 100% due to rounding.

## Food Insecurity

Food insecurity is defined by the USDA as a "household-level economic and social condition of limited or uncertain access to adequate food."<sup>45</sup> Programs such as the Food Distribution Program on Indian Reservations (FDPIR), the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and the National School Lunch Program are important for helping those at risk of hunger.

Through FDPIR, families meeting eligibility requirements based on income and household size can receive a monthly package of USDA foods from an Indian Tribal Organization (ITO) or state agency.<sup>46</sup> The White Mountain Apache Tribe Food Distribution distributes FDPIR boxes in the White Mountain Apache Tribe Region. Families choosing not to participate in FDPIR may enroll in SNAP and receive monthly benefits to purchase food at participating retailers.

<sup>v</sup> For more information about FDPIR, visit <https://www.fns.usda.gov/sites/default/files/fdpir/pfs-fdpir.pdf>

The number of young children participating in SNAP has declined since 2012, but this program still supports 1,746 young children in the White Mountain Apache Tribe Region annually (Table 16).

In many Arizona tribal communities the WIC program was initially funded through the state of Arizona. Overtime, however, several tribes advocated for services that were directed by the tribes themselves and that met the needs of tribal members. As part of this effort, in 1986 the Inter Tribal Council of Arizona (ITCA) applied for and received approval to become a WIC state agency through the USDA, initially funding seven Tribes. Currently, the ITCA WIC program provides services to 13 reservation communities and the Indian urban populations in the Phoenix and Tucson area. The White Mountain Apache Tribe WIC continues to be one of the tribally operated programs under the ITCA WIC umbrella.

Enrollment in the White Mountain Apache Tribe WIC program has also declined slightly between 2013 and 2015 (Table 18), though the program still served nearly 2,000 women, infants, and children in 2015 (Table 17). According to the 2016-2017 Head Start Community Assessment, 58 percent of parents and caregivers surveyed reported that they or their child received WIC benefits and 45 percent reported receiving SNAP benefits. WIC participation rates in the region were higher than those statewide for women, infants, and children and these rates increased by two percentage point between January 2013 and January 2015 (Figure 12). One reason for these high participation rates may be the relatively high availability of WIC authorized retailers in the region. A common challenge to participating in SNAP or WIC may be the availability of retailers where WIC vouchers or SNAP Electronic Benefits Transfer (EBT)<sup>vi</sup> are accepted. The ratio of population to SNAP retailers is less than half that available statewide or in all Arizona reservations, but the ratio of population to WIC retailers is more than double that of the statewide ratio and higher than the ratio in all Arizona reservations (Table 19). The availability of WIC retailers in local communities may make it easier for program participants to redeem WIC vouchers.

Schools are an important part of the nutrition assistance system, especially for children that may be food insecure. Most of the students enrolled in schools in the region were eligible for free and reduced price lunch. Overall, the percentage of eligible students rose from 87 percent in 2013 to 94 percent in 2016 (Figure 13). Rates of eligibility for free or reduced price lunch were generally higher in the region's elementary schools compared to the junior high or high school.

When school is not in session, schools, community centers, churches, and other community institutions in areas with at least 50 percent of children or more who are eligible for free or reduced-price lunch can receive funding through the Summer Food Service Program (SFSP)<sup>vii</sup> to provide summer meals to children of all ages.<sup>47</sup> There were four sites in the White Mountain Apache Tribe Region that served summer meals between 2012 and 2015, and the total number of meals served more than doubled across those four years (Table 21). In June and July of 2015, more than 8,500 breakfasts and lunches were served at Theodore Roosevelt School over 48 days, over 3,600 breakfasts and lunches were served at Alchesay High School over 18 days in June, and more than 7,500 breakfasts and lunches were served at Whiteriver Elementary School over 18 days in June. A concerted outreach campaign by the Whiteriver School District that included advertisements on the radio, posting of flyers throughout the region, and advertising in movie theatres in Show Low and Pinetop prior to the summer of 2013 contributed to the increase in meals served across the region. Additionally, the Native Vision Camp sponsored by Johns Hopkins is hosted in Whiteriver during

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<sup>vi</sup> *Electronic Benefits Transfer (EBT) is an electronic system that allows a recipient to authorize transfer of their government benefits from a Federal account to a retailer account to pay for products received. See <https://www.fns.usda.gov/ebt/general-electronic-benefit-transfer-ebt-information>*

<sup>vii</sup> *For more information on the Summer Food Service Program in Arizona, visit <http://www.azsummerfood.gov/>*

the summer, which brings Native youth from across the country to the region for a week-long sports camp. This program utilizes the summer meal program to feed campers while they are in the region.

The Child and Adult Food Program (CACFP) is another important nutrition program for young children. The program provides reimbursement to eligible child care centers, adult daycare centers, Head Starts, emergency shelters, and afterschool programs serving at-risk youth to enhance their current menus to offer more fresh fruits and vegetables, whole grains, and low-fat dairy products. The goals of the CACFP program are to support the health and nutrition status of children and adults and promote good eating habits.<sup>viii</sup> Alchesay Beginnings Child Development Center and the three White Mountain Apache Head Start Centers at Whiteriver, McNary and Cibecue all participated in CACFP between 2012 and 2015 (Table 22). Participation in CACFP enabled these centers to be reimbursed for providing healthy, balanced meals to children enrolled. The number of meals reimbursed in the region through CACFP decreased slightly between 2012 and 2015. Overall, CACFP reimbursed the four participating centers for 34,450 lunches, 27,049 breakfasts, and 14,845 afternoon snacks across 127 to 203 days of the year in 2015. Variation between years in the number of meals served are largely due to variations in the number of days meals were served. For example, in 2014, there were 140 meal service days at McNary Head Start compared to 137 in 2015. Similarly, there were 247 meal service days at Alchesay Beginnings Child Development Center in 2013 compared to 183 in 2014.

Beyond federal nutrition assistance program, local efforts to build food sovereignty and restore traditional food ways in the community include Ndee Bikiyaa (“the People’s Farm), a project of the White Mountain Apache Tribe Hydrology and Water Resources since 2009. Its mission is to “restore personal and cultural health among the White Mountain Apache through agriculture.”<sup>48</sup> The Farm is located southwest of Whiteriver near Fort Apache and encompasses more than 900 acres of fields, a two-acre garden, a community educational center, two hoop houses, and a greenhouse. Ndee Bikiyaa also supports building school gardens, conducted community gardening workshops, and grows crops for sale at cost to community members at the White Mountain Apache Farmers Market. The Farm has been certified by the USDA for its food harvesting, agricultural, and handling practices.<sup>49</sup>

When asked about what would help improve nutrition in their family, respondents to the 2016-2017 Head Start Community Assessment reported that reviews of healthy and unhealthy foods and instruction in how to read labels, basic nutrition, and training for parents would be most helpful. Other supports desired included providing examples of physical activity as well as local resources for personal counseling around nutrition and health (Figure 14).

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<sup>viii</sup> For more information on the CACFP, visit <http://www.azed.gov/health-nutrition/cacfp/>



Table 16. Numbers of Young Children (Ages 0 to 5) Receiving SNAP Benefits, 2012 to 2015

	CY 2012	CY 2013	CY 2014	CY 2015	Change from 2012 to 2015
White Mountain Apache Tribe	2,044	2,026	1,989	1,746	-15%
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A
ARIZONA	296,686	290,513	277,345	249,712	-16%

Source: Arizona Department of Economic Security (2016). [Family Assistance Administration dataset]. Unpublished data.

Table 17. Enrollment in the White Mountain Apache Tribe WIC Program, 2015

	Women	Infants	Children	Total
White Mountain Apache Tribe	497	536	950	1,983

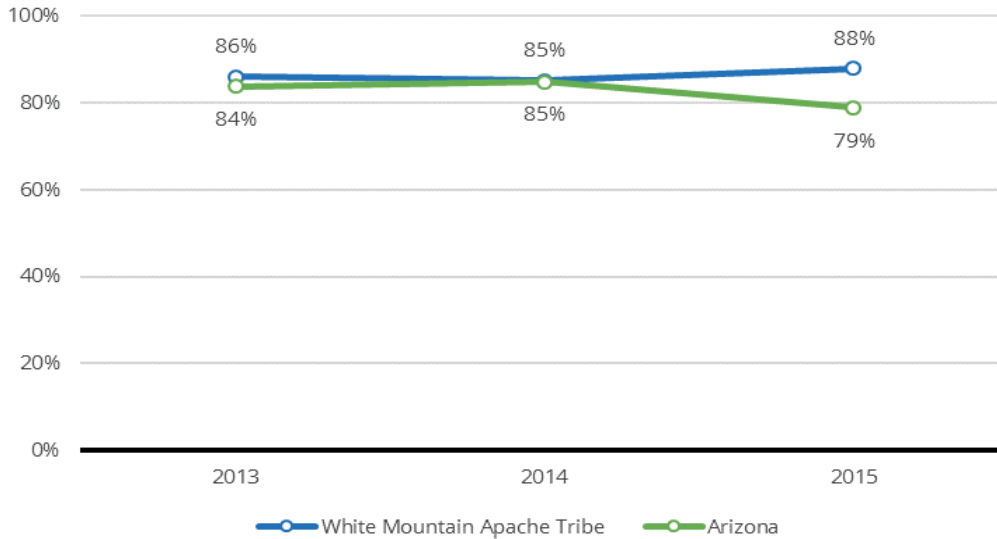
Source: Inter-Tribal Council of Arizona (2016) [WIC Dataset]. Unpublished data.

Table 18. Children (ages 0-4) enrolled in the White Mountain Apache Tribe WIC Program, 2013 to 2015

	CY 2013	CY 2014	CY 2015	Change 2013-2015
White Mountain Apache Tribe	1,596	1,536	1,486	-7%

Source: Inter-Tribal Council of Arizona (2016) [WIC Dataset]. Unpublished data.

Figure 12. WIC Participation Rates January 2013 to January 2015



Source: Inter-Tribal Council of Arizona (2016) [WIC Dataset]. Unpublished data..

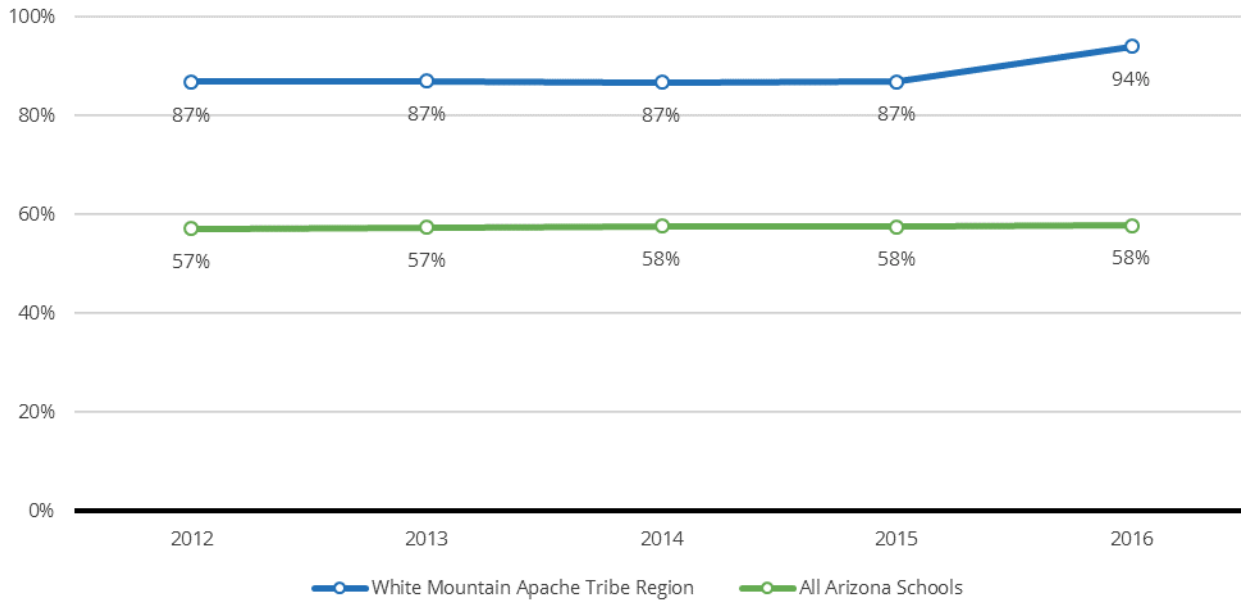
Note: Participation rates are calculated by dividing the number of participants who received benefits in a given month by the total number of participants enrolled in the program during that month.

Table 19. Retailers Participating in the SNAP or WIC Programs

	Number of SNAP retailers	SNAP retailers per 100,000 residents	Number of WIC retailers	WIC retailers per 100,000 residents
White Mountain Apache Tribe	4	29.83	3	22.37
All Arizona Reservations	108	60.63	26	14.60
ARIZONA	4,038	63.17	644	10.08

Source: United Arizona Department of Health Services (2016). Arizona WIC Vendor List. Retrieved from <http://azdhs.gov/documents/prevention/azwic/az-wic-vendor-list.pdf>; Inter-Tribal Council of Arizona (2016). Special Supplemental Nutrition Program for Women, Infants, and Children: Find a Store. Retrieved from [http://itcaonline.com/?page\\_id=1064](http://itcaonline.com/?page_id=1064); United States Department of Agriculture (2016). SNAP Retailer Locator. Retrieved from <https://www.fns.usda.gov/snap/retailerlocator>. Notes: Per capita figures were calculated using the 2010 Census total population for each geography. SNAP and WIC retailers by geography account for the retailers falling within the geographic boundaries of a given area. WIC retailers account for retailers authorized through both the Arizona Department of Health Services and the Inter-Tribal Council of Arizona WIC Programs.

Figure 13. Proportion of Students (Pre-kindergarten Through Twelfth Grade) Eligible for Free or Reduced-Price Lunch, 2012 to 2016



Source: Arizona Department of Education (2016). [Nutrition Program dataset]. Unpublished data.

Table 20. Proportion of Students (Pre-kindergarten Through Twelfth Grade) Eligible for Free or Reduced-Price Lunch, 2012 to 2016

	Schools	2012	2013	2014	2015	2016
White Mountain Apache Tribe Region Schools	6	87%	87%	87%	87%	94%
Mcnary Elementary School (PS-8)	1	94%	95%	92%	92%	92%
Whiteriver Elementary (PS-5)	1	87%	87%	87%	87%	100%
Canyon Day Junior High School	1	87%	87%	87%	87%	91%
Cradleboard School (PS-5)	1	79%	79%	79%	79%	90%
Alchesay High School	1	84%	84%	84%	84%	85%
Seven Mile School (PS-5)	1	92%	92%	92%	92%	100%
All Arizona Schools	1,295	57%	57%	58%	58%	58%

Source: Arizona Department of Education. [Nutrition Program Data]. Unpublished data.

Table 21. Meals Served through the Summer Food Service Program, 2012 to 2015

	2012	2013	2014	2015	Change from 2012 to 2015
White Mountain Apache Tribe Region Schools	8,142	10,488	9,485	19,701	+142%
Alchesay High School	3,758	0	0	3,614	-4%
Canyon Day Junior High School	0	2,636	2,409	0	0%
Theodore Roosevelt	0	0	0	8,510	N/A
Whiteriver Elementary	4,384	7,852	7,076	7,577	+73%
All Arizona Schools	4,436,660	4,138,208	4,046,104	3,998,264	-10%

Source: Arizona Department of Education. [Nutrition Program Data]. Unpublished data.

Note: No summer meals were provided at Alchesay High School in the summers of 2013 and 2014 due to construction on the Alchesay High School campus. Due to the close proximity of the campuses of Alchesay High School and Whiteriver Elementary, the Summer Food Service Program service at these sites serves many of the same families.

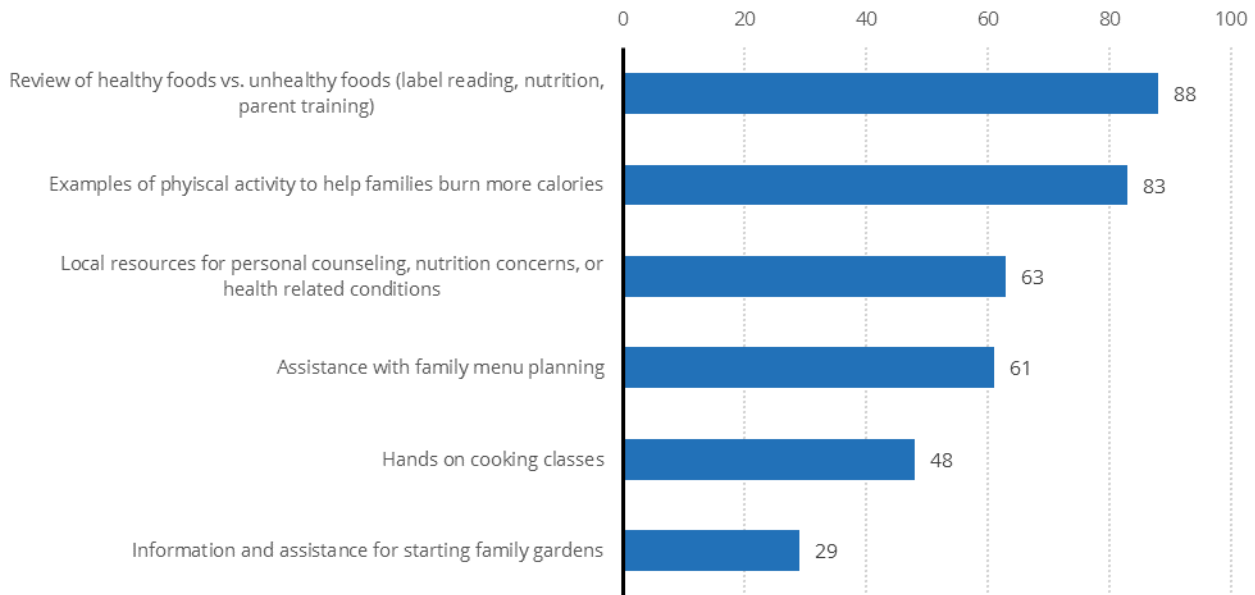
Table 22. Meals Served through CACFP, 2012 to 2015

	2012	2013	2014	2015	Change from 2012 to 2015
White Mountain Apache Tribe Region CACFP Sites	85,672	93,669	89,005	76,344	-11%
Alchesay Beginnings Child Development Center	26,641	34,310	25,928	22,433	-16%
Cibecue Headstart	8,646	8,207	8,246	8,935	+3%
McNary Headstart	4,401	3,853	4,550	3,641	-17%
Whiteriver Headstart	45,984	47,299	50,281	41,335	-10%
All Arizona Schools	19,923,277	20,434,338	20,412,397	21,773,052	+9%

Source: Arizona Department of Education. [Nutrition Program Data]. Unpublished data.

Note: Variations in the number of meals served are largely due to variations in the number of days meals were served. For example, in 2014, there were 140 meal service days at McNary Head Start compared to 137 in 2015. Similarly, there were 247 meal service days at Alchesay Beginnings Child Development Center in 2013 compared to 183 in 2014.

Figure 14. Responses to “What can be done to help improve the nutrition in [your] family?”



Source: White Mountain Apache Head Start (2016). 2016-2017 Head Start Community Assessment. Received by request.

### Housing and Transportation

Residents of the White Mountain Apache Tribe Region have a lower housing cost burden than residents of the state as a whole: only 16 percent of housing units in the region require their residents to contribute more than 30 percent of their household income toward housing, compared to 34 percent statewide (Table 23). However, it is important to note that even when housing is affordable, housing availability is typically lower on tribal land, due to the legal complexities of land ownership and the lack of rental properties, often leading to a shortage of safe, quality housing. Data from the 2016-2017 Head Start Community Assessment suggest that many see a need to improve housing in the region. Out of five social services, housing improvement was the service that the most parents and caregivers felt should be given top priority (see Figure 15). Of those that responded to the survey, 26 percent reported owning their home, 28 percent reported renting, and 45 percent said that they stay with family or friends. Sixty-five percent of respondents reported that five to eight people lived in their households, and an additional six percent reported a household size of nine or more people. Key informants noted that families often live together due to a shortage of housing on the reservation. While multi-generational and multi-family living may be beneficial for raising children as there are more people to pitch in, a lack of sufficient housing stock may mean that it is hard for adult children with growing families to move out into their own home.

Beyond housing, several key informants noted that there is a need in the community for wider infrastructure improvements. The three White Mountain Apache Head Start center facilities in Whiteriver, McNary, and Cibecue were reported to need major improvements or new buildings altogether. The Tribal Child Find Program was also reported to need a new building as their current one has significant water damage. Seventeen percent of parents and caregivers surveyed in the 2016-2017 Head Start Community Assessment said that Head Start facilities needed repairs and maintenance, and 30 percent responded that new buildings were needed in all locations.

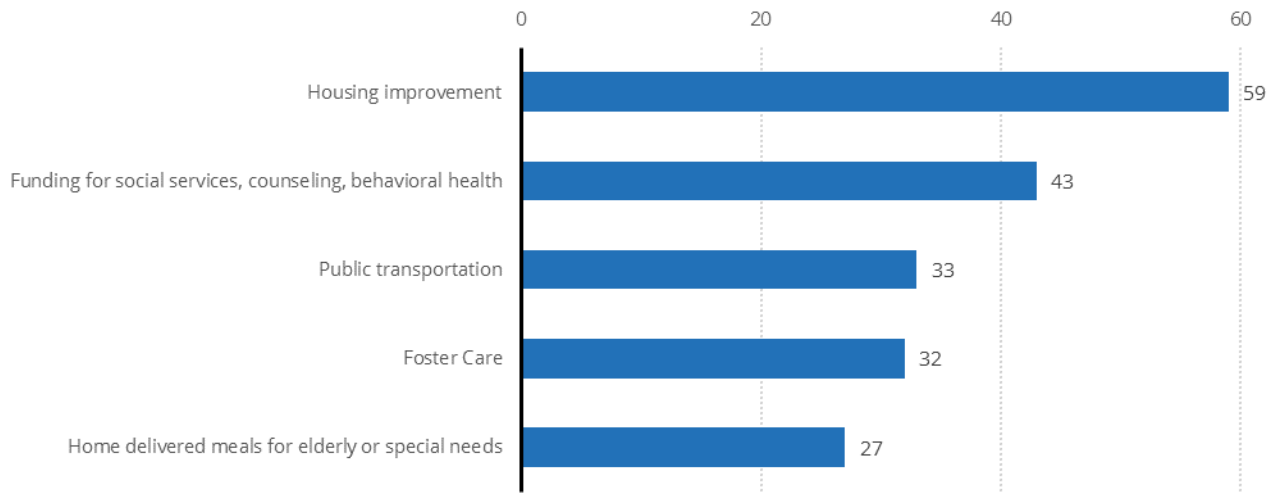
Transportation remains a major challenge in the region. Figure 17 shows a map of households in the region by block group that do not have access to a vehicle. As many as one in two households have no vehicle available in Cibecue, Carrizo, Cedar Creek, and East Fork. Just over half (54%) of respondents to the 2016-2017 Head Start Community Assessment reported owning a car or planning to buy one. About a third of respondents (34%) reported relying on friends and family for transportation, while thirteen percent walked, hitchhiked, or rode a bike (Figure 16). Key informants in the region identified transportation as a major barrier to parents and families participating in programs, including parenting classes and workshops offered in the region. Beyond lack of access to a vehicle, the cost of gas and the low availability of service stations in the region can also be a challenge for low-income families. Availability of transportation was also identified as a major reason why families might miss medical appointments or follow-up care. Non-emergency transport is available through the Indian Health Service for medical appointments. However, this service can be difficult for families to utilize when they have multiple children because transport is only provided to the patient and the patient's parent or guardian, not the entire family. While regional transportation solutions will require a broad effort on the part of multiple regional stakeholders, programs seeking to reach and serve families with young children need to remain cognizant of the challenges in this area and, where possible, design programs and outreach strategies that minimize the need for families to travel long distances.

Table 23. The Cost of Housing, Relative to Household Income

	Number of occupied housing units	Occupied housing units which cost 30% of household income, or more
White Mountain Apache Tribe	3,482	16%
Canyon Day	300	11%
Cedar Creek	114	32%
Cibecue	439	28%
East Fork-Ft Apache-Seven Mile-Turkey Creek	482	22%
Hondah-McNary	416	21%
North Fork	422	9%
Rainbow City	217	3%
Whiteriver	976	12%
Remainder of the Region	116	9%
All Arizona Reservations	47,892	17%
ARIZONA	2,387,246	34%

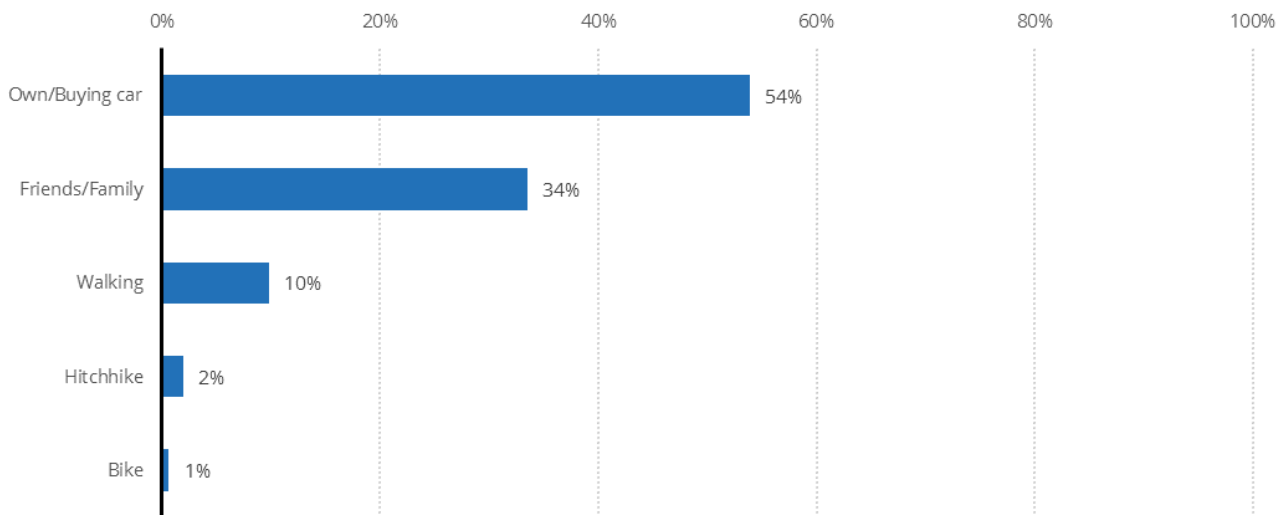
Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B25106

Figure 15. Responses to “Which of the following Social Services do you feel should be given top priority for improvement?”



Source: White Mountain Apache Head Start (2016). 2016-2017 Head Start Community Assessment. Received by request.

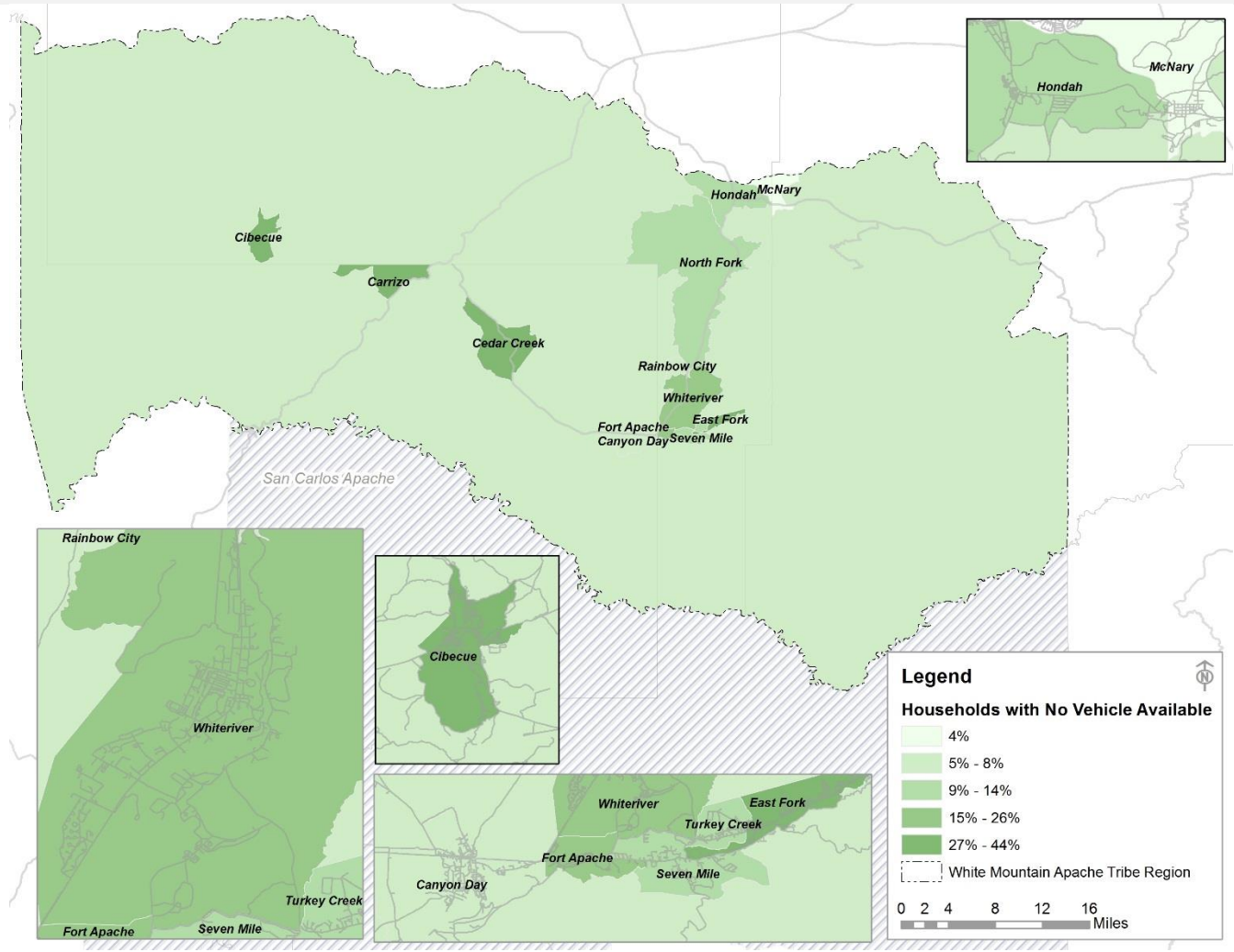
Figure 16. Responses to “What is your current transportation means?”



Source: White Mountain Apache Head Start (2016). 2016-2017 Head Start Community Assessment. Received by request.



Figure 17. Map of Households with No Vehicles Available, by Census Designated Place



Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B08201. Map produced by CRED.



## EDUCATIONAL INDICATORS

## Why Educational Indicators Matter

The degree to which people in a community are engaged and succeeding in educational settings can have profound impacts on the developmental and economic resources available to children and families in that region. Indicators such as school enrollment and attendance, achievement on standardized testing, graduation and dropout rates, and the overall level of education in the adult population can all paint a picture of a region's educational engagement and success.

The importance of education begins early in life. Preschool participation has been shown to better prepare young children for kindergarten by supporting good school attendance practices and honing socio-emotional, cognitive, and physical skills.<sup>50,51,52,53</sup> Starting in kindergarten, poor school attendance can cause children to fall behind, leading to lowered proficiency in reading and math, and increased grade-retention.<sup>54</sup>

Early education is laying an important foundation for the future. Students who are at or above grade level reading in third grade are more likely to graduate high school and attend college.<sup>55</sup> A family's economic circumstances can multiply this effect: more than one-fourth (26%) of children who were both not reading proficiently in third grade and living in poverty for at least a year do not finish high school – that is more than six times the drop-out rate for proficient readers.<sup>56</sup>

In recognition of the importance of assuring that children are reading by the third grade, the Arizona Revised Statute §15-701 (also known as the *Move on When Reading* law) was enacted, which states that a student shall not be promoted from the third grade if the student obtains a score that falls far below the third-grade level.<sup>ix</sup> Exceptions exist for students identified with or being evaluated for learning disabilities, English language learners, and those with reading impairments. From 2000-2014, the primary in-school performance measure of students in public elementary schools in the state used to meet the *Move on When Reading* requirement was the Arizona's Instrument to Measure Standards (AIMS).<sup>x</sup> In 2014, the statewide assessment tool for English language arts (ELA) and mathematics changed from AIMS to AzMERIT (Arizona's Measurement of Educational Readiness to Inform Teaching), and the first AzMERIT testing began in the 2015 school year.<sup>57</sup> New proficiency cut points were determined by grade level,<sup>58</sup> and earning a score of "proficient" or "highly proficient" indicates that a student is prepared for the next grade without requiring additional support.<sup>59</sup> Students who score as either "minimally" or "partially proficient" are likely to need support to be ready to move on to the next grade.<sup>60</sup> In order for children to be prepared to succeed on tests such as AzMERIT, research shows that early reading experiences, opportunities to build vocabularies, and literacy-rich environments are the most effective ways to support the literacy development of young children.<sup>61</sup>

Beyond the direct connections between caregivers' education and their own literacy, the ability to read to, share with, and teach young children in the home is influenced by parental and familial stress levels, income levels, and educational levels. Families in poverty are often grappling with issues of day-to-day survival which may limit time spent in developmentally enriching activities. Parents with higher educational attainment may be less vulnerable to these issues and are more likely to have children with positive outcomes related to school readiness and educational achievement, as well improved health, social and economic outcomes.<sup>62</sup> Higher levels of parental education are also associated with better housing, more secure neighborhoods, and stable working conditions, all of which are important for the health and well-being of children.<sup>63,64</sup>

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<sup>ix</sup> For more information on *Move on When Reading*, visit <http://www.azed.gov/mowr/>

<sup>x</sup> For more information on the AIMS test, visit <http://arizonaindicators.org/education/aims>

## What the Data Tell Us

### Standardized Test Scores

There are six public schools in the White Mountain Apache Tribe Region in two public school districts. In the Whiteriver Unified School District, Seven Mile School, Cradleboard School, and Whiteriver Elementary School serve students in preschool through fifth grade. Canyon Day Junior High School serves students in sixth through eighth grade, while Alchesay High School enrolls high school students. McNary Elementary School in the McNary Elementary District enrolls students in preschool through eighth grade. Figure 17 shows a map of school districts in the region. In addition to public schools, students may enroll in Dishchii'bikoh Community (Cibecue Community) School, Theodore Roosevelt School, or John F. Kennedy Day School, which are operated by the Bureau of Indian Education. Cibecue Community School is a K-12 Title I grant school that focuses on preserving Apache language and culture. Theodore Roosevelt School is a boarding school that also serves local students in third through eighth grade, and John F. Kennedy Day School enrolls students in kindergarten through eighth grade. There is one private religious school in the region, East Fork Lutheran School, which serves students in kindergarten through eighth grade.

The AzMERIT, which replaced Arizona Instrument to Measure Standards (AIMS) in the 2014-2015 school year, is designed to assess students' critical thinking skills and their mastery of the Arizona College and Career Ready Standards established in 2010. Students who receive a proficient or highly proficient score are considered adequately prepared for success in the next grade. In the 2014-2015 school year, only 15 percent of White Mountain Apache Tribe Region students attained these scores on the third grade math assessment, which was a lower passing rate than across Arizona as a whole (41%) (Figure 19). Performance on the English Language Arts (ELA) test was poorer, with only 10 percent of White Mountain Apache Tribe Region students demonstrating proficiency, compared to 40 percent across the state (Figure 20). Across schools, third grade students at Cradleboard School passed the ELA assessment at the highest rate (20%), while students at Whiteriver Elementary and Cradleboard school passed the Math assessment at similar rates (24% and 23% respectively) (see Table 24 and Table 25). A portion of the 81 percent of White Mountain Apache Tribe Region third graders who scored minimally proficient on the ELA test are at risk for retention in third grade, based on the Arizona's Move on When Reading law, which requires retention of those whose reading falls far below the third grade level.<sup>xi</sup>

These scores on the AzMERIT Math and English Language Arts tests were considerably lower than those on the AIMS tests in prior years. In the 2013-2014 school year, between 34 and 56 percent of students in White Mountain Apache Tribe Region schools passed the AIMS Math test, and between 45 and 66 percent passed the AIMS reading test (Figure 21; Figure 22). The drop in passing rates in the transition from AIMS to AzMERIT has been seen across all schools in Arizona.<sup>65</sup>

A sample of Arizona students in grades 4, 8 and 12 also take the National Assessment of Educational Progress (NAEP), a nationally-administered achievement test that allows for comparisons between states.<sup>xii</sup> Thirty percent of Arizona fourth graders scored at the proficient or advanced level in reading in 2015, compared with 35 percent of fourth graders nationally. Scores have been improving steadily, both in the state and nationally, since testing began in 1998.

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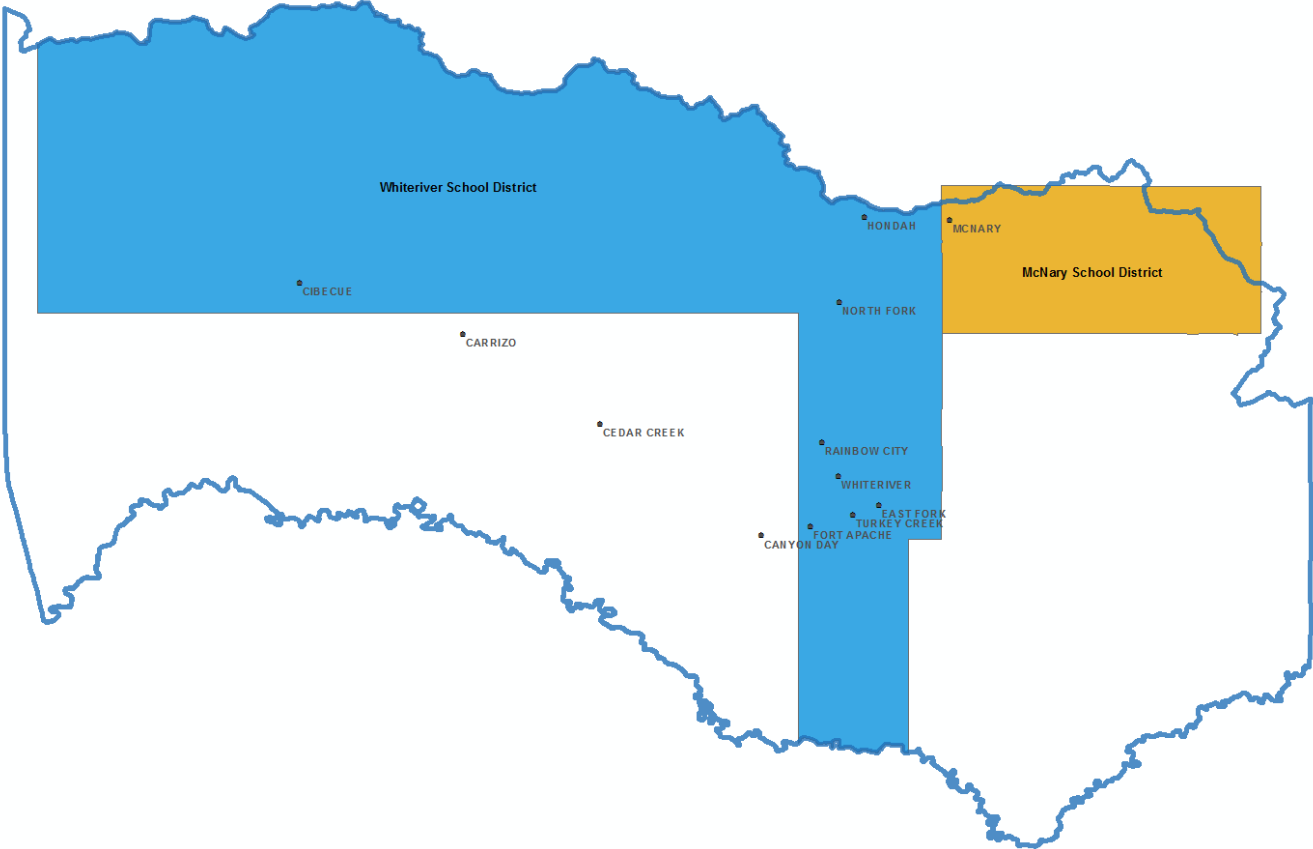
<sup>xi</sup> Note that in the data provided, the scores reported are a combined ELA score of reading and writing. Students may have a minimally proficient ELA score and still meet the Move On When Reading requirement.

<sup>xii</sup> Please note that specific data on NAEP scores for the White Mountain Apache Region were not available for this report.

Strong disparities exist in the state NAEP scores based on race, ethnicity and income. Forty-four percent of Arizona fourth grade white students score at the proficient reading level or above, compared with 27 percent of black students, 18 percent of Hispanic students, and 11 percent of American Indian students. Fifty-two percent of fourth graders who were not eligible for free or reduced-price school lunch scored at or above the proficient reading level, but only 17 percent of children who were eligible for the program scored that highly.

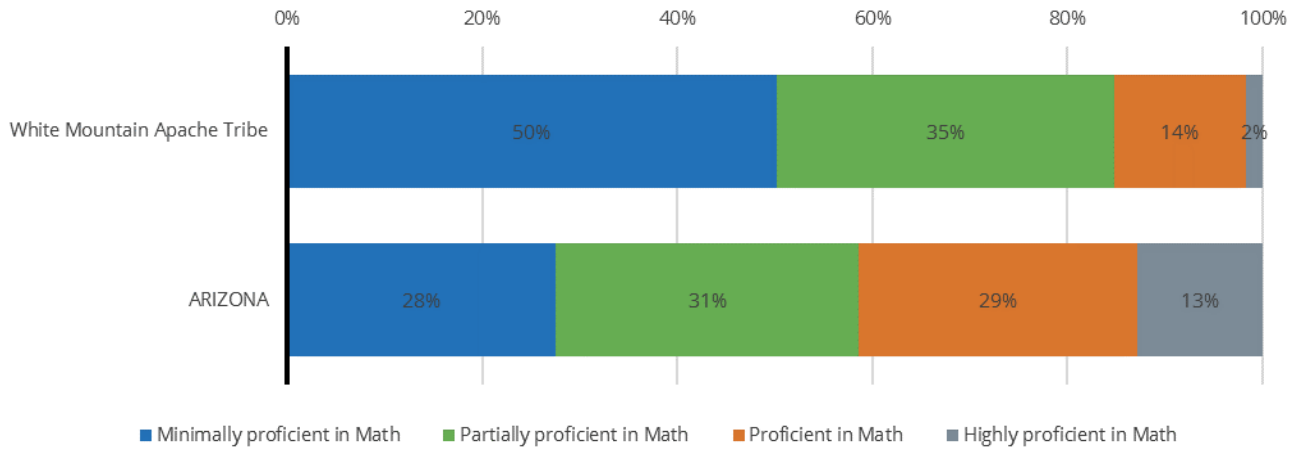
Student performance in the White Mountain Apache Tribe Region, and statewide, suggests that there is much work to be done to support early literacy and to strengthen scholastic achievement, particularly among young children from ethnic/racial minority groups and children in poverty.

Figure 18. School Districts in the White Mountain Apache Tribe Region



Source: First Things First (2016). Map by First Things First.

Figure 19. AzMERIT Math Test Results for Third-Graders in the 2014-2015 School Year



Source: Arizona Department of Education (2016). [Education dataset]. Unpublished data.

Note: The percentages may not add to 100% due to rounding.

Table 24. AzMERIT Math Test Results for Third-Graders in 2014-15, by School District

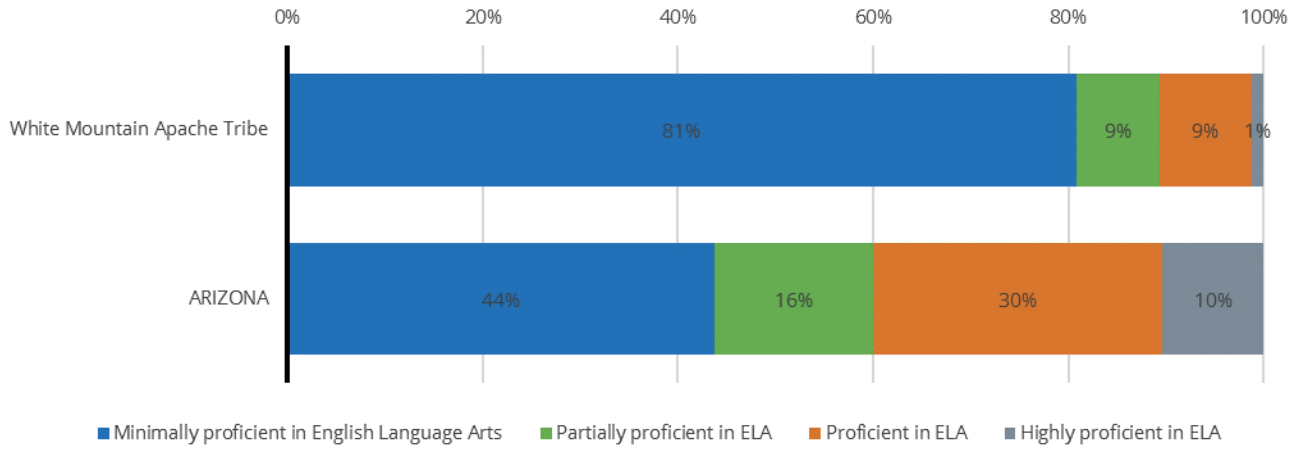
	Minimally proficient in Math	Partially proficient in Math	Proficient in Math	Highly proficient in Math	Passing Math (proficient or highly proficient)
White Mountain Apache Tribe Region Schools	50%	35%	14%	2%	15%
Cradleboard School (PS-5)	46%	35%	15%	4%	19%
McNary Elementary School (PS-8)	88%	6%	6%	0%	6%
Seven Mile School (PS-5)	54%	37%	9%	0%	9%
Whiteriver Elementary (PS-5)	41%	38%	19%	3%	21%
All Arizona Schools	28%	31%	29%	13%	41%

Source: Arizona Department of Education (2016). [Education dataset]. Unpublished data.

Note: The school-district data in this table include only the schools that fall within the region's boundaries. For districts which are partially outside of the region, the data for the complete district is likely to vary from the percentages reported here.

Note: The percentages may not add to 100% due to rounding.

Figure 20. AzMERIT English Language Arts Test Results for Third-Graders in the 2014-2015 School Year



Source: Arizona Department of Education (2016). [Education dataset]. Unpublished data.

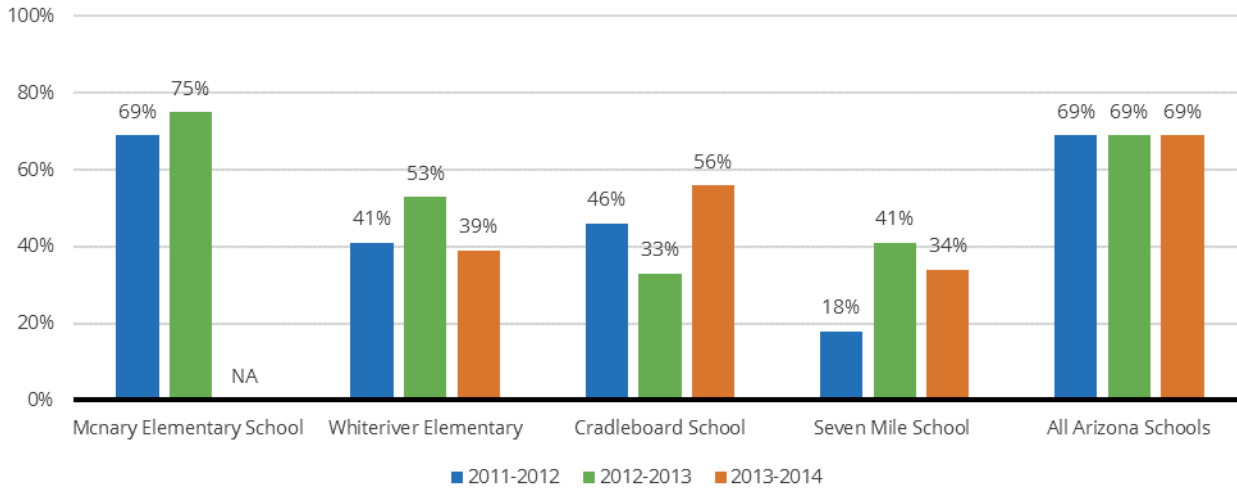
Table 25. AzMERIT English Language Arts Test Results for Third-Graders in 2014-15, by School District

	Minimally proficient in English Language Arts	Partially proficient in English Language Arts	Proficient in English Language Arts	Highly proficient in English Language Arts	Passing English Language Arts (proficient or highly proficient)
White Mountain Apache Tribe Region	81%	9%	9%	1%	11%
Cradleboard School (PS-5)	76%	4%	18%	2%	20%
McNary Elementary School (PS-8)	94%	0%	6%	0%	6%
Seven Mile School (PS-5)	83%	10%	7%	0%	7%
Whiteriver Elementary (PS-5)	78%	11%	8%	3%	10%
All Arizona Schools	44%	16%	30%	10%	40%

Source: Arizona Department of Education (2016). [Education dataset]. Unpublished data.

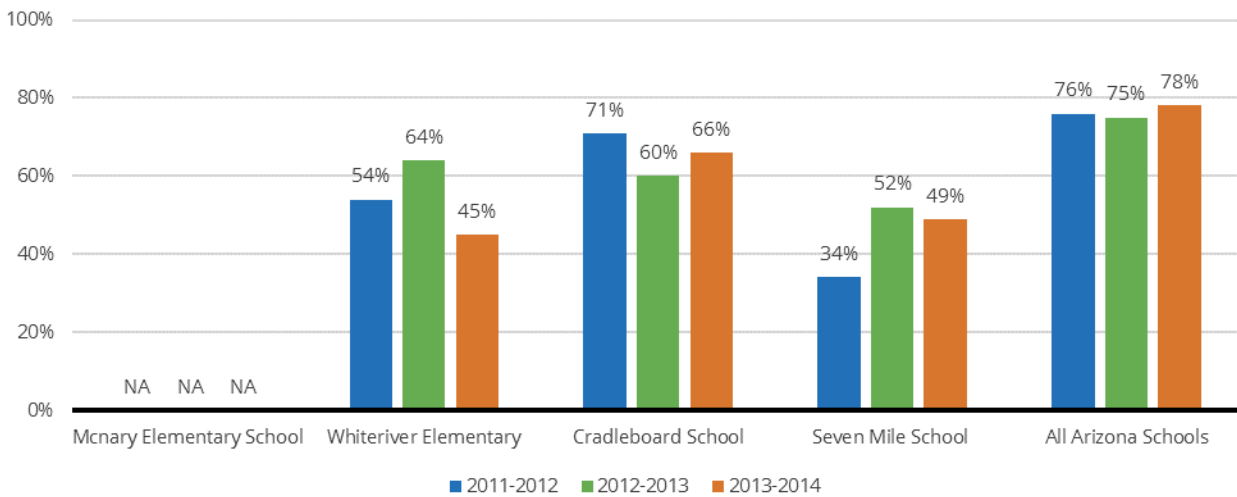
Note: The school-district data in this table include only the schools that fall within the region's boundaries. For districts which are partially outside of the region, the data for the complete district is likely to vary from the percentages reported here.

Figure 21. Students passing AIMS Math, 2011-2012 to 2013-2014 School Years



Source: Arizona Department of Education (2016). AIMS Results. Retrieved from <http://www.azed.gov/research-evaluation/aims-assessment-results/>

Figure 22. Students passing AIMS Reading, 2011-2012 to 2013-2014 School Years



Source: Arizona Department of Education (2016). AIMS Results. Retrieved from <http://www.azed.gov/research-evaluation/aims-assessment-results/>

### Educational Attainment

The Arizona Department of Education tracks the percent of students who are chronically absent, meaning they have missed more than 10 days of school in a school year. Table 26 shows these percentages for elementary schools in the region. Rates of chronic absences in the schools in the White Mountain Apache Tribe Region have been consistently



higher in 2014 (42%) and 2015 (44%) than in the state as a whole (34% and 36%, respectively). However, absence rates vary by school; Cradleboard School had a smaller percent of students with chronic absences (33%) compared to schools statewide, while the percent of students with chronic absences was ten percentage points higher in Seven Mile School (54%) than in the region as a whole. Identifying and addressing the reasons behind chronic absenteeism is important to ameliorate later effects on educational achievement and graduation rates.

The White Mountain Apache Tribe Region contains one public high school, Alchesay High School. Dishchii'bi'koh Community School, located in Cibecue, also serves high school students in the region; however data from this school were not available to include in this report. The high school drop-out rate at Alchesay High School increased slightly from a low of 14 percent in 2013 to 18 percent in 2015. The drop-out rate in the White Mountain Apache Tribe Region has consistently been much higher than the state rate of 3 to 4 percent (Table 27). The four-year high school graduation rate at Alchesay High School has been consistently lower than that of schools statewide. However, between 2013 and 2014, the four-year graduation rate increased by nearly 20 percentage points. In 2015, two out of three high school seniors at Alchesay High School graduated on time.

Educational attainment for adults aged 25 and older in the White Mountain Apache Tribes Region is similar to that of adults in all Arizona reservations (Table 28). Over a third of adults have at least some college or professional education or a Bachelor's or advanced degree in the region (36%), nearly the same percentage as in all Arizona reservations (37%). Another third of adults have a high school diploma or GED, and just under a third have less than a high school education. These rates of educational attainment are lower than that seen in the county or the state. However, educational attainment varies by community. Nearly half of adults in Canyon Day (49%) and more than half of adults in North Fork (53%) have at least some college education. More than one in ten adults in Hondah-McNary and North Fork have a bachelor's degree. About half of adults in Cibecue and Rainbow City lack a high school diploma or GED. Among parents and caregivers surveyed in the 2016-2017 Head Start Community Assessment, 22 percent reported completing less than high school, 43 percent reported having a high school diploma or GED, 24 percent reported completing some college, and 10 percent had a college degree.

Table 26. Chronic Absences for Students in Grade 1 to 3, 2014 and 2015

	Number of schools	Number of students in 2014	Students with chronic (more than 10) absences in 2014	Percent of students with chronic absences in 2014	Number of students in 2015	Students with chronic (more than 10) absences in 2015	Percent of students with chronic absences in 2015
White Mountain Apache Tribe Region Schools	4	793	335	42%	858	377	44%
Cradleboard School	1	162	63	39%	177	58	33%
McNary Elementary School	1	43	21	49%	54	23	43%
Seven Mile School	1	312	153	49%	337	181	54%
Whiteriver Elementary	1	276	98	36%	290	115	40%
All Arizona Schools	1,185	278,142	93,719	34%	283,147	103,078	36%

Source: Arizona Department of Education (2016). [Education dataset]. Unpublished data.

Table 27. High School Drop-Out and Graduation Rates, 2012 to 2015

	Total number of high schools and alternative schools	Drop-out rate, 2012	Drop-out rate, 2013	Drop-out rate, 2014	Drop-out rate, 2015	Four-year graduation rate, 2011	Four-year graduation rate, 2012	Four-year graduation rate, 2013	Four-year graduation rate, 2014
White Mountain Apache Tribe Region Schools	1	16%	14%	15%	18%	47%	57%	48%	67%
Alchesay High School	1	16%	14%	15%	18%	47%	57%	48%	67%
All Arizona Schools	836	4%	3%	3%	4%	78%	77%	76%	76%

Source: Arizona Department of Education (2016). [Education dataset]. Unpublished data.

Table 28. Level of Education for the Adult Population (Ages 25 and Older)

	Estimated population (ages 25 and older)	Less than high school	High school or GED	Some college or professional education	Bachelor's degree or more
White Mountain Apache Tribe	7,562	32%	32%	30%	6%
Canyon Day	655	26%	26%	44%	5%
Cedar Creek	215	30%	31%	31%	8%
Cibecue	934	49%	26%	21%	4%
East Fork-Ft Apache-Seven Mile-Turkey Creek	1,088	41%	28%	25%	6%
Hondah-McNary	789	21%	27%	39%	12%
North Fork	972	16%	31%	41%	12%
Rainbow City	604	47%	38%	15%	0%
Whiteriver	2,052	27%	42%	27%	4%
Remainder of the Region	253	42%	25%	31%	2%
All Arizona Reservations	102,571	28%	34%	29%	8%
ARIZONA	4,284,776	14%	25%	34%	27%

Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B15002

Note: The percentages above may not add to 100% due to rounding.



# EARLY LEARNING

## Why Early Learning Matters

Young children spend their time observing the world and learning at a rapid pace. From fine and gross motor skill development, to language and numeracy skills, to social skills, the early years of a child's life are filled with opportunities for learning. The skills that young children are building are critical for healthy development as well as later achievement and success. Just as rich, stimulating environments can promote development, early negative experiences can also carry lasting effects.<sup>66</sup> Gaps in language development between children from disadvantaged backgrounds and their more advantaged peers are already evident by 18 months of age;<sup>67</sup> those disparities that persist until kindergarten are predictive of later academic failure.<sup>68</sup>

Families play a tremendous role in fostering development. Research shows that children's health, socio-emotional, and cognitive development also benefit greatly from high quality early learning.<sup>69,70</sup> This is particularly true for children from disadvantaged backgrounds.<sup>71</sup> 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 high school.<sup>72</sup>

Investment in children during the crucial first five years not only provides the necessary foundation for later achievement, but also produces a positive return on investment to society through increased educational achievement and employment, reductions in crime, and better overall health of those children as they mature into adults.<sup>73, 74,75</sup> Experts estimate that investments in quality early learning initiatives can offer returns as high as \$16 per dollar spent.<sup>76,77</sup> In other words, the costs of these programs are ultimately repaid several times over and the investment in early childhood is potentially one of the most lucrative ones that a community can make.

The ability of families to access quality, affordable early care and education opportunities, however, can be limited. Nearly one-third (32%) of parents of young children responding to a national survey regarding child care reported it was very or somewhat difficult to find care for their child, with cost being the most often cited challenge. More than two-thirds (69%) of parents surveyed reported having to pay in order to secure child care, and almost a third (31%) of those parents reported that that cost has caused a financial problem for the household.<sup>78</sup> According to the U.S. Department of Education, only 19 percent of four-year-olds in Arizona are enrolled in publically funded preschool or Head Start programs, compared to 41 percent nationally.<sup>79</sup> If not enrolled in publically-funded programs, which are often free or reduced cost, the annual cost of full-time center-based care (\$9,166) for a young child in Arizona is nearly equal to the cost of a year at a public college (\$10,065).<sup>80</sup> Child care subsidies can be a support for families who have financial barriers to accessing early learning services.<sup>xiii</sup>

In addition to prohibitive costs, the availability of suitable child care cannot be taken for granted. An inadequate child care supply, known as a "child care desert," has been defined as a zip code with at least 30 children under five years of age and either no or very limited center-based early care and education programs (i.e., there are more than three times as many children under age five as there are spaces in the child care settings.)<sup>81</sup> Living in a child care desert disproportionately affects rural populations, and given the many rural counties in Arizona, this is likely a common phenomenon in many regions.

Beyond basic issues of access and affordability, quality is also of paramount concern to parents. A recent national survey of parents who use child care for their young child(ren) found that most parents (59%) rated the quality of

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<sup>xiii</sup> For more information on child care subsidies see <https://www.azdes.gov/child-care/>

their child care as “excellent;” this runs contrary to research which suggests most child care across the country is not high quality.<sup>82</sup> How parents perceive and understand quality may differ; this points to the importance of quality ratings systems to help guide parent choices. Quality First is Arizona’s Quality Improvement and Rating System (QRIS) for early child care and preschool providers. Quality First employs a five-point rating scale to indicate quality levels. A one-star rating indicates that the provider is committed to examining practices and improving the quality of care beyond basic health and safety requirements. Quality First providers advance to a quality rating (3-5 star) by implementing lower teacher-to-child ratios, supporting higher staff qualifications, instituting a curriculum that aligns with the state standards and child assessment, and providing nurturing relationships between adults and children that promote emotional, social, and academic development. The number of providers across the state that meet quality standards (three-star rating or higher) has increased in recent years with 25 percent of the 857 participating providers in 2013 and 65 percent of 918 participating providers in 2016 meeting or exceeding quality standards.<sup>83</sup>

The presence of qualified, well-trained, caring professionals is essential to providing quality child care and early education experiences for children. Ensuring that child care and early education programs promote developmental (cognitive, physical, socio-emotional) and academic readiness for kindergarten requires that professionals in these settings possess the knowledge and skills and engage in practices necessary to impart those benefits. In Arizona, the number of early childhood professionals receiving a credential or degree has increased from 2007 (21%) to 2012 (29%). However, one incentive for attaining these credentials – increased wages – shows an opposite pattern. After adjusting for inflation, wages for assistant teachers, teachers, and administrative directors working across all types of licensed child care and education settings in Arizona decreased between 2007 and 2012. In addition, average annual wages for early education professionals in Arizona are about half that of kindergarten and elementary teachers, which may in turn affect retention of those in early education settings, particularly after degree attainment.<sup>84</sup> In addition to formal education, there are additional professional development opportunities available for early childhood professionals in Arizona. The Arizona Early Childhood Career and Professional Development Network, supported by First Things First, hosts a professional development website, AZEarlyChildhood.org, that provides early childhood professionals with resources and information on professional development opportunities, career and job advancement, and networking in the early childhood field.<sup>85,86</sup>

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. Children with special health care needs (CSHCN) 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.”<sup>87</sup> 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,<sup>88</sup> and are at an increased risk for maltreatment and neglect.<sup>89,90</sup> Almost half (46%) of families with a child with special needs in Arizona have incomes below 200 percent of the federal poverty level.<sup>91</sup> In Arizona, the services available to families with children with special needs include early intervention screening and intervention services provided through the Arizona Department of Education AZ FIND (Child Find),<sup>xiv</sup> the Arizona Early Intervention Program (AzEIP),<sup>xv</sup> and the Division of Developmental Disabilities (DDD).<sup>xvi</sup> Ensuring all families have access to timely and appropriate screenings for children who may benefit from early identification of special needs is paramount to

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<sup>xiv</sup> For more information on AZ FIND, visit <http://www.azed.gov/special-education/az-find/>

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

<sup>xvi</sup> For more information on DDD, visit [https://www.azdes.gov/developmental\\_disabilities/](https://www.azdes.gov/developmental_disabilities/)

improving 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. It also reduces educational costs by decreasing the need for special education.<sup>92,93,94</sup>

## What the Data Tell Us

### Child Care and Preschool

Child care and early education in the White Mountain Apache Tribe Region are available through a variety of modalities (see Table 29). Chaghache Day Care and Alchesay Beginnings Child Development Center (also known as ABC Day Care) provide center-based care. Preschool classes are offered at Seven Mile School through Whiteriver Unified School District. Preschool classes were offered at Cradleboard School during the 2015-2016 school year, however the school no longer offers a preschool program. The Family and Child Education (FACE) program at John F. Kennedy Day School provides early learning education and support for young children and their families. White Mountain Apache Head Start enrolls four-year-olds at three centers across the region.

Alchesay Beginnings Child Development Center has the capacity to serve 102 children ages two weeks to five years of age, with an additional capacity of 20 for after school care of children ages six to twelve. Depending on attendance and availability, drop-in child care services are also available for a fee. Services are available Monday through Friday from 7:00 a.m. to 5:30 p.m. The Center is housed at Alchesay High School in Whiteriver and considers the Whiteriver Unified School District calendar. To be eligible for services, parents or caregivers must be employed, in school, or in training. The center has four classrooms, one for infants that can enroll up to 16 infants, two for toddlers that together can enroll up to 47 toddlers, and one for preschoolers that can enroll up to 39 students. Alchesay Beginnings Child Development Center does not provide transportation for students beyond transport for special field trips. The Center currently holds a two-star "Progressing Star" rating from Quality First, meaning that the program is "approaching quality standards." The enrollment numbers for the Center in the table below reflect summer enrollment and are thus much lower than the enrollment typically seen during the school year.

Chaghache Day Care, located in Whiteriver, has the capacity to enroll 90 children ages six months to twelve years of age. The Center operates Monday to Friday from 6:45 a.m. to 5:30 p.m. and has four classrooms, one for infants (6-22 months), one for toddlers (22-36 months), one for preschoolers (ages 3-4), and pre-K (ages 4-5). As of August 2016, there were 12 infants, 20 toddlers, and 28 preschoolers enrolled at Chaghache Day Care Center. Chaghache Day Care has a waiting list in all of these groups, with 20 infants, 15 toddlers, and fewer than 10 preschoolers on the waiting list. In the past, Chaghache Day Care administered a home-based provider program in the region; however, there have been no formal or regulated home-based providers in the region since 2011.

The largest provider of early care and education in the region is the White Mountain Apache Tribe Head Start, which has funded enrollment for 252 children. Over the course of the 2014-2015 school year, Head Start enrolled a total of 262 children throughout the year. White Mountain Apache Tribe Head Start enrolls four-year-old children at its three centers in Whiteriver, Cibecue, and McNary. In order to enroll in the program, families must meet income eligibility requirements, and Head Start is one of the few programs in the region that is free for low-income families. The program is moving toward operating from 8:30 a.m. to 2:30 p.m., which is an increase from the previous 5-hours of operation per day. All three Head Start centers participate in Quality First. The Whiteriver Head Start Center currently has a four-star "Quality Plus" rating, the McNary Center has a three-star "Quality" rating, and the Cibecue Center has a two-star "Progressing Star" rating.

Program staff noted that White Mountain Apache Tribe Head Start has been under-enrolled in the past year. As of August 2016, there were 236 children enrolled in the program, which is less than the program's funded enrollment. The number of children on the waiting list with completed applications has fallen from 20 in 2013 to 14 in 2014 to less than 10 in 2015. One reason for the decrease in enrollment might be due to the opening of new preschool programs at Seven Mile School. Key informants noted that it might be easier for parents to enroll their children in these programs if they are closer to where they live.

According to the 2016-2017 Head Start Community Assessment, 98 percent of parents and caregivers surveyed reported that they were satisfied with Head Start services, and 94 percent felt Head Start has an impact on the community. Seventy-seven percent of respondents indicated that they would like to see Head Start expand services to include three-year-olds. In the past, there were plans to start an Early Head Start program, but those plans are currently on hold. Key informants indicated that funding is available for the program, but that the lack of a building or funding to build one that meets all of the requirements for an Early Head Start Program is currently a barrier to creating a new program.

There is one preschool in the region operating at Seven Mile School in the Whiteriver Unified School District. By the end of the 2015-2016 school year, there were 12 children enrolled in preschool classes at Seven Mile School. The preschool program provides half-day preschool for enrolled children and has the potential to enroll up to 34 children—17 in the morning class and 17 in the afternoon class. At the start of the preschool program at Seven Mile School, enrollment was very slow, with very few children enrolling. Key informants indicated that once parents found out about the program, they were supportive; however, some felt that the half-day program was harder for families than a full-day program. Transportation was also an issue in the beginning—Whiteriver Unified School District worked to adjust routing so that children enrolled in the preschool at Seven Mile could ride on the special education bus to get to school. The Seven Mile Preschool program was supported by the White Mountain Apache Tribe Regional Partnership Council through the Expansion (capital expense) strategy after a need for preschool services was identified in the Seven Mile area. This program also continues to be supported by the Regional Partnership Council through participation in Quality First. In the 2015-2016 school year, fewer than 10 students were enrolled in preschool at Cradleboard School. The preschool program at Cradleboard School has since closed.

The Family and Child Education (FACE) program has operated at John F. Kennedy Day School in Cedar Creek since the 2005-2006 school year. The program has both a center-based and home-based components. The home-based component includes visits and screenings by parent educators for families with children birth to three. Parent educators meet with families weekly or biweekly for 1-2 hours depending on the age of the child or children in the home. In the 2015-2016 school year there were a total of 35 children participating in the home-based component of the program, 19 of whom were age two or younger. The FACE center-based component includes an early childhood education program for children ages three to five, adult education for the children's parents, and Parent and Child Time (PACT). In the 2015-2016 school year, 20 three- and four-year-olds were enrolled in the center-based classroom, with five students on the waiting list. All children must have an adult come to class with them each day, preferable an immediate family member. Children and adults spend part of the day in separate classrooms but come together through the day for PACT. Sixteen adults participated in the adult education program. The center-based program operated for five hours per day, Monday through Thursday during the school year. Breakfast and lunch are served to all participants, and transportation is provided to and from the program.

Beyond formal early care and education providers, many parents may rely on informal care arrangements for child care. Of the parents and caregivers surveyed in the 2016-2017 Head Start Community Assessment, 110 (76%) said that they use other child care beyond Head Start. Of these, 40 percent said that they have a sitter who comes to their



house, 30 percent took their child or children to a sitter outside their home, and the remainder used other early care providers in the region (see Figure 23). Thirty-nine percent of parents and caregivers reported using these other child care arrangements one day a week, a third (33%) reported using these arrangements for two or three days a week, and the remaining twenty-eight percent used these arrangement for four or more days a week (see Figure 24). Forty-four percent of respondents said that when they used alternative child care arrangements, they used them for two hours a day or less, and twenty percent used them for two to four hours, twenty-nine percent used them for four to eight hours (see Figure 25). In the past, the White Mountain Apache Tribe Regional Partnership Council funded a Family, Friends, and Neighbors strategy to support kin and kith caregivers in the region. Given that families in the region may often use informal child care arrangements or at-home sitters, having a program to train these providers in best practices could help support early learning in the region.

Altogether, early care and education providers in the region have the capacity to serve 478 young children in the region. However, most of this capacity is for the preschool age group, particularly four-year-olds. White Mountain Apache Head Start alone has the capacity to serve 79 percent of the estimate 321 four-year-olds in the region according to the 2010 Census. Combined with other providers, there is capacity in the region to serve all of the four-year-olds in the region. However, opportunities for early care and education for children ages three and younger are much more limited. Across all providers in the region, there is only capacity to serve approximately 50 infants and less than 100 toddlers, which represents only 15 percent of the 333 infants and 14 percent of the 677 toddlers in the region according to the 2010 Census. Thus, while it appears that there is sufficient capacity in the region for every child to enroll in early education at four years of age, more opportunities for early care and education are needed for the infant and toddler age groups.

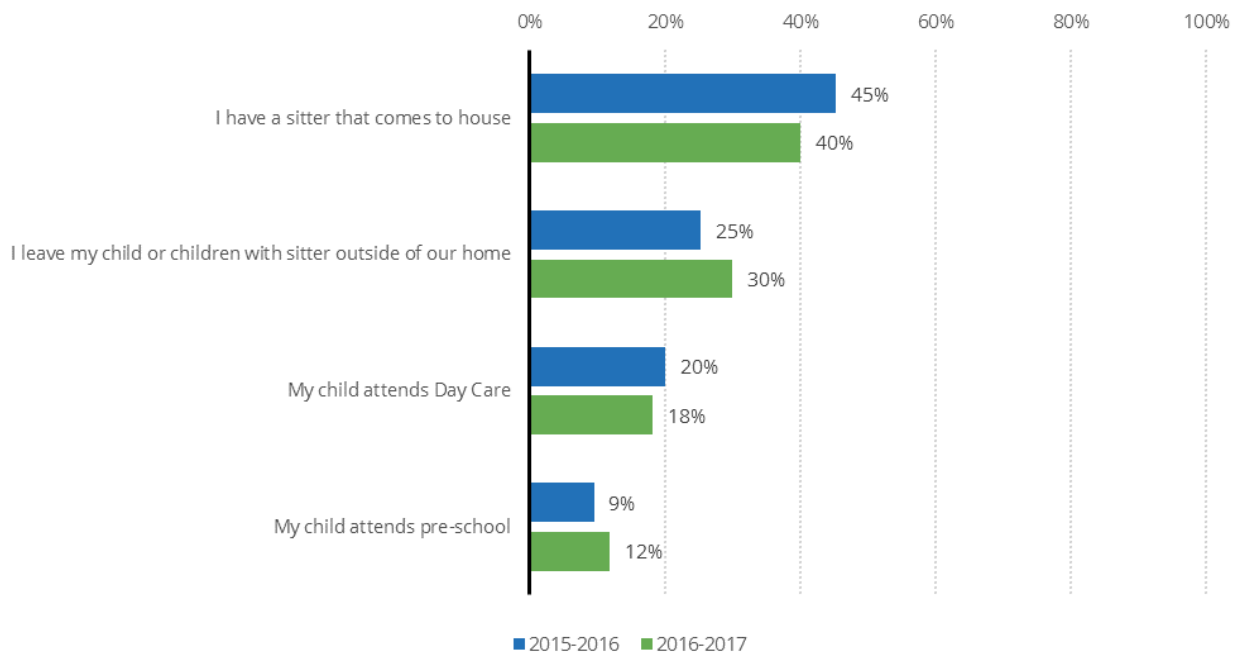
Table 29. Child Care Capacity and Enrollment, 2015-2016

	Infants Enrolled	Infant Capacity	Toddlers Enrolled	Toddler Capacity	Preschool Enrolled	Preschool Capacity	Total Enrolled	Total Capacity	Quality First Status
Alchesay Beginning Child Development Center*	<10	16	16	47	12	39	36	102	2 Star
Chaghache Day Care Center	12	30	20	30	28	30	60	90	Not Participating
White Mountain Apache Tribe Head Start	0	0	0	0	252	252	252	252	4 Star, 3 Star, 2 Star
Cradleboard School**	0	0	0	0	<10		<10		Not Participating
Seven Mile School	0	0	0	0	12	34	12	34	2 Star
FACE Program at JFK Day School***	<10	N/A	16	N/A	36	N/A	55	N/A	Not Participating
<b>Total</b>	<b>23</b>	<b>46</b>	<b>52</b>	<b>77</b>	<b>343</b>	<b>338</b>	<b>418</b>	<b>478</b>	<b>3</b>

Source: Office of Head Start (2016). 2015 Program Information Report. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/data/pir>; Alchesay Beginnings Child Development Center (2016) [Center Data]. Unpublished data; Chaghache Day Care Center (2016) [Center Data]. Unpublished data; White Mountain Apache Tribe FACE Program (2016). [Program Data]. Unpublished data.

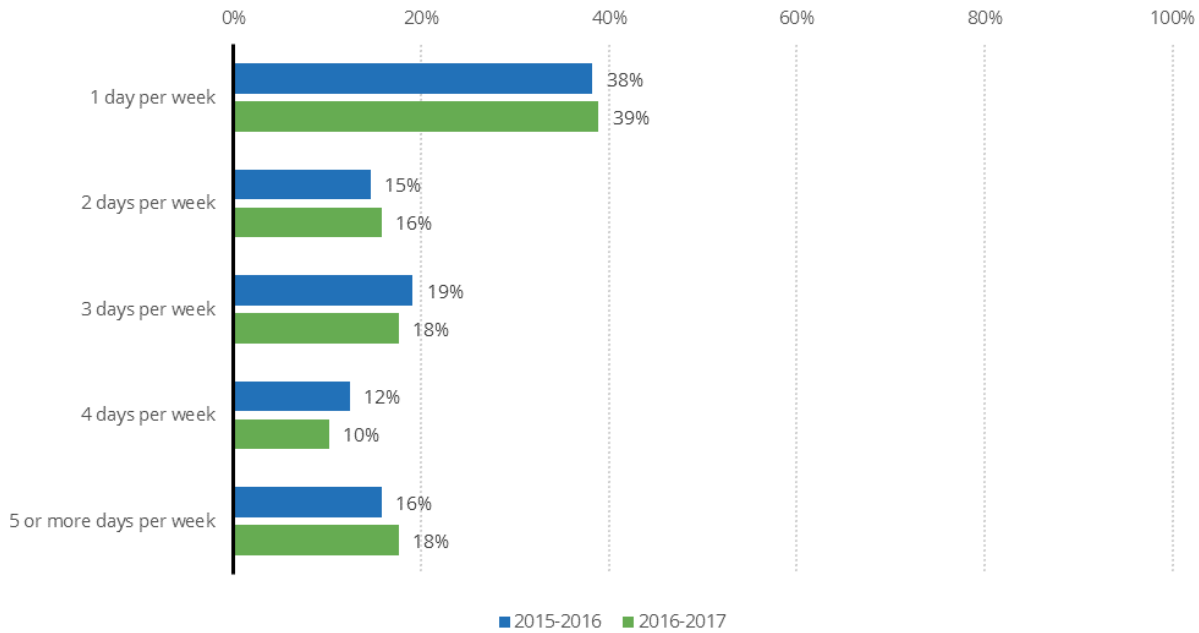
Notes: \*Enrollment numbers for Alchesay Beginning Child Development Center were obtained over the summer and are an underestimate of enrollment during the school year. \*\*The Cradleboard School preschool program operated during the 2015-2016 school year, but the program has since closed \*\*\*Note that infants and toddlers enrolled in the FACE program attend this program with a parent or caregiver. .

Figure 23. Responses to “For a child 5 years or younger in your household...”



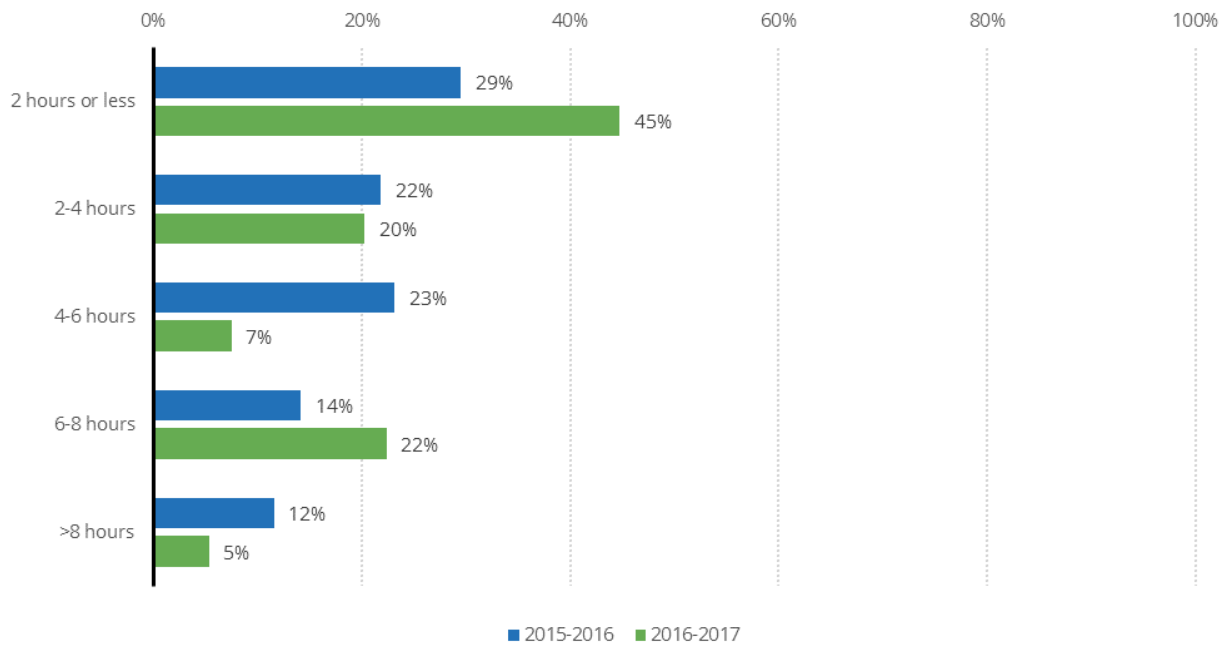
Source: White Mountain Apache Head Start (2016). 2015-2016 Head Start Community Assessment & 2016-2017 Head Start Community Assessment. Received by request.

Figure 24. Responses to “How often do you usually need to get outside help to care for your child or children?”



Source: White Mountain Apache Head Start (2016). 2015-2016 Head Start Community Assessment & 2016-2017 Head Start Community Assessment. Received by request.

Figure 25. Responses to “About how many hours per day does your child (or children) spend in Day care, Pre-school, Before & After School Care, or other child care?”



Source: White Mountain Apache Head Start (2016). 2015-2016 Head Start Community Assessment & 2016-2017 Head Start Community Assessment. Received by request.

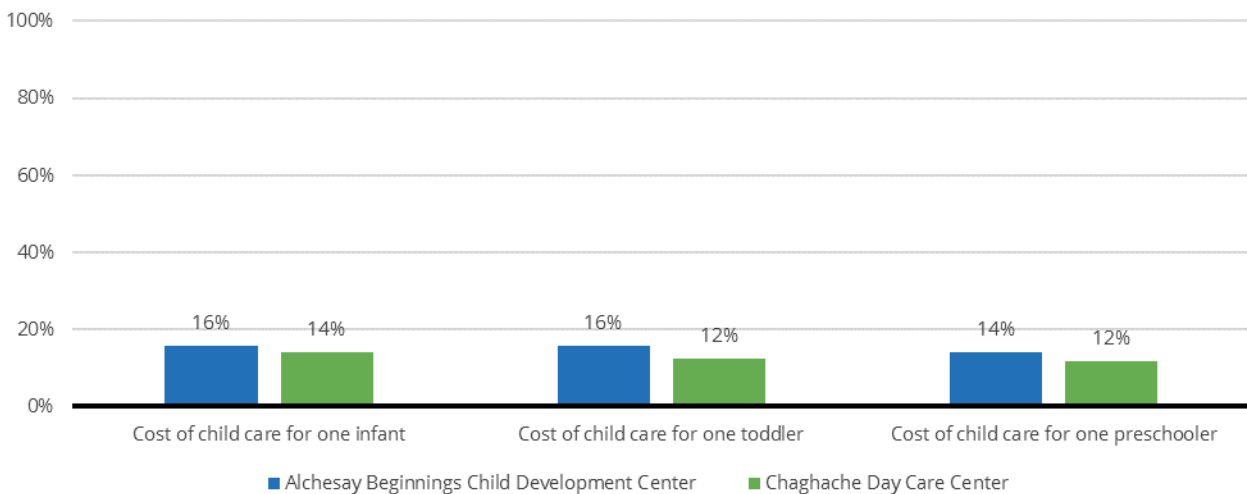
## Cost of Care

Participation in the White Mountain Apache Head Start program is cost-free for all children enrolled. Similarly, children with special needs enrolled in Whiteriver Elementary School receive services at no cost to their families. Typically-developing children enrolled in the preschool programs at Seven Mile School do pay a fee of \$10 per day. Figure 26 shows the cost of full-time child care as a proportion of the median family income in the region at child care centers in the region. To avoid being overburdened, the Department of Health and Human Services recommends that parents spend no more than 10 percent of their family income on child care.<sup>95</sup> Families in the White Mountain Apache Tribe Region who do not qualify for child care assistance are paying more than that (between 14 and 16 percent of the median family income, depending on the child’s age).

In addition to the child care subsidies provided by the tribal CCDF fund through Chaghache Day Care, some families in the White Mountain Apache Tribe Region also receive subsidies from the Arizona Department of Economic Security (DES). Fewer than 25 children were on the waiting list for DES child care subsidies between 2013 and 2015. The number of children receiving subsidies increased from fewer than 25 in 2013 to 44 in 2015 (Table 30). All 22 children involved with the Arizona Department of Child Safety (DCS) who were eligible to received child care subsidies in 2015 actually received this support (Table 31).

Children attending one of the three Quality First centers in the region may receive scholarships to help cover the cost of care. In 2016, 58 infants, toddlers, and preschoolers attended Quality First centers with the help of scholarships funded by the White Mountain Apache Tribe Regional Partnership Council.<sup>96</sup>

Figure 26. Cost of Full-Time Child Care as a Percentage of Median Income



Source: Alchasy Beginnings Child Development Center (2016) [Center Data]. Unpublished data. Chaghache Day Care Center (2016) [Center Data]. Unpublished data.

Table 30. Department of Economic Security (DES) Child Care Subsidies for Children (Ages 0 to 5), 2013 to 2015

	Children eligible for subsidy during 2013	Children eligible for subsidy during 2014	Children eligible for subsidy during 2015	Children receiving subsidy during 2013	Children receiving subsidy during 2014	Children receiving subsidy during 2015	Children on waiting list during 2013	Children on waiting list during 2014	Children on waiting list during 2015
White Mountain Apache Tribe	<25	30	46	<25	28	44	<25	<25	<25
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARIZONA	28,429	29,180	43,860	27,041	26,685	38,855	5,094	5,195	5,140

Source: Arizona Department of Economic Security (2016). [Child Care Administration dataset]. Unpublished data.

Table 31. DES Child Care Subsidies for Children Involved in the Department of Child Safety (DCS) During 2015

	Number of DCS-involved children eligible for subsidy	Number of DCS-involved children receiving subsidy	Percent of DCS-involved children receiving subsidy
White Mountain Apache Tribe	22	22	100%
All Arizona Reservations	N/A	N/A	N/A
ARIZONA	18,417	15,785	86%

Source: Arizona Department of Economic Security (2016). [Child Care Administration dataset]. Unpublished data.

### Child Care Professionals

Educational attainment among teachers and staff at early care and education centers in the region is high (see Table 32). As of 2016, at Chaghache Day Care, all lead teachers had Child Development Associate (CDA) credentials, and all assistant teachers had CDA credentials or were enrolled in coursework. At White Mountain Apache Head Start, three teachers had Bachelor’s degrees in Early Childhood Education, seven teachers had Associate’s degrees, four had CDA credentials, and two were enrolled in coursework. Among assistant teachers, all had CDA credentials, Associate’s degrees, or were enrolled in coursework. The director of the JFK FACE program had an advanced degree in Early Childhood Education, and one teacher had a Bachelor’s degree while the other was currently enrolled in coursework.

Alchesay Beginnings Child Development Center is a unique program in that it functions as a hands-on learning opportunity for high school students at Alchesay High School. As part of a ‘grow your own’ approach to increasing the child care labor force, students at Alchesay High School have the opportunity to enroll in early child development classes and receive on-the-job training as staff at Alchesay Beginnings Child Development Center. The program has four levels, beginning with a nine-week introduction to careers and education followed by classroom-based training in early childhood development. As juniors and seniors, students can take up to 27 dual-enrollment credits through Northland Pioneer College. These students spend a minimum of three hours per week at Alchesay Beginnings Child Development Center. Students who decide to pursue their CDA credential can take an additional course that takes place entirely in the classrooms at the Center to prepare for the observation component of the CDA credential. All

Northland Pioneer College coursework fees are waived for the students, and there are funds available to help students afford the CDA assessment fee. According to staff at the center, 275 students participated in the early childhood component of the program in the 2015-2016 school year. Twenty-seven students earned their Child Development certificate through Northland Pioneer College, and twelve received their CDA credential.

Beyond the program at Alchesay High School, there are a number of professional development opportunities in the region. Northland Pioneer College (NPC) has campuses in both Navajo and Apache Counties with a center in Whiteriver. The college offers programs in Early Childhood Development and opportunities to earn a Certificate of Proficiency (CP), Certificate of Applied Science (CAS), or Associate of Applied Science (AAS) degree. The Whiteriver NPC center has a smart classroom that allows students to take general education courses required for pursuit of further degree programs at four-year colleges in the state. First Things First provides scholarships for early childhood professionals working with children birth to 5 enrolled in the Arizona Early Childhood Workforce Registry, providing funding for tuition, books, courses, and college fees for CDA credentials, Associate's, and Bachelor's degrees through Arizona State University. However, key informants in the region have noted that some potential applicants have had a difficult time enrolling in the region. Due to the complexity of the process and that it must be completed online, many have needed to seek help applying. Additionally, many people in the region primarily use mobile phones to access the internet, but the application process is very difficult to complete on a mobile device. In order to address this challenge, the Registry coordinator who works with applicants from the White Mountain Apache Tribe Region provides opportunities for interested applicants to complete all aspects of the application at once in one location.

All of the early care and education programs in the area have opportunities of professional development for their staff. Alchesay Beginnings Child Development Center holds regular staff trainings and invites other programs to participate. Chaghache Day Care Center brings in an early childhood expert once a month for trainings. Head Start staff report that they regularly look for training opportunities for staff and attend trainings held at Alchesay Beginnings Child Development Center and Chaghache Day Care Center. John Hopkins University's Center for American Indian Health also holds trainings in the region, and the Easter Seals Blake Foundation holds training in Show Low. However, key informants in the region did identify several challenges around professional development. While the availability of CDA credentialing is seen as a major asset, some feel that there are fewer continuing professional development opportunities in the region in recent years. Staff have expressed a need for a wider range of topics focused on the three- to five-year old age group, similar to those offered in Phoenix. Due to the long distances and challenges of scheduling, many staff cannot attend the Early Childhood Summit or other professional development opportunities in Phoenix. The Office of Head Start offers access to online trainings and webinars for its staff, but due to the time difference, many of these trainings are scheduled during class time and thus are inaccessible to staff in the region. Key informants expressed a particular need for training in mental and behavioral health services.

Professional development opportunities and high rates of education attainment for early childhood educators are a major asset in the region, as is the success of the Alchesay High School program that has already led to the hiring of graduating seniors at early education centers in the region. Nevertheless, some challenges continue to exist for early childhood educators seeking out financial help to advance their education as well as those interested in professional development opportunities on specific topics or age ranges.

Table 32. Staff Credentials for Early Care and Education Providers, 2014-2015

	Total Staff	Child Development Associate (CDA) Credential	AA in Early Childhood Education	BA in Early Childhood Education	Advanced Degree in Early Childhood Education	Currently enrolled in coursework
Chaghache Day Care Director	1	0	1	0	0	0
Chaghache Day Care Lead Teachers	3	3	0	0	0	0
Chaghache Day Care Assistant Teachers	9	3	0	0	0	6
Chaghache Day Care Other Staff	1	0	1	0	0	0
White Mountain Apache Head Start Classroom Teachers	14	4	7	3	0	2
White Mountain Apache Head Start Assistant Teachers	14	7	2	0	0	5
Alchesay Beginnings Child Development Center Director	1	0	0	1	1	0
Alchesay Beginnings Child Development Center Staff	**	0	0	0	0	All
FACE Program Director	1	0	0	0	1	0
FACE Program Teachers	2	0	0	1	0	1

Source: Office of Head Start (2016). 2015 Program Information Report. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/data/pir>; Alchesay Beginnings Child Development Center (2016) [Center Data]. Unpublished data; Chaghache Day Care Center (2016) [Center Data]. Unpublished data; White Mountain Apache Tribe FACE Program (2016). [Program Data]. Unpublished data.

Note: Alchesay Beginnings Child Development Center is staffed by students from Alchesay High School who are enrolled in early childhood classes. As of the 2015-2016 school year, 275 students were participating in early childhood classes.

### Developmental Screenings and Services for Children with Special Developmental and Health Needs

The Department of Economic Security Arizona Early Intervention Program (AzEIP) provides services to children from birth to 36 months of age who are developmentally delayed because they have not met at least 50% of their expected developmental milestone or who have an established condition with a high probability of resulting in a developmental delay<sup>97</sup> The AzEIP provider in the White Mountain Apache Tribe Region is Northland Therapy Services, an agency located in Show Low. The number of children from the White Mountain Tribe Region referred to the AzEIP each year from FY 2013 to FY 2015 has steadily decreased (Table 33). While 83 children were referred in FY 2013, fewer than 25 were referred in FY 2015. During this same period, the number of children served each year by the AzEIP provider in the region ranged from between 12 and 28 in FY 2013 to between 3 and 27 in FY 2014 and FY 2015. A national study suggests that about 13 percent of children ages 0 to 2 would typically qualify for early intervention services,<sup>98</sup> which suggests that at least 136 young children in the region would be likely to benefit annually (based on Table 1). Key informants in the region felt that due to the remoteness of the community young children who might qualify for AzEIP services may not be receiving them.

The Arizona Department of Economic Security Division of Developmental Disabilities (DDD) provides services to individuals in the state with a cognitive disability, cerebral palsy, autism, epilepsy or who are at risk for a

developmental disability. Children under the age of six are eligible if they show significant delays in one or more of these areas of development: physical, cognitive, communication, social emotional or self-help.<sup>99</sup> Fewer than 25 children ages 0-2 were served by DDD in the region between 2013 and 2015, while no children ages 3-5 were served in the region in that same period (Table 36)

The Arizona Child Find program is a component of the Individuals with Disabilities Education Act (IDEA) that requires states to identify and evaluate all children with disabilities (birth through age 21) to attempt to ensure that they receive the supports and services they need. Children are identified through physicians, parent referrals, school districts and screenings at community events. Each Arizona school district is mandated to offer child find services and to provide preschool services to children with special needs either through their own schools or through agreements with other programs such as Head Start. In the White Mountain Apache Tribe Region, the tribe's Child Find Program and the Whiteriver Unified School District partner to provide these services.

Data from the White Mountain Apache Tribe Child Find program show that in 2015, more than 100 children between the ages of three and five were identified as disabled, and all of them received services through tribal Child Find (Table 38). The largest proportion of children had speech and language impairments, followed by visual impairments, multiple disabilities, hearing impairments, and developmental delay (Figure 28). WMAT Child Find identifies children with special developmental and health care needs through yearly door-to-door surveys where staff do home visits and inform parents of screening dates. Transportation is provided to the screenings for parents and children. Screenings take place once a month in Whiteriver and once every two months in Cibecue and include developmental, auditory, vision, and motor screenings. WMAT Child Find also receives referrals from local pediatricians. Children identified, younger than age 3, as qualifying for special needs services by WMAT Child Find are referred to the AzEIP provider, Northland Therapy Services; or to Whiteriver Unified School District, if they are aged 3 or older. Children can be supported through both AzEIP and WMAT Child Find at the same time; families of children enrolled in AzEIP do not receive home visits or developmental special instruction through WMAT Child Find, but receive parent education services and transportation to medical appointments.

Whiteriver Unified School District provides extensive services for children with special developmental and health care needs. Children ages 3 to 5 may receive services in a variety of settings, including home-based services for children in kith and kin care, services at the child care centers in the region, dual-enrollment at Head Start and the Whiteriver Elementary Early Childhood Education program, and through the Early Childhood Education Program alone. The Whiteriver Elementary Early Childhood Education program has three classrooms with three teachers and three assistants. The district employs a physical therapist, speech pathologist, sign language interpreter, and a contracted occupational therapist. These professionals conduct screenings at the WMAT Child Find screening events every 30 days. According to Arizona Department of Education enrollment data, there were 28 preschool-age children enrolled in special education at Whiteriver Elementary School as of October 1, 2015 (Table 40).

The district refers children to WMAT Child Find, AzEIP, and Head Start and has dual enrollment Memoranda of Understanding (MOUs) with Head Start, FACE, and WMAT Child Find. This means that children can attend Head Start or the FACE program in the morning and be bussed to Whiteriver Elementary in the afternoon to receive specialized services. Whiteriver Unified also provides two special needs teachers to work specifically with children in the morning according to the goals in their Individualized Education Plans (IEPs). In the 2014-2015 school year, there were 25 children with IEPs enrolled at Head Start (Table 39). Besides the monthly screenings put on by WMAT Child Find and the school district, Head Start conducts a yearly screening and service event for children coming into Head Start.



A major strength of the services for children with special developmental and health care needs in the region is the strength of collaboration and trust developed between providers and the community. Key informants in the region noted a strong perception in the community that the school district wants to help children with special needs. Parents and caregivers feel safe sharing their children’s needs, which was not always the case in the past. Additionally, the wide continuum of services available in the region stands out from many other rural communities.

WMAT Child Find undertakes a large number of outreach efforts in the community, maintaining a presence at health screenings, WIC, Rainbow Treatment Center, the local grocery store, and beyond. WMAT Child Find Staff hold monthly parent trainings in Cibecue and Whiteriver with incentives for parents where they invite Community Health Representatives to come train parents on nutrition and health. Whiteriver School District also publicizes special needs services through the local newspaper, the radio station, and flyers as well as community presentation. Service providers in the region noted that children and their families are being reached with information about the services available. About half of parents and caregivers surveyed in the 2016-2017 Head Start Community said that they were aware of the special needs services provided for children in the community (Figure 29).

However, one challenge named by several key informants was the lack of services for children had special needs but did not meet the eligibility criteria for services through AzEIP or the school district. When children fall into the at-risk category, WMAT Child Find will bring them in again to re-screen, but the program is not able to provide additional intervention services. A program for early intervention and enrichment for all children could have a significant impact in the community. There is additionally a higher need for special services in the region than elsewhere; providers noted higher rates of hearing impairment and double atresia. Needs for social, emotional, and behavioral support is also high. Apache Behavioral Health Services provides assessment and services for children in the region but does not currently have any staff that specialize in the early childhood age group. Currently, Apache Behavioral Health Services runs the Helping Every Day Youth program that provides counseling and activities for school-age children, but there are no programs for children under the age of five. However, key informants in the region noted that there is a plan to start a therapy group for children ages 0 to 5 and their families and to hire a therapist to facilitate this group. Overall, the need for services for children who do not meet the eligibility criteria and for more behavioral health services were the two major needs identified by key informants in the region.

**Table 33. Arizona Early Intervention Program (AzEIP) Referrals and Services for Children (Ages 0 to 2), 2013 to 2015**

	Children (ages 0-2) referred to AzEIP during FY 2013	Children (ages 0-2) referred to AzEIP during FY 2014	Children (ages 0-2) referred to AzEIP during FY 2015	Children (ages 0-2) served by AzEIP during FY 2013	Children (ages 0-2) served by AzEIP during FY 2014	Children (ages 0-2) served by AzEIP during FY 2015
White Mountain Apache Tribe	83	3 to 27	<25	12 to 28	3 to 27	3 to 27
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A	N/A
ARIZONA	10,715	11,741	14,450	4,799	5,248	10,039

Source: Arizona Department of Economic Security (2016). [Arizona Early Intervention Program dataset]. Unpublished data.

Note: An exact number of children ages 0 to 2 referred to or served by AzEIP was not available because this number was the sum of several numbers provided by a state agency, and some numbers were suppressed in accordance with agency guidelines. Instead, a range of possible numbers is provided, where the true number lies within this range. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.

Table 34. Children (Ages 0 to 5) Referred to the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of children (ages 0-2) referred in FY2012	Number of children (ages 0-2) referred in FY2013	Number of children (ages 0-2) referred in FY2014	Number of children (ages 0-2) referred in FY2015	Number of children (ages 3-5) referred in FY2012	Number of children (ages 3-5) referred in FY2013	Number of children (ages 3-5) referred in FY2014	Number of children (ages 3-5) referred in FY2015
White Mountain Apache Tribe	<25	<25	<25	<25	<25	<25	<25	<25
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARIZONA	1,439	2,186	2,479	2,484	1,393	1,401	1,804	1,969

Source: Arizona Department of Economic Security (2016). [Division of Developmental Disabilities dataset]. Unpublished data.

Table 35. Children (Ages 0 to 5) Evaluated by the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of children (ages 0-2) screened in FY2012	Number of children (ages 0-2) screened in FY2013	Number of children (ages 0-2) screened in FY2014	Number of children (ages 0-2) screened in FY2015	Number of children (ages 3-5) screened in FY2012	Number of children (ages 3-5) screened in FY2013	Number of children (ages 3-5) screened in FY2014	Number of children (ages 3-5) screened in FY2015
White Mountain Apache Tribe	0	0	0	0	0	0	0	0
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARIZONA	732	314	216	238	669	731	727	958

Source: Arizona Department of Economic Security (2016). [Division of Developmental Disabilities dataset]. Unpublished data.

Note: Screening is defined by DES as including "children who DDD had paid for an evaluation, not including occupational therapy, physical therapy, or speech therapy, during state fiscal year 2015.

Table 36. Children (Ages 0 to 5) Served by the Division of Developmental Disabilities (DDD), 2012 to 2015

	Number of children (ages 0-2) served in FY2012	Number of children (ages 0-2) served in FY2013	Number of children (ages 0-2) served in FY2014	Number of children (ages 0-2) served in FY2015	Number of children (ages 3-5) served in FY2012	Number of children (ages 3-5) served in FY2013	Number of children (ages 3-5) served in FY2014	Number of children (ages 3-5) served in FY2015
White Mountain Apache Tribe	<25	<25	<25	<25	<25	0	0	0
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARIZONA	2,646	2,693	2,341	2,336	2,563	2,600	2,533	2,540

Source: Arizona Department of Economic Security (2016). [Division of Developmental Disabilities dataset]. Unpublished data.

Table 37. Division of Developmental Disabilities (DDD) Service Visits for Children (Ages 0 to 5), 2012 to 2015

	Number of service visits (ages 0-2) in FY2012	Number of service visits (ages 0-2) in FY2013	Number of service visits (ages 0-2) in FY2014	Number of service visits (ages 0-2) in FY2015	Number of service visits (ages 3-5) in FY2012	Number of service visits (ages 3-5) in FY2013	Number of service visits (ages 3-5) in FY2014	Number of service visits (ages 3-5) in FY2015
White Mountain Apache Tribe	27	91	95	<25	<25	0	0	0
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARIZONA	168,992	158,496	130,486	120,519	363,468	374,440	367,590	358,322

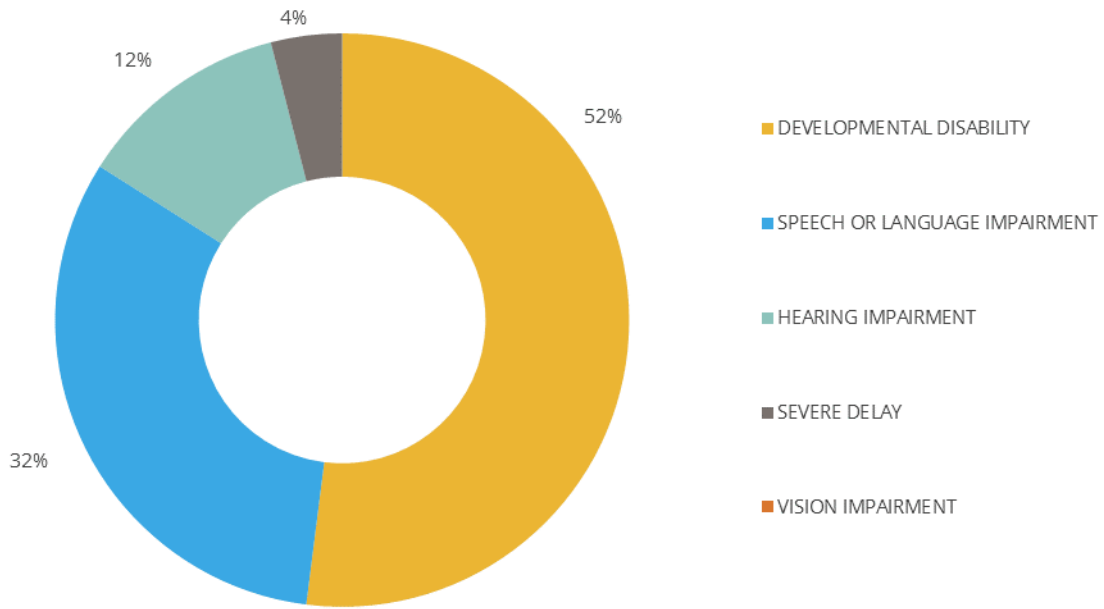
Source: Arizona Department of Economic Security (2016). [Division of Developmental Disabilities dataset]. Unpublished data.

Table 38. American Indian Children ages 3-5 with an IEP and receiving services from the White Mountain Apache Tribe, 2015

	Age 3	Age 4	Age 5
Children identified as disabled	56	34	<25
Children receiving services	100%	100%	100%

Source: White Mountain Apache Tribe Child Find (2016). [Special Needs Data]. Unpublished data

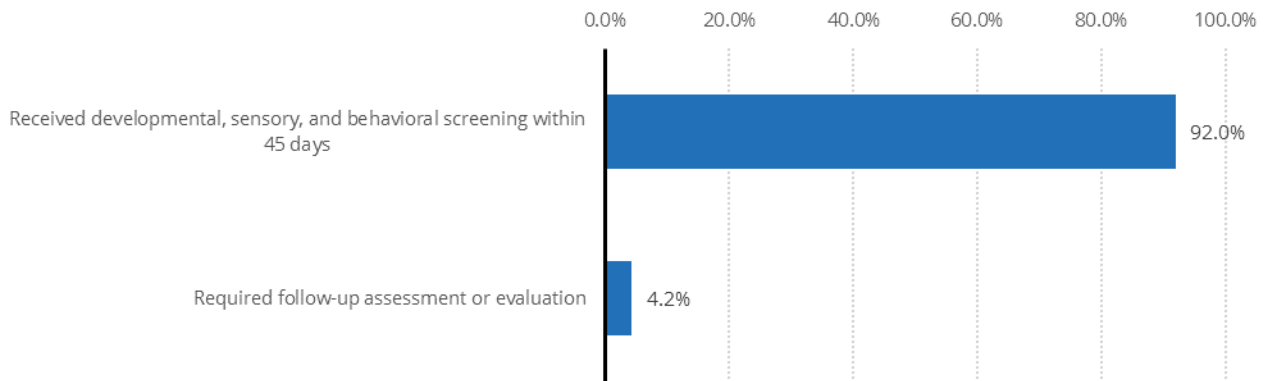
Figure 27. Children (ages 3-5) Receiving Services from the White Mountain Apache Tribe by Disability Type, 2015



Source: White Mountain Apache Tribe Child Find (2016). [Special Needs Data]. Unpublished data

Note: The data presented in this table are unduplicated (i.e., children diagnosed with multiple disabilities are counted only one time in the Federal Primary Need (FPN) category).

Figure 28. Children Receiving Developmental, Sensory, and Behavioral Screenings through Head Start, 2014-2015



Source: Office of Head Start (2016). 2015 Program Information Report. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/data/pir>

Table 39. Children with IEPs served through Head Start, 2014-2015

	Children (ages 3-5) enrolled in Head Start		Children with an IEP	
	Count	Percentage	Count	Percentage
White Mountain Apache Tribe Head Start	262		25	10%

Source: Office of Head Start (2016). 2015 Program Information Report. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/data/pir>

Table 40. Preschool Students Enrolled in Special Education, October 2015

	Schools	Student Enrolled	Enrolled in Special Education	
			Count	Percentage
White Mountain Apache Tribe Region Schools	3	50*	28	61%
Cradleboard School	1	<10	0	0%
Seven Mile School	1	12	0	0%
Whiteriver Elementary School	1	28	28	100%
All Arizona Schools	445	19,123	8,773	46%

Source: Arizona Department of Education. [Enrollment Data]. Unpublished data.

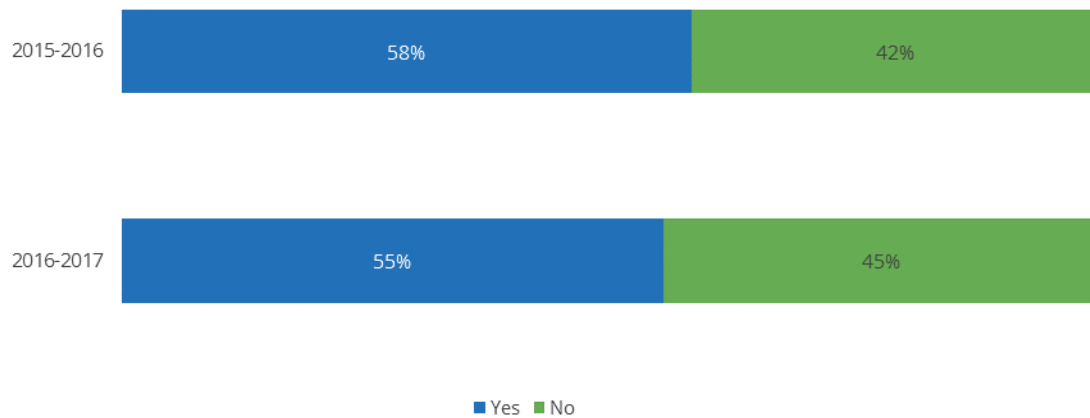
Note: Total preschool enrollment number has been rounded to the nearest ten because of the suppressed enrollment number for Cradleboard School

Table 41. Kindergarten to Third Grade Students Enrolled in Special Education

	Elementary Schools	Students Enrolled	Enrolled in Special Education	
White Mountain Apache Tribe Region Schools	4	1,039	114	11%
Cradleboard School	1	203	25	12%
Seven Mile School	1	63	<25	DS
McNary Elementary School	1	415	40	10%
Whiteriver Elementary School	1	358	40	11%
All Arizona Schools	1,238	342,307	33,269	10%

Source: Arizona Department of Education. [Enrollment Data]. Unpublished data.

Figure 29. Responses to “Are you aware of services that are available in the community for children with special needs?”



Source: White Mountain Apache Head Start (2016). 2015-2016 Head Start Community Assessment & 2016-2017 Head Start Community Assessment. Received by request.



## CHILD HEALTH

## Why Child Health Matters

Optimal development encompasses intellectual, social, emotional, and physical health. The extent to which children can achieve optimal development depends on the everyday environment and supports which surround them, as well as access to additional resources and services that support healthy development.<sup>100,101</sup> The health of a child in utero, at birth, and in early life sets the stage for health and well-being throughout their life. Factors such as access to health care and health insurance, a mother's receipt of prenatal care, and receipt of preventive care such as immunizations and oral health care all influence not only a child's current health, but long-term development and future health as well.<sup>102,103,104</sup>

One way to assess how well a region is faring is by comparing a set of indicators to a set of known targets or standards. With regard to children's health, Healthy People is a federal initiative which provides 10-year national objectives for improving the health of Americans. Healthy People 2020 targets were developed with the use of current health data, baseline measures, and areas for specific improvement. Using the Healthy People 2020 standards as a tool for comparison can help regions understand where they fall relative to the nation as a whole, as well as identify particular areas of strength and places for improvement in relation to young children's health. Therefore, Healthy People 2020 targets are included when available.

The ability to obtain health care is critical for supporting the health of young children. In the early years of a child's life, well-baby and well-child visits allow clinicians to offer developmentally appropriate information and guidance to parents and provide a chance for health professionals to assess the child's development and administer preventative care measures like vaccines and developmental screenings.<sup>105</sup> Families without health insurance are more likely to skip these visits, and so are less likely to receive preventive care for their children, or to receive care for health conditions and chronic diseases.<sup>106,107</sup> Children who lack health insurance are also more likely to be hospitalized and to miss school.<sup>108</sup> Health care services to members of federally-recognized Indian tribes are available from Indian Health Service (IHS) facilities and other tribally-administered health care facilities.<sup>xvii</sup>

Low income children in Arizona are covered by the Arizona Health Care Cost Containment System (AHCCCS), Arizona's Medicaid. AHCCCS coverage is available for children in families with income up to 147 percent of the Federal Poverty Level (FPL) for those under age 1, and up to 141 percent of FPL for those ages 1 to 5 (and 133% for those from 6-19 years). Across the nation, state-run Children's Health Insurance Programs (CHIP) have provided health insurance to children up to age 19 in families with incomes too high to qualify them for Medicaid (AHCCCS). Enrollment in the Arizona version of CHIP, KidsCare, was suspended as of January 1, 2010, a particularly vulnerable time for families, following on the heels of the Great Recession.<sup>109</sup> Arizona became the only state without an active CHIP program. However, in May 2016, the Arizona legislature voted to lift the freeze on KidsCare,<sup>110</sup> and in July 2016 applications began to be accepted for the first time in six years, with coverage beginning September 1, 2016.<sup>111</sup> Expanding health insurance availability for lower-income children can lead to health improvements, and to longer-term benefits such as increased high school and college graduation rates and higher lifetime earnings.<sup>112</sup>

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<sup>xvii</sup> As a result of the Indian Self-Determination and Education Assistance Act (PL-93-638) (ISDEAA), federally recognized tribes have the option to receive the funds that the Indian Health Service (IHS) would have used to provide health care services to their members. The tribes can then utilize these funds to directly provide services to tribal members. This process is often known as 638 contracts or compacts. Source: Rainie, S., Jorgensen, M., Cornell, S., & Arsenault, J. (2015). *The Changing Landscape of Health Care Provision to American Indian Nations*. *American Indian Culture and Research Journal*, 39(1), 1-24.



Because a number of factors influence the health of a child before conception and in utero, the characteristics of women giving birth can have a substantial impact on the birth and developmental outcomes for their children. For instance, 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.<sup>113</sup> 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.<sup>114,115,116</sup>

A mothers' weight status can also influence her child's health. Women who are obese before they become pregnant have pregnancies with a higher risk of birth complications and neonatal and infant mortality.<sup>117,118</sup> Babies born to obese women are at risk for chronic conditions in later life such as diabetes and heart disease.<sup>119</sup> Maternal smoking is another factor that can greatly affect child outcomes. Babies born to mothers who smoke are more likely to be born early (pre-term), be low birth weight, die from sudden infant death syndrome (SIDS) and have weaker lungs than other babies.<sup>120</sup>

One potentially harmful birth outcome that can have long-lasting effects are preterm births – births before 37 weeks of gestation. 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 2,500 grams or 5 pounds, 8 ounces) are also at increased risk of infant mortality and longer-term health problems such as diabetes, hypertension and cardiac disease.<sup>121</sup>

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

After birth, a number of factors have been associated with improved health outcomes for infants and young children. One factor is breastfeeding, which has been shown to reduce the risk of ear, respiratory and gastrointestinal infections, SIDS, overweight, and type 2 diabetes.<sup>122</sup> 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.<sup>123</sup> Healthy People 2020 aims to increase the proportion of infants who were ever breastfed to 81.9 percent.<sup>124</sup> Immunization against preventable diseases is another factor that protects children from illness and potentially death. In order to assure community immunity (also known as "herd immunity"), which helps to protect unvaccinated children and adults from contracting vaccine- preventable diseases, rates of vaccination in a community need to remain high.<sup>125</sup> Research shows that higher exemption rates from vaccines at the school-level have been associated with school-based outbreaks of preventable diseases such as measles and pertussis.<sup>126</sup>

Oral health and good oral hygiene practices are also very important to children's overall health. According to the National Survey of Children's Health, the percentage of children in Arizona with excellent or very good oral health (65.7%) falls below the national level of 71.3 percent.<sup>127</sup> Tooth decay and early childhood caries can have short and long term consequences including pain, poor appetite, disturbed sleep, lost school days, and reduced ability to learn and concentrate.<sup>128</sup>

In early childhood, illness and injury can cause not only trauma to a child but added stress for a family. Non-fatal unintentional injuries substantially impact the well-being of children,<sup>129</sup> and injuries are the leading cause of death in children in the United States.<sup>130</sup> Common causes of visits to the emergency department for children 0-5 in Arizona include falls (particularly from furniture), collisions with an object, and natural events like bites and stings. Common causes for hospitalization of young children in Arizona include falls, poisoning, and assault/abuse.<sup>131</sup> Many of these injuries are preventable, prompting the Centers for Disease Control and Prevention to produce a National Action Plan for Child Injury Prevention, which outlines evidence-based strategies for addressing the challenge of keeping

children safe.<sup>132</sup> The Arizona Department of Health Services has recognized the need to focus on reducing childhood injuries in Arizona, and identified that as one of their priorities in the Bureau of Women’s and Children’s Health Strategic Plan<sup>133</sup>, as well as included it as part of their Arizona Injury Prevention Plan.<sup>134</sup>

A child’s weight status can have long-term impacts on health and well-being; in the United States, areas of concern tend to center around malnutrition and obesity, rather than undernutrition and underweight. Nationwide, it is estimated that about 3.8 percent of children ages 2-19 are underweight, 16.2 percent are overweight, and 17.2 percent are obese.<sup>135,136</sup> Obesity can have negative consequences on physical, social, and psychological well-being that begin in childhood and continue into and throughout adulthood.<sup>137</sup> The first two years of life are seen as critical to the development of childhood obesity and its resultant negative consequences. 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.<sup>138</sup> One component of establishing a healthy weight – physical activity – also promotes improved visual-motor integration skills and object manipulation skills which in turn lead to improved executive function, social behaviors and ultimately school readiness for young children.<sup>139</sup> The availability and accessibility of recreational facilities and resources that promote physical fitness can impact the ability of both child and adult community members to reap the benefits of physical activity.

## What the Data Tell Us

### Access to Care

Health care services are available to residents from the White Mountain Apache Tribe Region through Whiteriver Hospital and the Cibecue Health Center, both of which are part of the Indian Health Service Whiteriver Service Unit. Whiteriver Hospital is a 45-bed facility with a staff of 22 physicians, one podiatrist, five nurse practitioners, five dentists, two optometrists, and 79 nursing staff. The facility provides medical, pediatric, mental health, obstetric, ambulatory surgery, and alcohol treatment care. Cibecue Health Center is staffed by two physicians and a dentist and can provide outpatient, optometry, dental, and urgent care services. There are a total of five clinics in the region (four at Whiteriver Hospital plus the Cibecue Health Center) and four pharmacies (three at Whiteriver Hospital and one at Cibecue Health Center).<sup>140</sup> Between October 2013 and September 2015 there were 14,498 IHS active users (as defined by those who had one or more visits during the previous two years) from the White Mountain Apache Tribe. Of those, 1,898 were children ages birth to 5 (Table 42).<sup>xviii</sup> Figure 30 shows the number of well child visits by age at IHS facilities during that same time period.

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

A key factor in accessing health care is health insurance. According to estimates from the American Community Survey (ACS), 14 percent of young children in the White Mountain Apache Tribe Region were estimated to be

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<sup>xviii</sup> Please note that the number of active users represents all members of the White Mountain Apache Tribe (overall and for young children birth to 5) who received services at least once at the IHS Whiteriver Service Unit during the stated time period, regardless of their place of residence. This is also the case with all other indicators included in this report where the Indian Health Service is the source. This means that some of the children and adults considered “active users” may not be living within the reservation boundaries but in the surrounding areas. - Personal Communication, Indian Health Service – Phoenix Area, September 2016

uninsured, along with 26 percent of the total (Table 43). It is important to note that the U.S. Census Bureau does not consider coverage by the Indian Health Service (IHS) to be insurance coverage. The 2014 First Things First White Mountain Apache Tribe Regional Partnership Council Needs and Assets Report included data on the insurance status of young children from the White Mountain Apache Tribe Region for those served by IHS. According to this report, 45 percent of young children in the region did not have third-party insurance coverage in addition to the services provided by IHS. This suggests that the ACS estimate may be an underestimate of the share of young children in the region without health insurance.

Another source of access to health insurance for children in Arizona is KidsCare, Arizona’s Children’s Health Insurance Program (CHIP). KidsCare, as part of the AHCCCS program, provides insurance coverage for children in households with incomes between 100 and 200 percent of the Federal Poverty Level (FPL). The initial KidsCare program was frozen on January 1, 2010 and temporarily re-opened as KidsCare II for a limited number of eligible children on May 1, 2012. The program was eliminated entirely on February 1, 2014. However, on May 6, 2016, the KidsCare program was re-instated through Arizona law SB 1457.<sup>141</sup> New sign-ups opened on July 20, 2016 for coverage beginning on September 1, 2016.<sup>142</sup> Key informants in the region expected that the reinstatement of KidsCare would have a positive effect on the ability of young children to access needed health services. Currently Child Find assists families in getting needed medical services, such as glasses for children with vision impairments, when their families’ lack insurance.

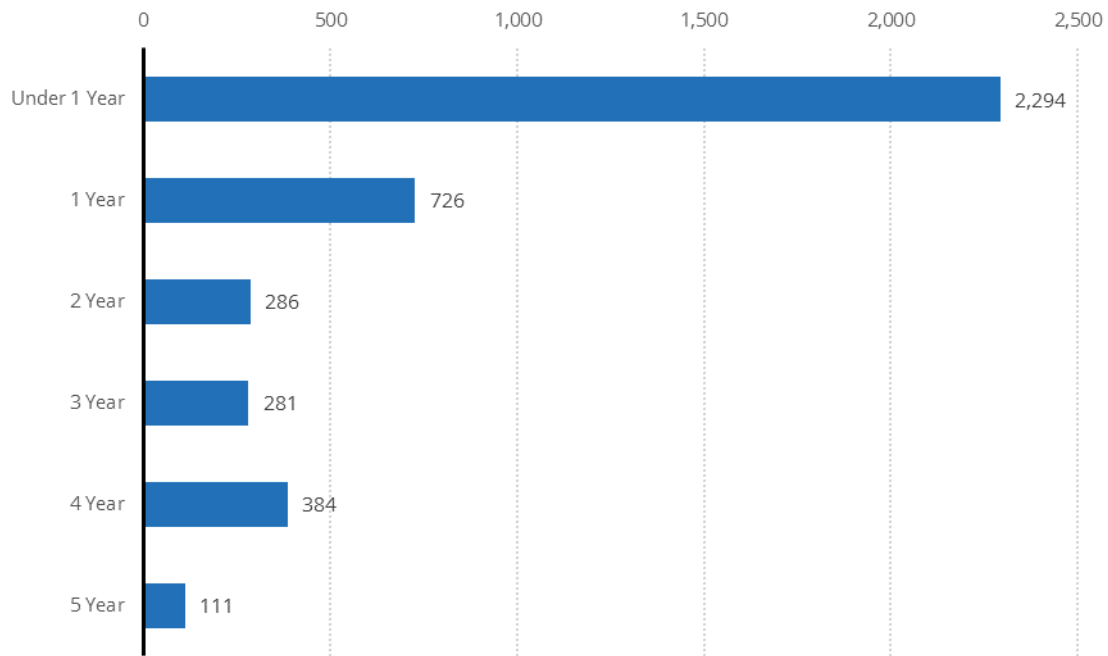
The White Mountain Apache Tribe Head Start facilitates health screening and referrals for children enrolled in the program. According to data from the 2014-2015 school year, all (100%) of the children enrolled in the Head Start had insurance, all children had an ongoing source of accessible health care, 92 percent of children received medical services from IHS, and 98 percent were up to date on primary and preventative care (Table 44). Yearly, Head Start brings in a dentist, pediatrician, audiologist, and other providers to provide screenings and services for children entering Head Start.

Table 42. Number of Active IHS Users from the White Mountain Apache Tribe

	Young Children (Ages 0-5)	All Children (ages 0-17)	All Ages
White Mountain Apache Tribe	1,898	5,395	14,498

Source: Indian Health Services, Phoenix Area (2016) [IHS Dataset]. Unpublished data.

Figure 30. Well Child Visits by Age at IHS Facilities



Source: Indian Health Services, Phoenix Area (2016) [IHS Dataset]. Unpublished data.

Table 43. Estimated Proportion of Population Without Health Insurance

	Estimated population (ages 0-5)	Children (ages 0-5) without health insurance	Estimated population (all ages)	Persons (all ages) without health insurance
White Mountain Apache Tribe	1,928	14%	14,669	26%
Canyon Day	113	12%	1,243	35%
Cedar Creek	130	39%	511	42%
Cibecue	193	8%	1,796	22%
East Fork-Ft Apache-Seven Mile-Turkey Creek	221	5%	1,869	25%
Hondah-McNary	215	13%	1,580	23%
North Fork	275	40%	1,763	41%
Rainbow City	144	6%	1,188	23%
Whiteriver	613	4%	4,237	21%
Remainder of the Region	24	0%	482	20%
All Arizona Reservations	19,868	18%	184,327	26%
ARIZONA	531,825	10%	6,453,706	16%

Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B27001

Table 44. Access to Health Care for Children Enrolled in White Mountain Apache Head Start

	Children (ages 0-5) enrolled in Head Start/Early Head Start.	Children with health insurance	Children with ongoing source of accessible health care	Children receiving IHS medical services	Children up to date on primary and preventative care
White Mountain Apache Head Start	262	100%	100%	92%	98%

Source: Office of Head Start (2016). 2015 Program Information Report. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/data/pir>

### Maternal Characteristics

In 2014, 305 babies were born to mothers residing in the White Mountain Apache Tribe Region (Table 45). Most of the births occurred at hospitals outside the region, including Summit Healthcare Regional Medical Center, located in Pinetop.<sup>143</sup> Of the mothers who gave birth in the region in 2014, nearly all (98%) were American Indian or Alaska Native (Figure 32). Thirty-five percent of new mothers in the region had a high school diploma or GED (Table 46).

The population of new mothers in the White Mountain Apache Tribe Region was quite different from the state. More than two-thirds of mothers (71%) were not married in the region (45% statewide), and one out of every 20 mothers (5%) in the region were age 17 or younger (2% statewide) (Table 47). In the region, nearly 98 percent of births were to mothers relying on AHCCCS or Indian Health Service (IHS) coverage, which was much higher than the statewide proportion of 55 percent. Of the births covered by a public payee (AHCCCS or IHS), the proportion of births covered by AHCCCS has increased between 2009 and 2014 (Figure 33). Since 2012, more than 90 percent of births have been covered by AHCCCS. Facilitating enrollment in AHCCCS can offer benefits both at the individual and community levels. Community members who enroll in a health insurance plan can gain increased access to health care services by being able to receive care through AHCCCS providers, Indian Health Service facilities, Tribes and Tribal Organizations, and Urban Indian Organizations. At the community level, tribes can benefit when IHS or tribally-operated 638 facilities bill a third-party insurer for medical services resulting in savings in Contract Health Service funds. The money saved through outside billing can then be used in other ways to benefit all tribal citizens. According to the 2016-2017 Head Start Community Assessment, 59 percent of respondents reported that they or their child were covered by AHCCCS.

A lower proportion of mothers in the White Mountain Apache Tribe Region reported smoking (0.7%) than across the state (4.6%). Rates of tobacco use among pregnant women in the region met the Healthy People 2020 goal of 1.4 percent or less (Table 47). The percentage of children enrolled in WIC who were exposed to smoking in the household decreased from 2 percent in 2011 to 0 percent in 2015 (Figure 34). Children exposed to secondhand smoke are at a higher risk of developing ear infections, respiratory illnesses, and sudden infant death syndrome.<sup>144</sup> This decline in smoking in households with young children is promising; however, it is important to note that these data are collected through self-reporting. Some key informants in the region pointed out that that smoking in some households is likely not being reported, and that rates of children exposed to secondhand smoke in the region may be higher than those reflected in the WIC data.

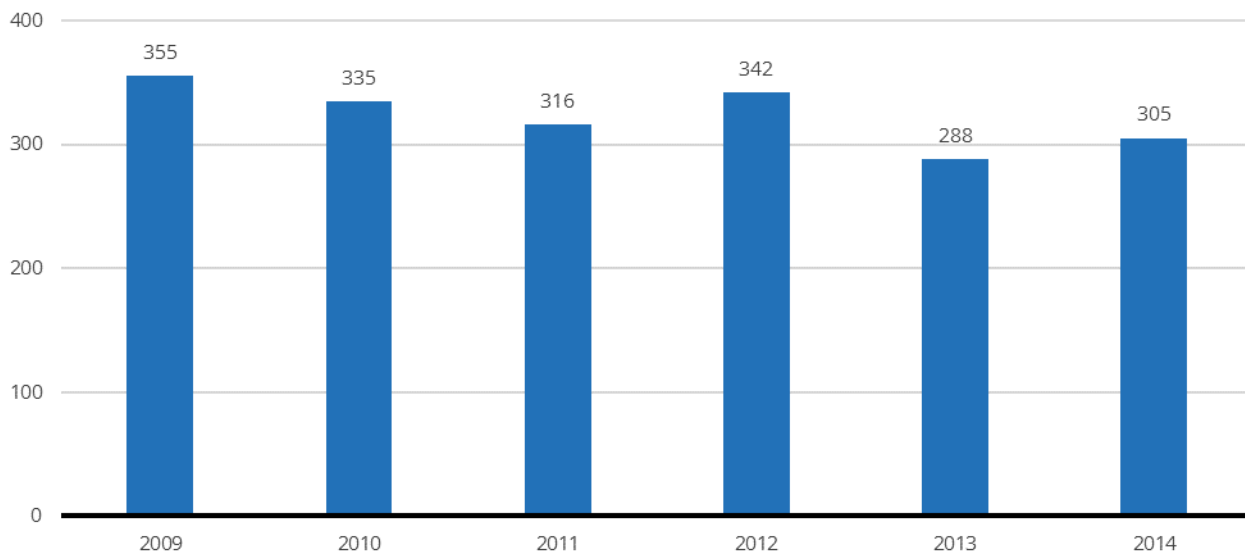
Another aspect of maternal health that is linked to both birth outcomes and a child's subsequent health is maternal obesity. Among Arizonan women overall, about 51 percent were overweight or obese before pregnancy in 2014. Among women who participate in WIC in general, this rate was higher – 58 percent, which is to be expected given that low-income women are more likely to be obese in the United States. In the White Mountain Apache Tribe Region, this rate was higher still: 28 percent of women in the WIC program were overweight, and 40 percent were obese, for a total of 68 percent who were overweight or obese before becoming pregnant (Figure 35). The rate of pre-pregnancy obesity in the region has remained steady around 40 percent since 2011 (see Figure 36). In Arizona, pre-pregnancy obesity rates for women enrolled in WIC increased from 27 percent in 2012 to 31 percent in 2015.

Table 45. Live Births During Calendar Year 2014, by Mother's Place of Residence

	Total number of births to Arizona-resident mothers in 2014
White Mountain Apache Tribe	305
All Arizona Reservations	N/A
ARIZONA	86,648

Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 31. Births to Mothers Residing in the White Mountain Apache Tribe Region, 2009 to 2014



Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data. First Things First (2015). First Things First White Mountain Apache Tribe Regional Partnership Council 2014 Needs and Assets Report. Retrieved from <https://www.firstthingsfirst.org/regions/Publications/Regional%20Needs%20and%20Assets%20Report%20-%202014%20-%20White%20Mountain%20Apache%20Tribe.pdf>

Table 46. Live Births During Calendar Year 2014, by Mother's Educational Attainment

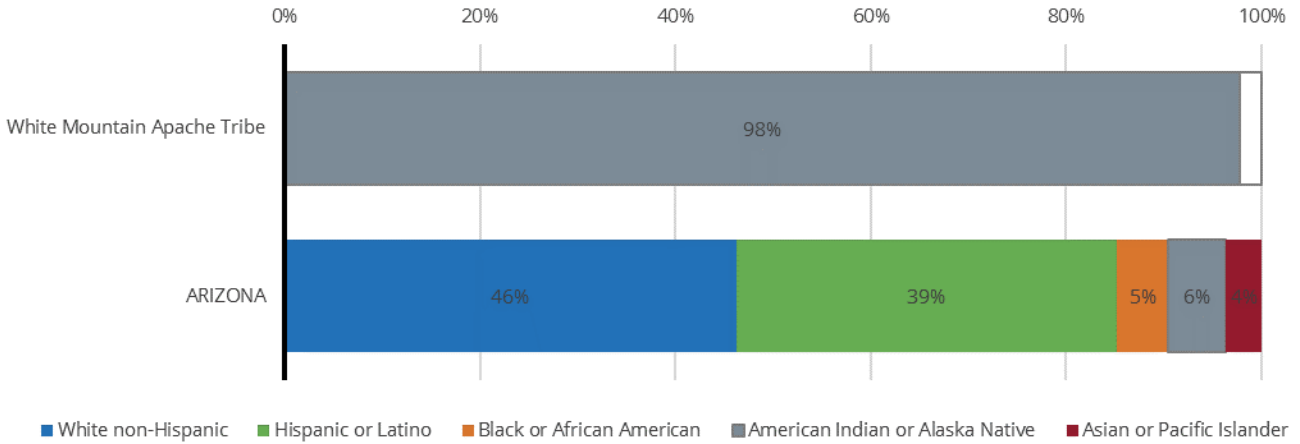
	Less than high school	High school or GED	Some college or professional education	Bachelor's degree or more
White Mountain Apache Tribe	N/A	35%	N/A	N/A

All Arizona Reservations	N/A	N/A	N/A	N/A
ARIZONA	20%	25%	31%	23%

Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Note: The percentages above may not add to 100% due to rounding.

Figure 32. Race and Ethnicity of Mothers Giving Birth in 2014



Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Note: The share of non-American Indian mothers giving birth cannot be displayed due to small numbers.

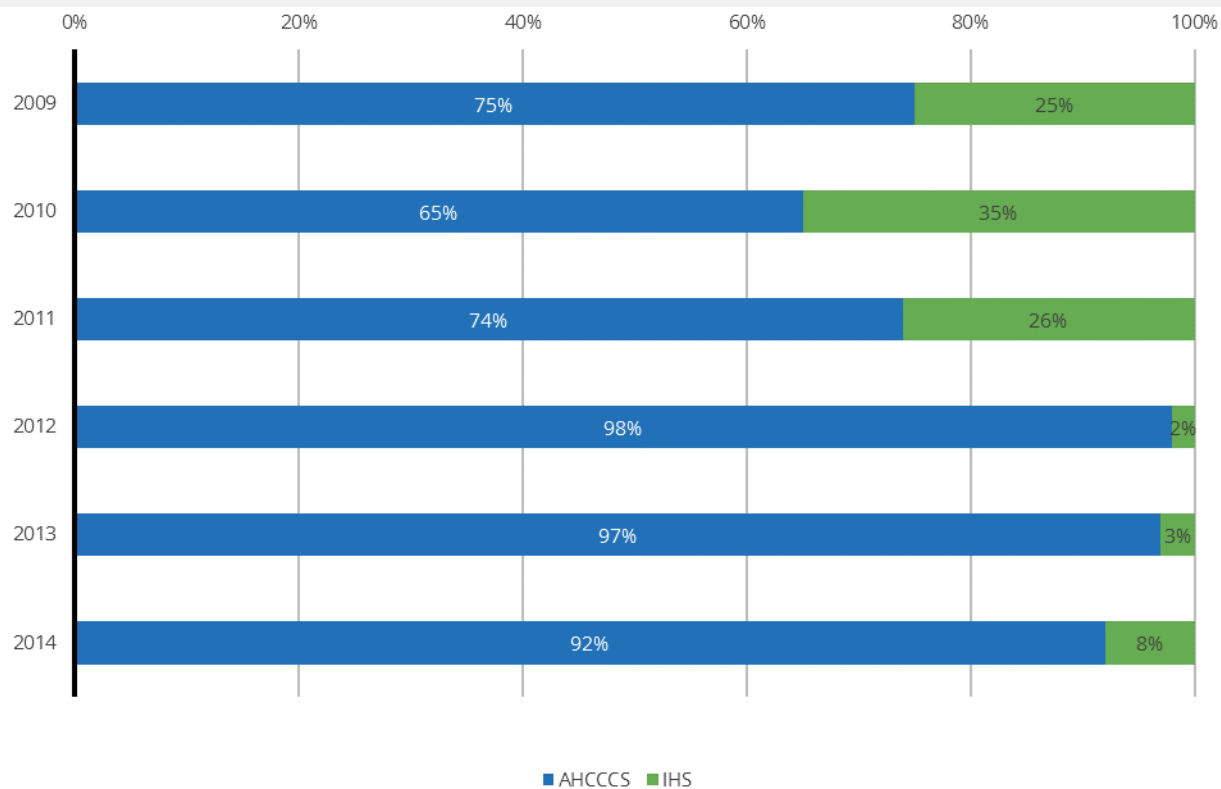
Table 47. Other Characteristics of Mothers Giving Birth in 2014

	Mother was not married	Mother was 19 or younger	Mother was 17 or younger	Birth was covered by AHCCCS or Indian Health	Tobacco use during pregnancy
White Mountain Apache Tribe	71%	13%	5%	98%	0.7%
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A
ARIZONA	45%	8%	2%	55%	4.6%

Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

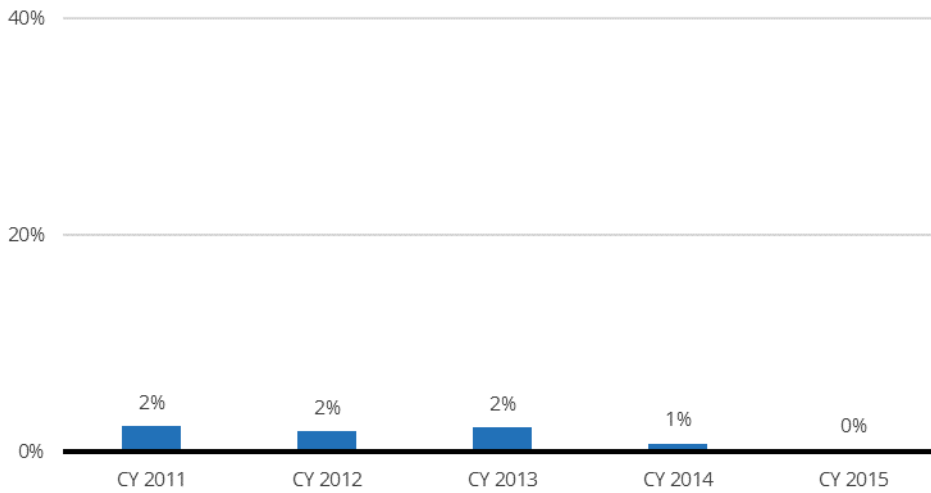


Figure 33. Share of Public Payee Births Covered by AHCCCS or IHS



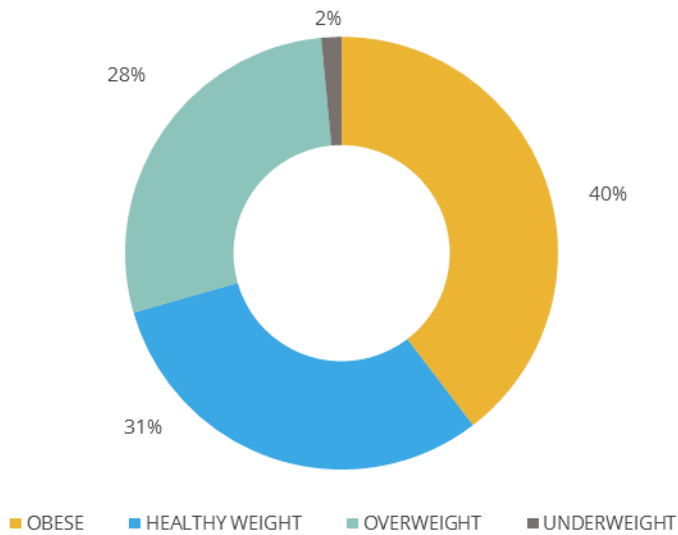
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 34. Children (ages 0-4) in the White Mountain Apache WIC Program Exposed to Smoking in the Household



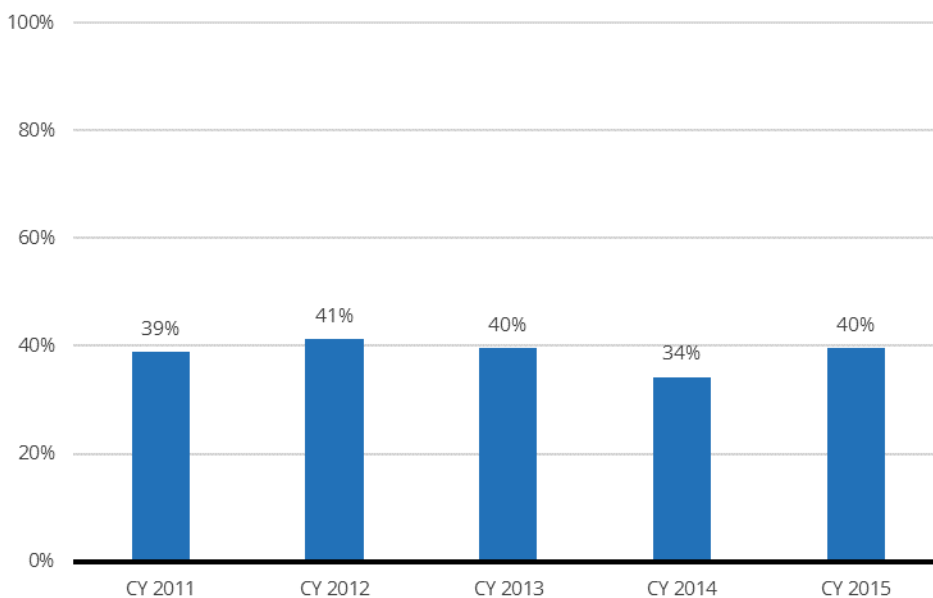
Source: Inter-Tribal Council of Arizona (2016) [WIC Dataset]. Unpublished data.

Figure 35. Pre-pregnancy Weight Status of Women in the White Mountain Apache Tribe WIC Program, 2015



Source: Inter-Tribal Council of Arizona (2016) [WIC Dataset]. Unpublished data.

Figure 36. Pre-pregnancy Obesity Rates for Women in the White Mountain Apache Tribe WIC Program, 2012 to 2015



Source: Inter-Tribal Council of Arizona (2016) [WIC Dataset]. Unpublished data.

### Prenatal Care

The Healthy People 2020 goal is that at least 77.9 percent of pregnant women receive prenatal care that begins in the first trimester of pregnancy. Prior to 2014, there had been a steady trend in the White Mountain Apache Tribe Region of 80.4 to 82.6 percent of pregnant women with early prenatal care, meeting the Healthy People 2020 goal in 2013 (Figure 37). In 2014, the Arizona Department of Health Services introduced major changes in the way that prenatal care by trimester is assessed; these structural changes mean that rates from 2014 onward are not directly comparable to earlier rates. The new calculations have resulted in a much higher number of birth certificates with “unknown” prenatal care status statewide, and 6.6 percent of births in the region could not have prenatal care status determined. Of those with known prenatal care status, 64.2 percent of pregnant women obtained prenatal care during the first trimester, compared to 71.7 percent in the state (Table 48). It is not clear if this represents an actual decline, or is an artifact of the new reporting system. However, the fact that the share of women with prenatal care in the first trimester is lower in the region than in the state suggests a greater need for early prenatal care. Women who gave birth at IHS facilities such as Whiteriver Hospital had higher rates of prenatal care in the first trimester (70.%) than women in the region overall (Table 49).

Another concern is overall lack of prenatal care; 16.1 percent of babies in the White Mountain Apache Tribe Region were born to mothers who had had fewer than five prenatal care visits (Table 48). The region had a much higher proportion of mothers with few prenatal visits, compared to the state, where 6 percent of births were to mothers who had fewer than five prenatal care visits. Similar to prenatal care in the first trimester, women who gave birth in

IHS facilities had higher rates of more prenatal care visits. Only eight percent of women giving birth in the region had fewer than five prenatal care visits (Table 49).

Table 48. Live Births During Calendar Year 2014, by Number of Prenatal Visits

	No visits	1 to 4 visits	5 to 8 visits	9 to 12 visits	13 or more visits	Percent of births with fewer than five prenatal care visits	Percent of births with prenatal care begun in the first trimester
White Mountain Apache Tribe	2%	14%	40%	39%	4%	16.1%	64.2%
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARIZONA	2%	4%	15%	47%	31%	6.5%	71.7%

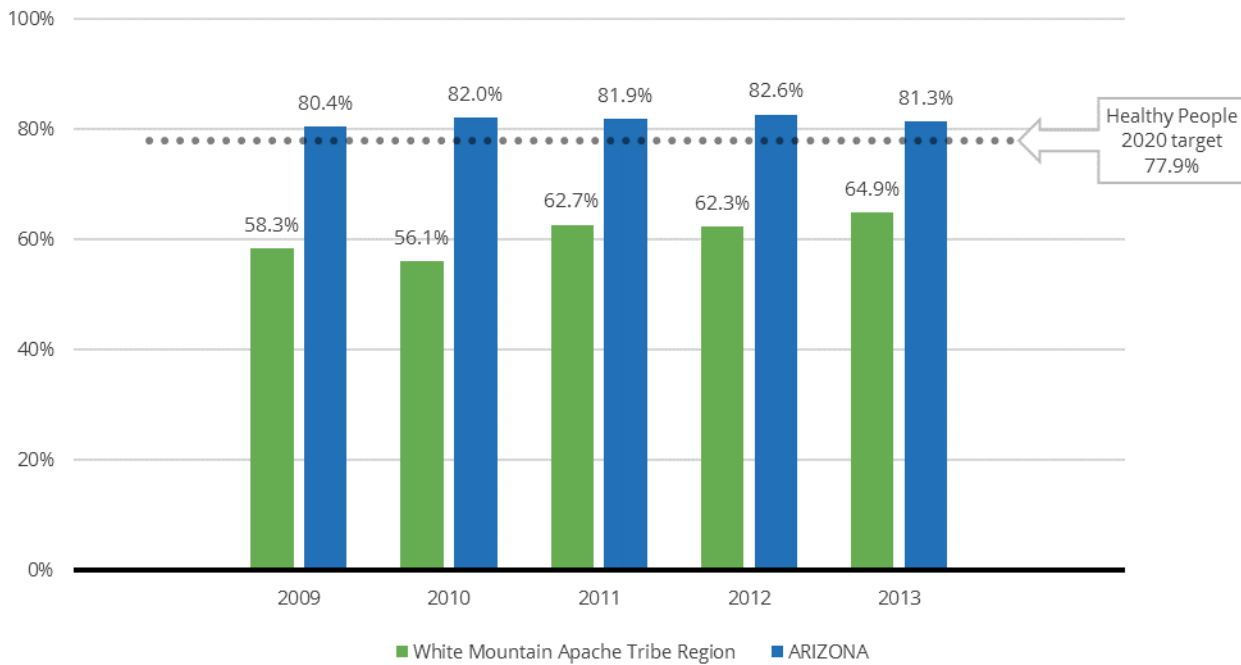
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Table 49. Births at IHS Facilities by Number of Prenatal Visits

	No Visits	1 to 4 visits	5 to 8 visits	9 to 12 visits	13 or more visits	Percent of births with fewer than five prenatal care visits	Percent of births with prenatal care begun in the first trimester
White Mountain Apache Tribe	2%	7%	32%	32%	28%	8%	70%

Source: Indian Health Services, Phoenix Area (2016) [IHS Dataset]. Unpublished data.

Figure 37. Percent of Births With Prenatal Care Begun in First Trimester



Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

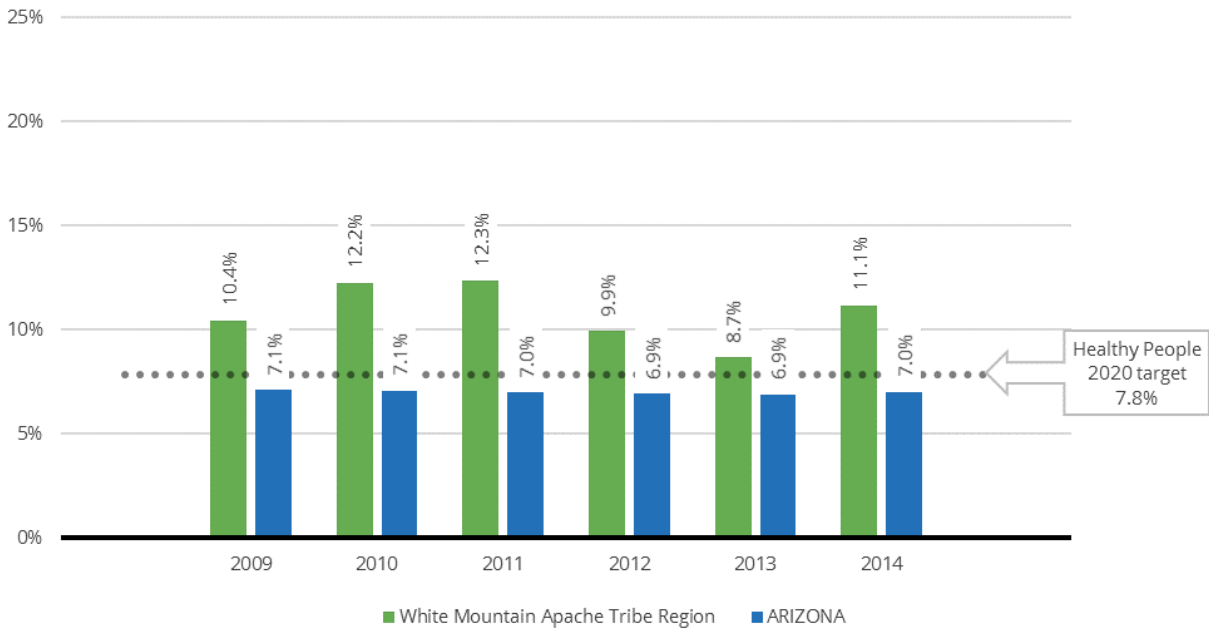
### Birth Outcomes

With regard to perinatal health, babies in the White Mountain Apache Tribe Region were doing slightly worse than babies born statewide. Thirteen percent of babies born in the region in 2014 were born premature, compared to 9 percent statewide (Figure 39). This was consistent with premature birth rates in previous years. In the same year, 11.1 percent of babies in the region were low birth weight, compared to seven percent across the state (Figure 38). Healthy People 2020 objectives include that fewer than 7.8 percent of babies are born at low birth weights and fewer than 11.4 percent are born preterm, meaning that the White Mountain Apache Tribe Region has not achieved the Healthy People 2020 goal for either low birthweight or preterm births (Figure 38; Figure 39). Despite higher rates of low birthweight and pre-term births, a slightly lower proportion (5.57%) of newborns in the region were admitted to a Neonatal Intensive Care Unit (NICU) across the state (6.77%) (Table 50).

In 2015, 13.4 percent of newborns did not pass initial hearing screenings, compared to the state where 3.8 percent of newborn did not pass initial screenings. Two percent of newborns required diagnostic evaluation and 0.7 percent had confirmed hearing loss, nearly triple that of newborns statewide (Figure 40). This indicates that there is a higher need for hearing and speech services than what may be seen among young children statewide. Studies have shown that Apache children are at particular risk for recurring ear infections.<sup>145</sup> Multiple key informants noted that there is a high prevalence of children with hearing and speech and language impairments in the region, and that additional awareness and education around ear infection management is important to support children’s health. Data from this dataset shows that over 70 percent of newborns in the region were born at Summit Healthcare Regional Medical Center, while nearly 20 percent of newborns were born at Whiteriver Hospital.

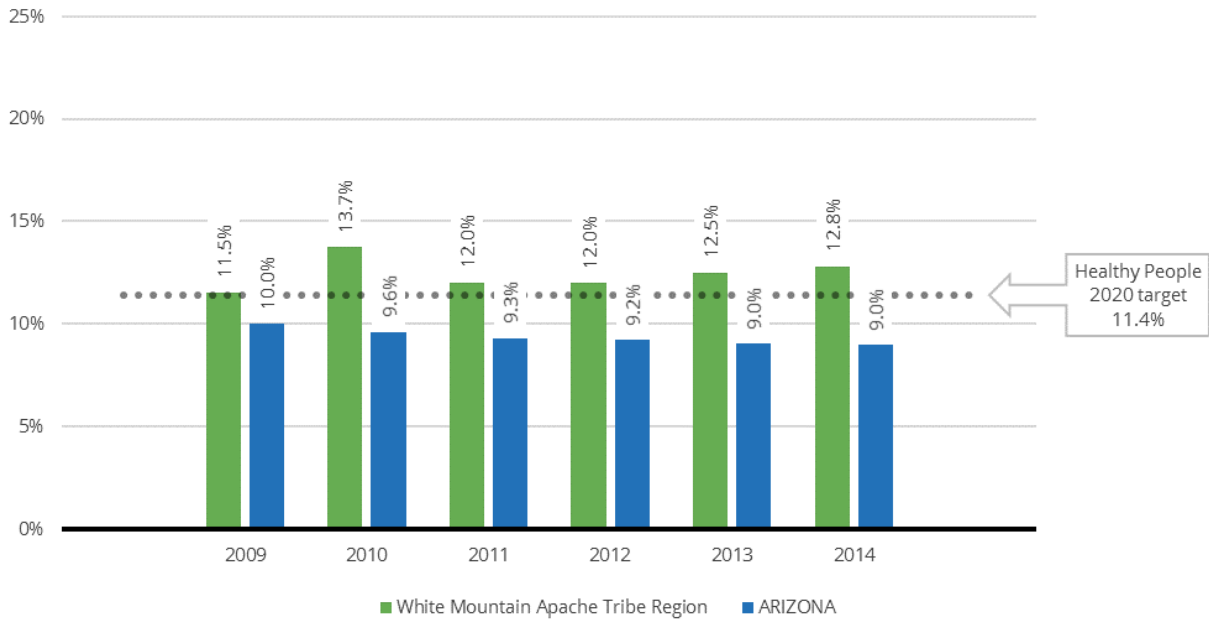
Of the infants enrolled in the White Mountain Apache Tribe WIC program in 2015, 76 percent were ever breastfed. Although this proportion does not meet the Healthy People 2020 goal of 81.9 or higher, it is a higher rate than that of infants enrolled in WIC statewide (71.2%). The percent of infants in the White Mountain Apache Tribe WIC program who were ever breastfed steadily increased between 2011 and 2015 from 63 percent to 76 percent. The percent of infants breastfed for six months or more has also increased since 2011, with 25 percent of infants ever breastfed being breastfed for six or more months. The steady increase in breastfeeding initiation may be related in part to the Indian Health Service’s Baby Friendly Hospital Initiative.<sup>146</sup> All 13 IHS obstetric hospitals are now baby-friendly, including Whiteriver Hospital.<sup>147</sup> According to key informants in the region, until recently, mothers receive breastfeeding education at every prenatal and infant health visit. However, funding for the breastfeeding consultant position through the Division of Health ended in May 2017. Beyond efforts at Whiteriver Hospital, both Alchesay Beginnings Child Development Center and Chaghache Day Care support breastfeeding mothers by providing storage for breastmilk and allowing mothers to come in and breastfeed their infants. According to the 2015 National WIC Report, 14.2 percent of infants in White Mountain Apache Tribe WIC program were fully breastfed, a higher proportion than the average for all ITCA WIC programs in fiscal year 2015 (13.2%).<sup>148</sup>

Figure 38. Percent of Babies Born in 2009 to 2014 With Low Birthweight (5.5 Pounds or Less)



Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 39. Percent of Babies Born Premature in 2009 to 2014 (37 Weeks or Less)



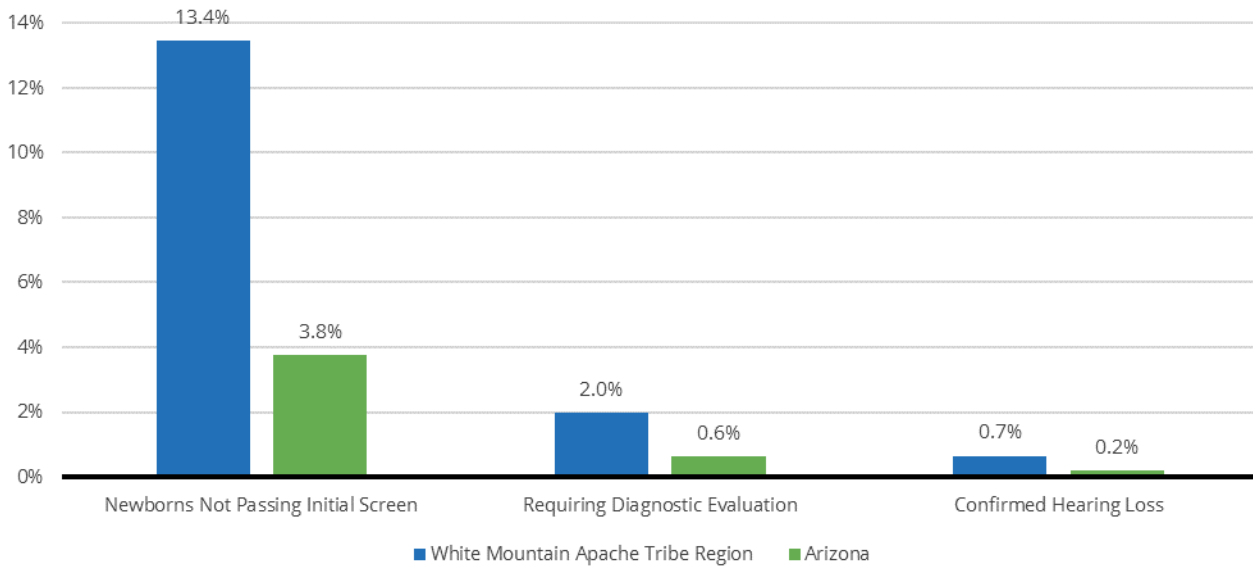
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Table 50. NICU Admissions in 2014

	Newborns admitted to intensive care unit
White Mountain Apache Tribe	6%
All Arizona Reservations	N/A
ARIZONA	7%

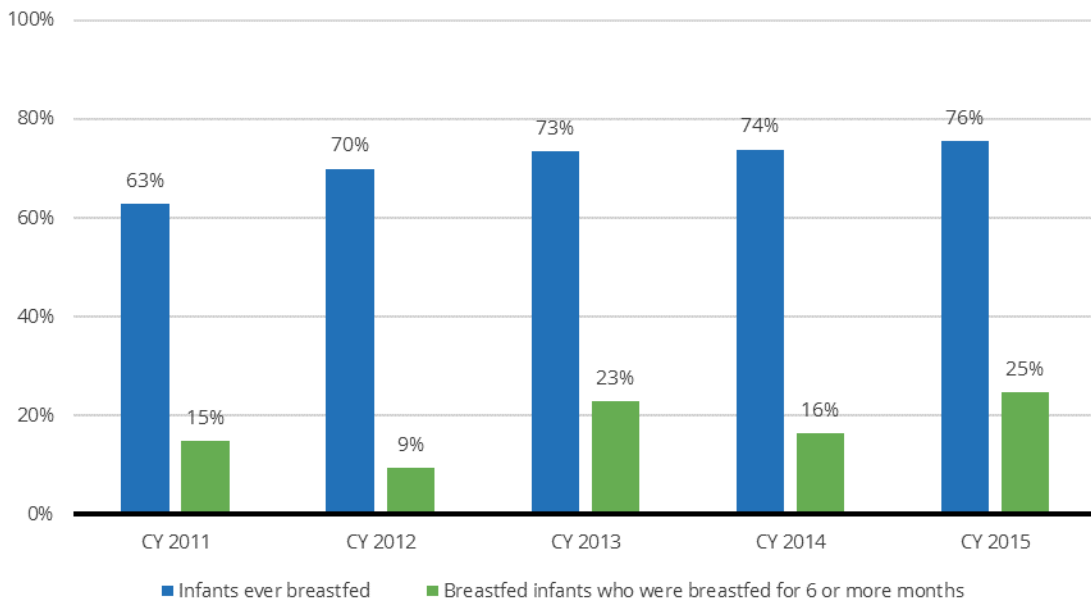
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 40. Newborn Hearing Screening Results, 2015



Source: Arizona Department of Health Services (2016). [Hearing Screening Results dataset]. Unpublished data.

Figure 41. Breastfeeding Rates for Infants in the White Mountain Apache WIC Program, 2012 to 2015



Source: Inter-Tribal Council of Arizona (2016) [WIC Dataset]. Unpublished data.



## Immunizations

Data provided by the Indian Health Services for children from the White Mountain Apache Tribe show that in the period between October 2013 and September 2015, 65.8 percent of children 19 to 35 months old were fully immunized. In the White Mountain Apache Tribe Region, young children are likely to join an early child care and education program at the age of 3 or 4. According to data from the White Mountain Apache Tribe Head Start program, in the school year 2014-2015 nearly all (98.1%) of the children enrolled in the program were up-to-date on their immunizations. This is higher than immunization rates in other early care and education programs in 2015. Only half of children enrolled in these programs were up to date on their polio vaccines, 78 percent up to date on their DTAP vaccines, and 67 percent up to date their Hepatitis A vaccines. Overall, the regional rates were lower than those of the state (Table 51). The Healthy People 2020 target for vaccination coverage for children ages 19-35 months for these vaccines is 90 percent, suggesting that the region is not meeting this goal, except for children enrolled in Head Start.

Despite low immunization rates for children in child care centers, data indicates that nearly all children in kindergarten were fully immunized. Nearly all kindergartners (99%) had the three major (DTAP, polio, and MMR) vaccine series (Table 52). The Healthy People 2020 target for vaccination coverage of kindergartners is 95 percent for the DTAP, MMR, polio, Hepatitis B, and Varicella vaccines. Kindergartners in the region are meeting the Healthy People 2020 goals for all immunizations, whereas statewide kindergartners are meeting this goal on three of the five required vaccines. Rates of personal exemptions for vaccinations among children in child care (1.2%) and kindergarten (0.0%) in the region were much lower than exemption rates at the state level (3.5% and 4.5% respectively).

Table 51. Vaccination Rates and Exemption Rates for Children in Child Care, 2015-2016

	Students enrolled	Four or more DTAP	Three or more Polio	Two or more MMR	Three or more HIB	Two Hep A	Three or more Hep B	One or more Varicella	Religious exemption	Medical exemption
White Mountain Apache Tribe	82	78%	51%	89%	88%	67%	94%	89%	1.2%	0.0%
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARIZONA	92,128	92%	93%	94%	92%	81%	92%	95%	3.5%	0.5%

Source: Arizona Department of Health Services (2016). [Immunization Data Reports dataset]. Unpublished data.

Note: These data represent immunization rates for children in preschool or child care at Cradelboard Elementary School, Seven Mile Preschool, Alchesay Beginnings Child Development Center, and Whiteriver Elementary School

Table 52. Vaccination Rates and Exemption Rates for Kindergarten Children, 2015-2016

	Students enrolled	Four or more DTAP	Three or more Polio	Two or more MMR	Three or more Hep B	One or more Varicella	Personal exemption	Medical exemption
White Mountain Apache Tribe	349	99%	99%	99%	100%	100%	0.0%	0.3%
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARIZONA	83,088	94%	95%	94%	96%	97%	4.5%	0.3%

Source: Arizona Department of Health Services (2016). [Immunization Data Reports dataset]. Unpublished data.

Note: These data represent immunization rates for Cibecue Community School, Cradelboard Elementary School, East Fork Lutheran School, John F. Kennedy School, Seven Mile Elementary School, McNary Elementary School, and Whiteriver Elementary School..

## Oral Health

More children in kindergarten in Arizona (52%) have tooth decay compared to children across the nation (36%). Within Arizona, American Indian (76%) children more likely to experience tooth decay than white children (34%).<sup>149</sup>

In 2010, the Indian Health Service (IHS) implemented an ongoing oral health surveillance system to monitor the oral health of American Indian and Alaska Native (AI/AN) children. Historically, this population has seen the highest rates of tooth decay in the United States, and it continues today at a rate that is 4 times than that of White children. The IHS Oral Health Survey collected data from preschool-age children in 2012 and 2014. During this last year, survey data were collected from a total of 11,873 children ages 1 to 5 from all IHS Areas, including 796 children from the Phoenix Area which includes the White Mountain Apache Tribe Region. Results from the survey show that that 43 percent of AI/AN children ages 3 to 5 have untreated tooth decay. American Indian/Alaska Native children begin to experience tooth decay at an early age: 18 percent of the one-year old children participating in the survey already had tooth decay. In addition, the prevalence of decay experience in the primary teeth rises sharply with age, with 76 percent of five-year old children experiencing this condition. This means that prevention efforts are essential before the age of two in the reduction of tooth decay prevalence among AI/AN children. The survey also found that many AI/AN children were not receiving adequate dental care and there was an underutilization of dental sealants on AI/AN children’s primary molars.<sup>150</sup> While the state of Arizona has met its own 2020 benchmark of no more than 32% of children with untreated tooth decay and is on track towards the Healthy People’s 2020 target (26%),<sup>151</sup> there remains a strong need for focused oral health efforts on primary prevention in tribal communities across the state.

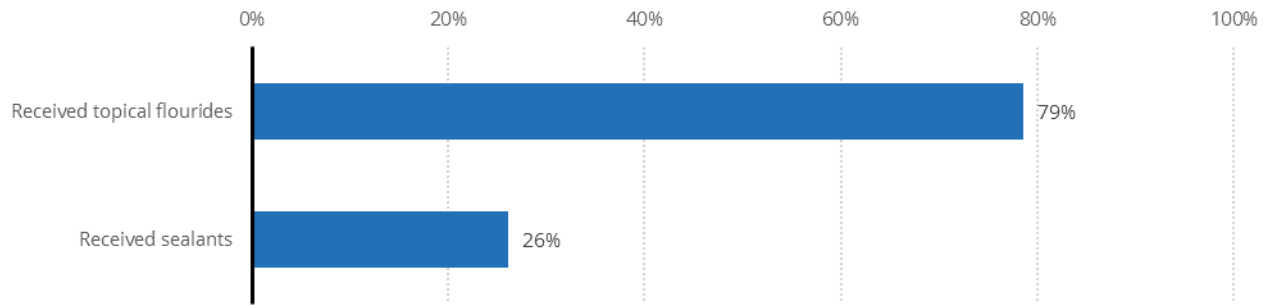
Data from the Indian Health Services indicates show that a total of 1,492 unique children (79%) ages birth to 5 received topical fluoride applications between October 2013 and September 2015 from the White Mountain Apache Tribe (Figure 42). Four hundred and ninety-five children (26%) received sealant applications in that same period, which is higher than that found in the 2014 IHS Oral Health Surveys discussed above: only six percent of American Indian/Alaska Native (AI/AN) children participating in the survey had at least one dental sealant on a primary molar tooth.

Children enrolled in Head Start receive access to dental screenings and preventative care. According to data from the 2014-2015 school year, all of the children enrolled in the White Mountain Apache Tribe Head Start had continuous

accessible dental care, and nearly all children (98%) received preventative dental care. Of the children in Head Start, all enrolled children received professional dental exams, and nearly three-quarters (74%) enrolled were found to need dental treatment (Table 53). Just over half of these children received the needed dental treatment.

Among parents and caregivers surveyed in the 2016-2017 Head Start Community Assessment, dental caries and treatment was the health issue that the most respondents felt should be given top priority (Figure 43). Given the high rate of dental decay among American Indian children in Arizona, further support for oral health in early childhood is likely needed in the region. The White Mountain Apache Tribe First Things First Regional Partnership Council has funded a strategy to support oral health among young children in the region. This strategy sought to provide a duplicated count (best practice is to apply fluoride varnish 3-4 times per year) of 1000 oral health screenings and applications of fluoride varnishes for children in the region.<sup>152</sup> Key informants in the region noted that all of the early care and education centers in the region are participating in the First Things First Oral Health program and that the program has a presence at the local health fairs and screening events.

Figure 42. Children (Ages 0-5) Receiving Oral Health Care through IHS



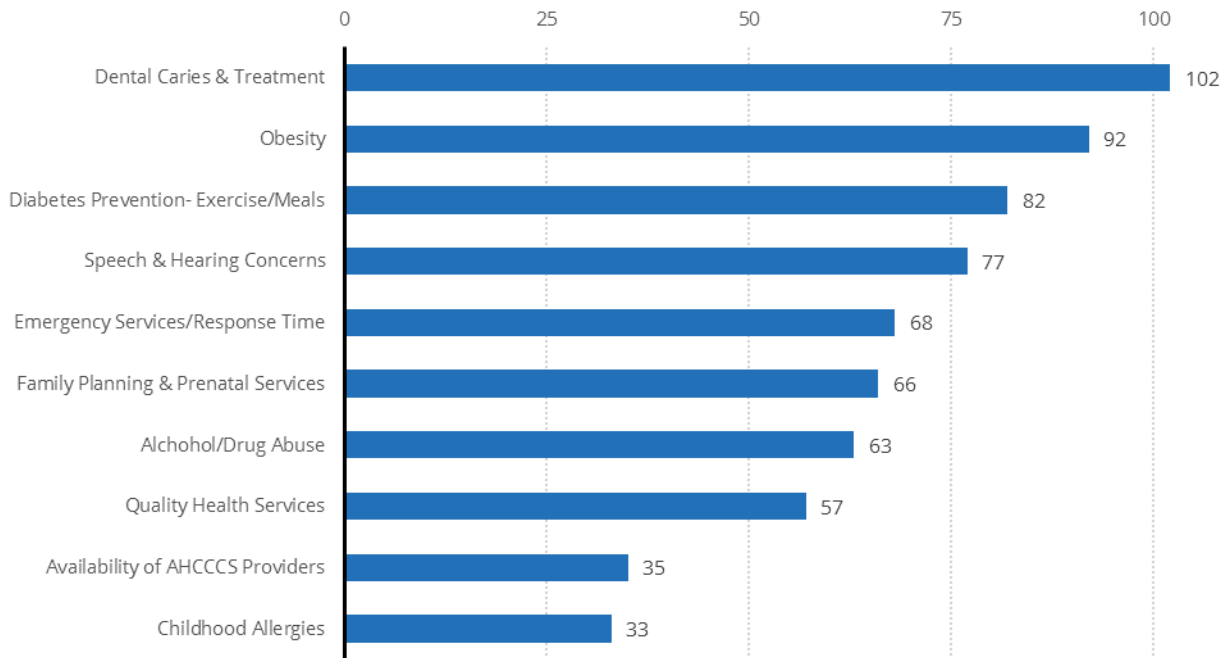
Source: Indian Health Services, Phoenix Area (2016) [IHS Dataset]. Unpublished data.

Table 53. Access to Dental Care for Children Enrolled in White Mountain Apache Head Start

	Children (ages 0-5) enrolled in Head Start	Children with continuous accessible dental care	Children receiving preventative dental care	Children with professional dental exam	Children needing dental treatment	Children receiving dental treatment
White Mountain Apache Head Start	262	100%	98%	100%	74%	53%

Source: Office of Head Start (2016). 2015 Program Information Report. Retrieved from <https://eclkc.ohs.acf.hhs.gov/hslc/data/pir>

Figure 43. Responses to “From the following list of 10 health issues, choose 5 that you feel should be given top priority?”



Source: White Mountain Apache Head Start (2016). 2016-2017 Head Start Community Assessment. Received by request.

### Childhood Injury, Illness and Mortality

Specific data on childhood mortality were not available for the White Mountain Apache Tribe Region. At the state level, the Arizona Child Fatality Review (CFR) Program produces an annual report in order to identify ways to decrease or eliminate identified preventable deaths amongst children across the state. In the 2015 annual report, 768 deaths were reported in children under 18 years old in Arizona, 74 percent (566) of which were young children from birth to age five. More than one-third of these deaths (38%) occurred in the neonatal period (birth-27 days) and were due to natural causes (prematurity, neurological disorders, and other medical conditions). The infancy age group (28-365 days) saw 23 percent of these deaths, which were largely due to suffocation. About 13 percent of these deaths were amongst children 1-4 years old, an age group with high rates of fatalities due to drowning, motor vehicle accidents, and blunt force trauma.

Local CFR Teams conduct an annual report which reviews each death in the state and determines the preventability of each of these deaths. In 2015, 10 percent of perinatal deaths, 48 percent of infant deaths, and 57 percent of young child deaths in Arizona were deemed preventable.

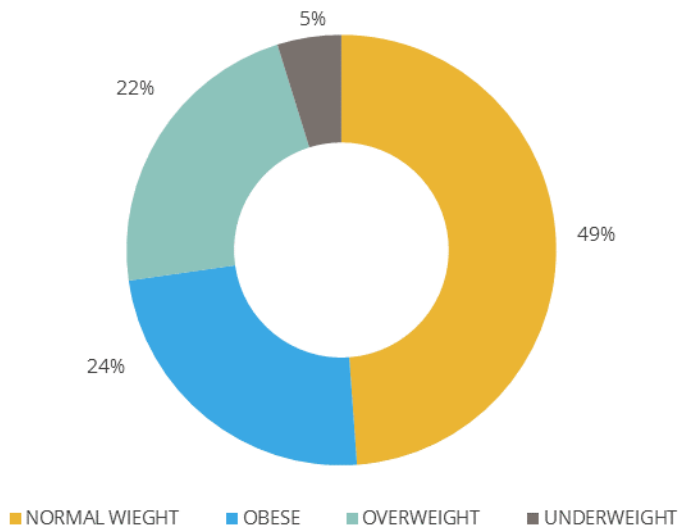
Additionally, the CFR Teams determine which deaths can be classified as maltreatment based on the actions or failures to take appropriate preventative action by a parent, guardian, or caretaker. In the 2015 review, 11 percent of all child fatalities were due to maltreatment and all of these deaths were determined to have been preventable. These maltreatment deaths are classified in one of three categories: homicide (e.g. abusive force trauma), natural (e.g. failure to obtain medical care or prenatal substance use that caused premature death), or accidental (e.g. the unintentional injuries caused by negligence or impaired driving).

## Weight Status

Healthy People 2020 has set a goal of no more than 9.4 percent of children having obesity. Data from the Indian Health Service for children from the White Mountain Apache Tribe indicate that 20.6 percent children (ages 2-5) were obese. Data on the weight status of children in the region were also available from the White Mountain Apache Tribe WIC program. In 2015, 24 percent of the children (ages 2 to 4) participating in the program were obese and an additional 22 percent were overweight (Figure 44). The obesity rate dropped slightly between 2011 and 2015 from 28 percent to 24 percent (Figure 45). Over a similar period of 2012 to 2015, statewide obesity rates for children ages 2 to 4 enrolled in WIC fell from 12.7 percent to 11.4 percent. Based on these data (whether the WIC or IHS rates), the region appears to not be meeting the Healthy People 2020 target for childhood obesity.

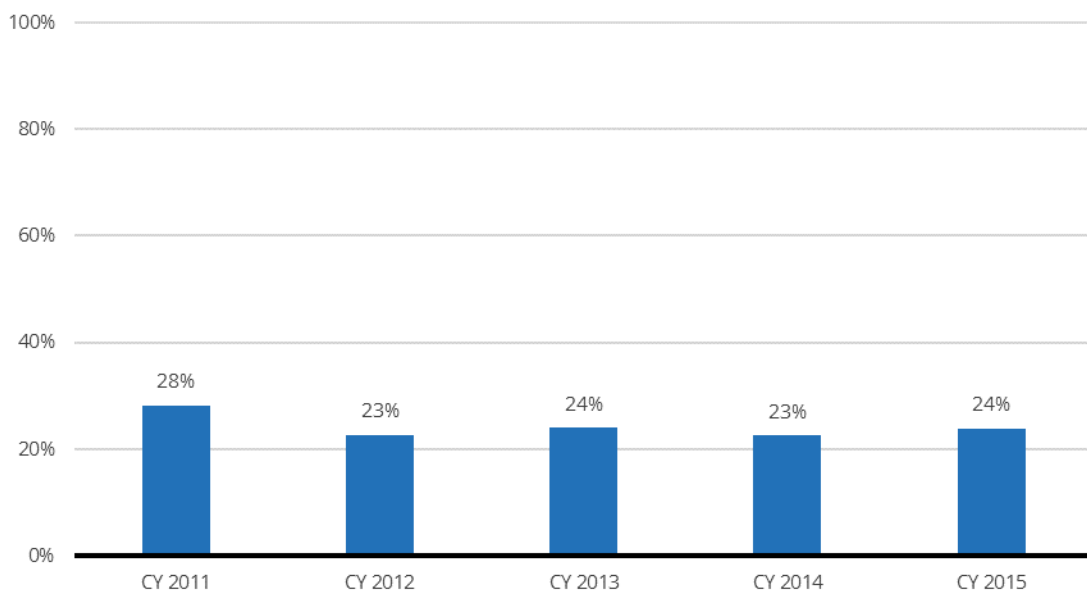
Obesity is linked to diabetes, which is high in the White Mountain Apache Tribe. Nearly one in five adults over the age of 20 (18.4%) seen at IHS between October 2013 and September 2015 had been diagnosed with Type II Diabetes. According to the 2016-2017 Head Start Community Assessment, obesity and diabetes prevention were the second- and third-most popular choices for health issues that should be prioritized (see Figure 43). Information about healthy eating and active living is provided in the region through local health fairs as well as workshops put on by Child Find and other tribal agencies.

Figure 44. Weight Status of Children (ages 2-4) in the White Mountain Apache WIC Program, 2015



Source: Inter-Tribal Council of Arizona (2016) [WIC Dataset]. Unpublished data.

Figure 45. Obesity Rates for Children (ages 2-4) in the White Mountain Apache WIC Program, 2012 to 2015



Source: Inter-Tribal Council of Arizona (2016) [WIC Dataset]. Unpublished data.



## FAMILY SUPPORT AND LITERACY



## Why Family Support and Literacy Matter

Parents, caregivers and families who provide positive and responsive relationships support optimal brain development during a child's first years<sup>153,154</sup> and promote better social, physical, academic and economic outcomes later in that child's life.<sup>155,156</sup> Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten and elementary school.<sup>157</sup> Literacy promotion is so central to a child's development that the American Academy of Pediatrics has identified it as a key issue in primary pediatric care, aiming to make parents more aware of their important role in literacy.<sup>158</sup> Reading aloud, singing songs, practicing nursery rhymes, and engaging in conversation primes children to reach their full potential. In 2014, First Thing First conducted the Parent and Caregiver survey, a face-to-face survey of parents and caregivers in tribal regions. This survey was based on a subset of items from the 2012 First Things First phone-based Family and Community Survey that inquired about a parent or caregiver's knowledge of children's early development and their involvement in a variety of behaviors known to contribute positively to healthy development. Data on the amount and quality of the interaction parents and caregivers typically have with their children can be useful to inform programs and policies to encourage positive engagement.

Not all children are able to begin their lives in the most positive, stable environments. Adverse Childhood Experiences (ACEs)<sup>xix</sup> have been linked to risky health behaviors (such as smoking, drug use and alcoholism), chronic health conditions (such as diabetes, depression, obesity), poorer life outcomes (such as lower educational achievement and increased lost work time), and early death.<sup>159</sup> Children in Arizona are more likely to have experienced two or more ACEs (31.1%) than children across the country (21.1%).<sup>160</sup>

Children subject to maltreatment and neglect often suffer physical, psychological and behavioral consequences, and in fact are much more likely to have interactions with the criminal justice system in later life.<sup>161</sup> Special federal guidelines are currently in place to regulate how Native children and their families interact with the state's child welfare system. In 1978, Congress passed the Indian Child Welfare Act (ICWA). ICWA established federal guidelines that are to be followed when an Indian child enters the welfare system in all state custody proceedings. Under ICWA, an Indian child's family and tribe are able and encouraged to be actively involved in the decision-making that takes place regarding the child, and may petition for tribal jurisdiction over the custody case. ICWA also mandates that states make every effort to preserve Indian family units by providing family services before an Indian child is removed from his or her family, and after an Indian child is removed through family reunification efforts.<sup>162</sup>

Behavioral health supports are often needed to address issues of domestic violence, maltreatment, abuse and neglect that children may face. Infant and toddler mental health is the young child's developing capacity to "experience, regulate and express emotions; form close interpersonal relationships; and explore the environment and learn."<sup>163</sup> When young children experience stress and trauma they have limited responses available to react to those experiences.

Children exposed to alcohol and drugs neonatally also face a number of challenges. Newborns exposed to alcohol or drugs in Arizona had higher incidences of low birthweight (23.2% compared to 7% for all births), higher incidences of respiratory symptoms, and higher incidences of feeding difficulties. The median total charges related to care were

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<sup>xix</sup> 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.

also double that of other hospital births.<sup>164</sup> Opiate use during pregnancy, both illegal and prescribed use, has been associated with neonatal abstinence syndrome (NAS), where infants born exposed to these substances exhibit withdrawal creating longer hospital stays, increased health care costs and increased complications for infants born with NAS.<sup>165</sup> Infants exposed to cannabis (marijuana) in utero often have a decrease in birth weight, and are more likely to be placed in neonatal intensive care, compared to infants whose mothers had not used the drug during pregnancy.<sup>166</sup> Research suggests that alcohol and drug exposure may be linked to behavioral issues and developmental delays as a child develops, creating a need for extra supports when a child enters school.<sup>167</sup>

Substance abuse treatment and supports for parents and families grappling with these issues can help to ameliorate these short and long-term impacts on young children.

## What the Data Tell Us

### Family Involvement

The 2014 First Things First Parent and Caregiver Survey collected data about parent and caregiver knowledge of children's early development and their involvement in a variety of behaviors known to contribute positively to healthy development, including two items about home literacy events. Eighteen percent of the respondents in the White Mountain Apache Tribe Region reported that someone in the home read to their child six or seven days in the week prior to the survey. More parents and caregivers (43%) reported that the child was not read to, or only once or twice during the week. In comparison, telling stories or singing songs was somewhat more frequent. In more than two-thirds of the homes (68%), children are hearing stories or songs three or more days per week (Figure 46). The average respondent reported reading stories 3.1 days per week, and singing songs or telling stories 3.7 days per week.

The 2014 First Things First Parent and Caregiver Survey also included an item aimed at eliciting information about parents' and caregivers' awareness of their influence on a child's brain development. More than half (52%) of the survey participants in the region recognized that they could influence brain development prenatally or right from birth. Still, a sizeable proportion (12%) responded that a parent's influence would not begin until after the infant was 7 months old (see Figure 47).

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

A need for parenting education came up in the 2016-2017 Head Start Community Assessment. When parents and caregivers were asked about the topics they felt were important as a parent, child behaviors, positive parenting skills, love and discipline, and strategies for behavior problems were most often named as important topics (see Figure 48).

A lack of parental engagement and involvement was named by key informants as one of the major challenges to supporting children in the region. Head Start provides monthly parent trainings, and Child Find provides regular workshops and training programs for parents. However, many key informants in the region noted that it is difficult to get parents to attend these programs, even with incentives and food provided. Part of the difficulty is again due to

the transportation challenge that many families face. Due to high rates of poverty and unemployment in the region, as well as the young age of many parents, families face significant challenges accessing resources and providing for their children. Service providers fear that due to lack of follow-up on appointments from parents, some children may not be receiving the care they need. Key informants saw parental involvement and investment in their children's education as a critical need in the region. Further examination of the barriers that make it difficult for parents to access services may shed some light on additional ways to support families in the region.

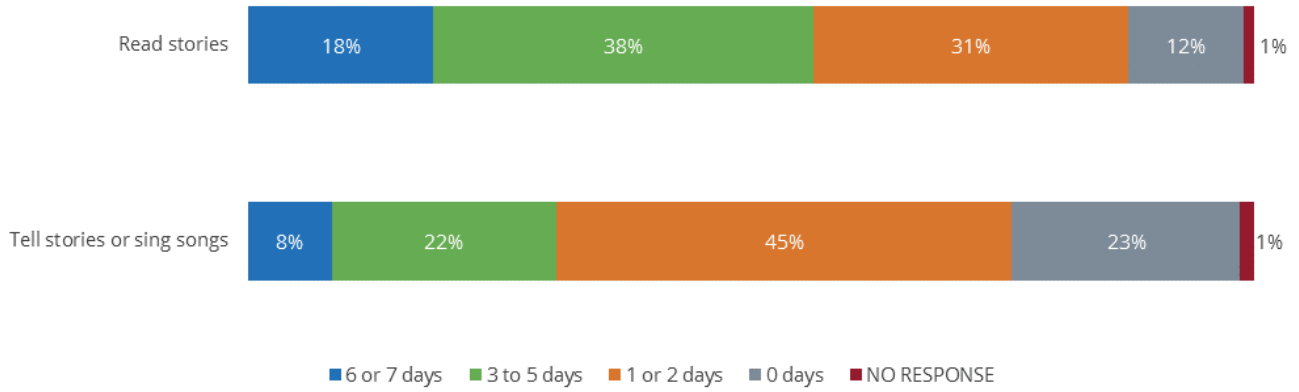
Key informants felt that there was a relatively high level of awareness of some of the more established services, such as WIC, SNAP, Child Find, and the special needs services provided through the school district. Several key informants noted that it was more difficult to raise awareness around new programs, such as the preschool classes that opened at Seven Mile Elementary. The Scout and the radio station were mentioned as main sources of information in the community, and so were seen as important tools for community service providers doing outreach about new programs and services as well as upcoming events. Community service providers were mentioned as another important source of information for families in the community—parents often hear about other services through their appointments at WIC or Child Find, or they find out about programs when they receive services at health fairs in the communities. Many service providers emphasized the importance of having a presence at health fairs or sending representative to WIC clinics to share information with parents. Given that many people have access to the internet through their mobile phones, some programs have plans to begin online outreach through Facebook. Additionally, the First Things First resource book was highlighted as a helpful tool for families in the region seeking information about programs, services, and resources in the community.

One challenge noted in the region was the lack of family awareness of the importance and impact of high quality early care programs. Key informants interviewed for this report mentioned that families often view early education programs in the region as "just daycare" or simply as a place for children to go, rather than an opportunity for enrichment and learning.

Another concern raised by key informants was that needs in more remote communities were not always being met. Most services are based out of Whiteriver, and although there are smaller satellite offices of many providers located in Cibecue, providers fear that sometimes communities outside Whiteriver are overlooked. The presence of the FACE program at John F. Kennedy Day School was highlighted as a particular asset for the Cedar Creek community, and the First Things First funding for Seven Mile Preschool helps to meet an acknowledged need for early education in and around the Seven Mile community.

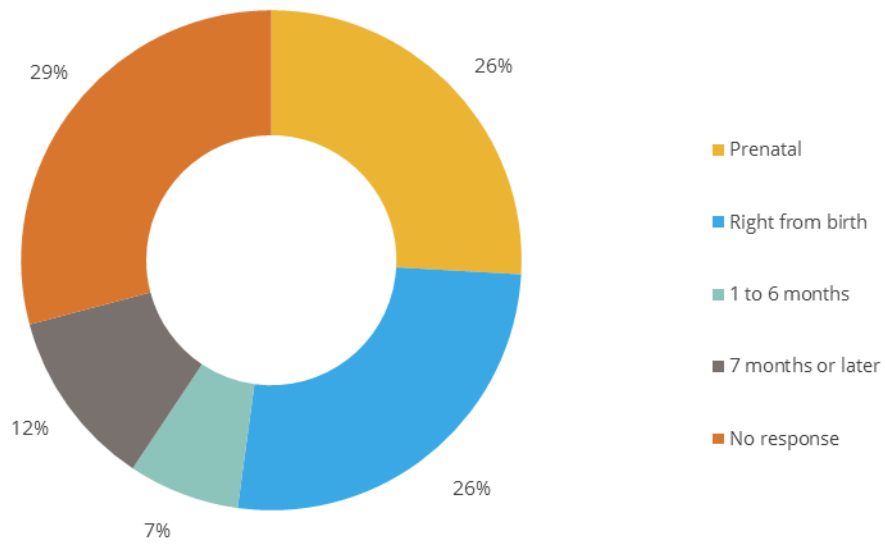
A major asset highlighted by key informants in the region was the trust built between the community and service providers. When parents trust that their children's needs will be met and that they will be well taken care of, they are more eager to engage in programs. Key informants highlighted high levels of trust and awareness around the services for children with special needs in the community and felt that parents knew they could get help for their children. Informants noted that parent frustration arose when children did not qualify for services. Again, there is a need for enrichment opportunities and support for children with special needs who do not meet eligibility criteria for current special needs services.

Figure 46. Responses to "During the past week, how many days did you or other family members read stories to your child?" and "During the past week, how many days did you or other family members tell stories or sing songs to your child?"



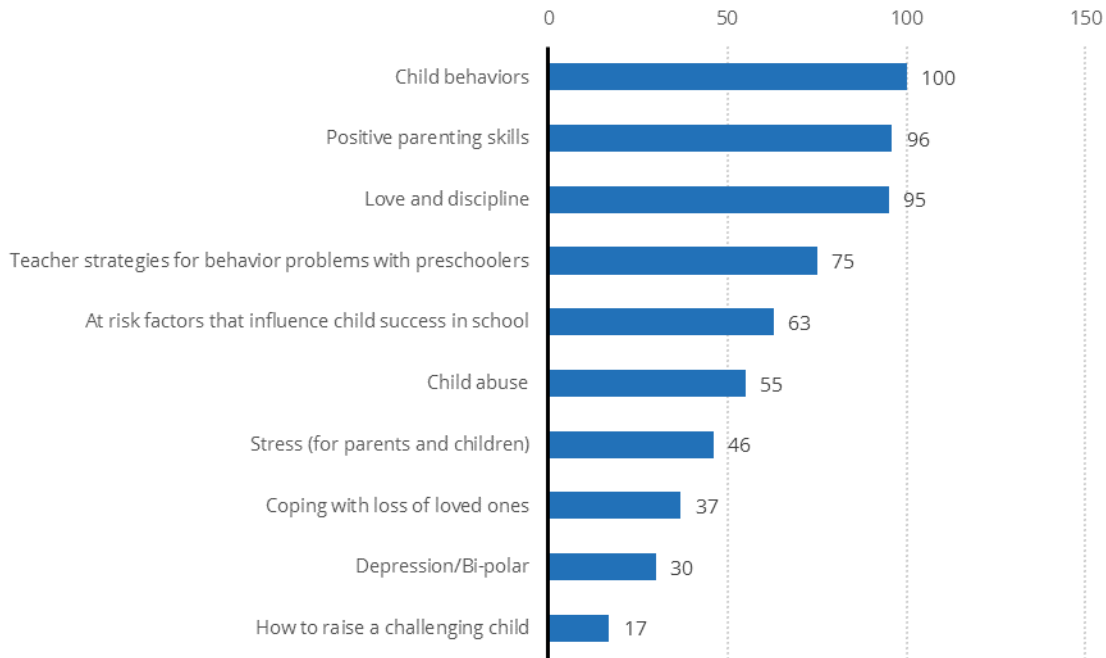
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

Figure 47. Responses to "When do you think a parent can begin to significantly impact a child's brain development?"



Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

Figure 48. Responses to “Choose 5 topics you feel are important as a parent.”



Source: White Mountain Apache Head Start (2016). 2016-2017 Head Start Community Assessment. Received by request.

## Child Welfare

Child welfare services in the White Mountain Apache Tribe Region are overseen by the White Mountain Apache Tribe Social Services Department. Services supporting children in the child welfare system are also available through the tribally-operated Our Children’s Shelter, a group home that can house up to 12 children aged birth through 18 years.

In calendar year 2015, there were 308 substantiated cases of child abuse and neglect that involved children birth to 17, an increase from 284 in 2014 (Table 54). In 2015, 137 children were removed by Tribal Child Protective Services (CPS), up from 107 in 2014. Over the course of 2014 and 2015, there were 872 children birth to 17 who were considered wards of the tribe. In 2015, about a third of these children were placed with their parents, a third with relatives, and the remainder in contracted foster care homes off-reservation or in the tribal group home (Figure 49). The number of foster homes available in the region increased in 2015. In mid-2014 there were no tribal foster care homes, but key informants indicated that there were eight foster homes licensed by the tribe’s Social Services Department in 2016.

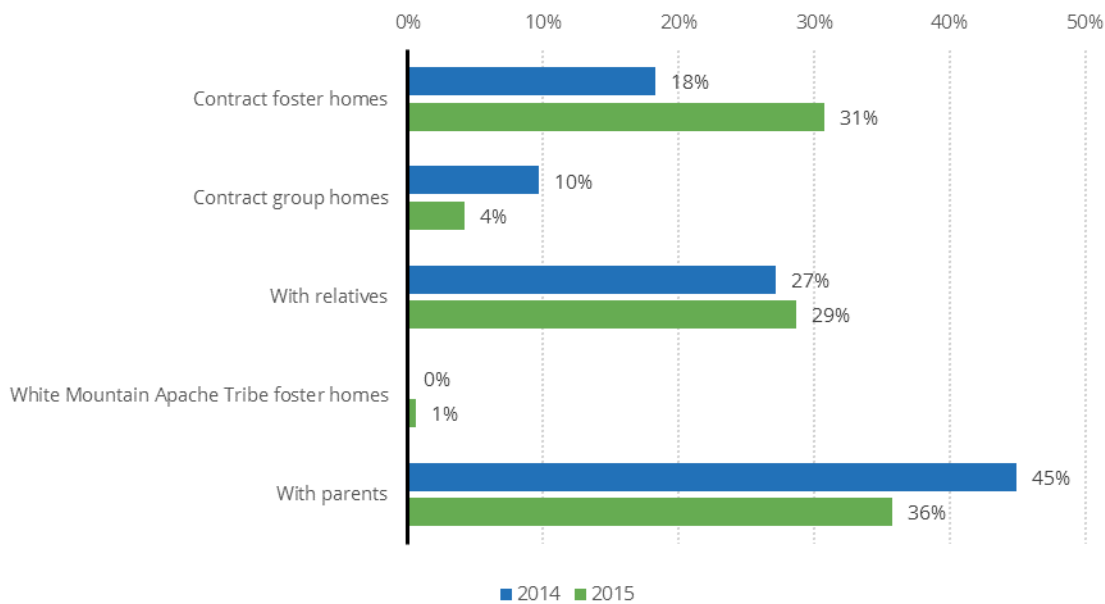
Key informants indicated that residents in the region are concerned about the capacity of Tribal CPS to respond to reports of child abuse or neglect, particularly in the more remote parts of the reservation. Service providers in the region indicated that Tribal CPS communicates well with other agencies, but there is a continued concern that the caseload may overwhelm the resource capacity of the child welfare system in the region.

Table 54. Children removed by Tribal CPS and Child Abuse Cases

	2014	2015
Children removed by Tribal CPS	107	137
Substantiated cases of child abuse/neglect	284	308

Source: White Mountain Apache Tribe Social Services (2016). [Child Welfare data]. Unpublished data.

Figure 49. Placement of Court Wards, 2014 and 2015



Source: White Mountain Apache Tribe Social Services (2016). [Child Welfare data]. Unpublished data.

### Justice System Involvement and Domestic Violence

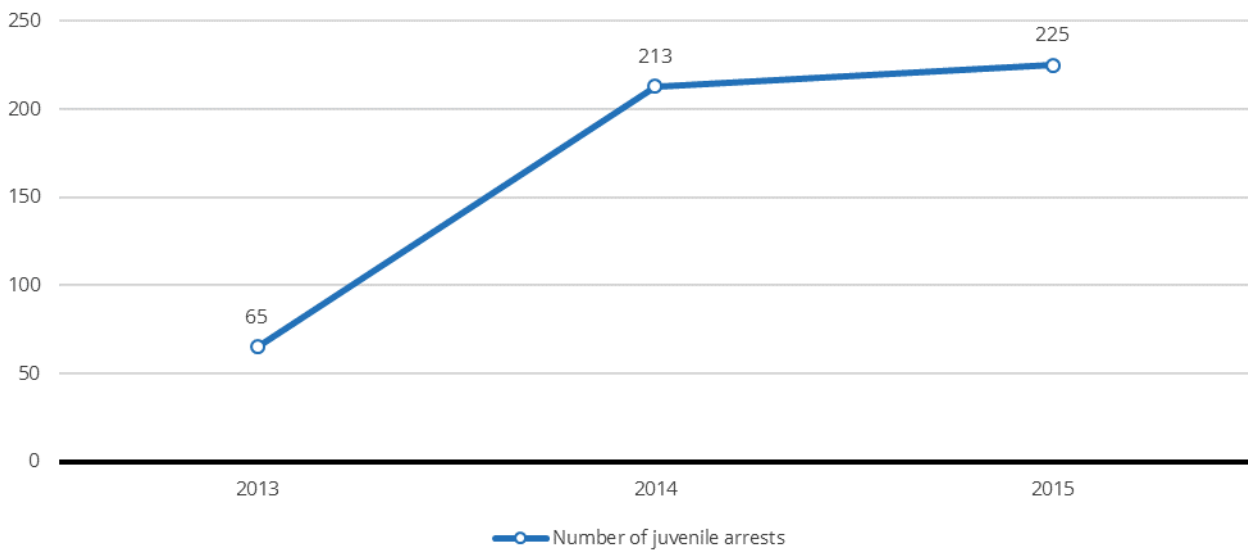
Data on the number of juvenile and domestic violence-related reports were available from the White Mountain Apache Tribe Police Department. Figure 51 shows that there was a substantial decrease in the number of domestic violence arrests from 2013 to 2015. Key informants suggested that this decrease may not be due to a decline in domestic violence-related incidents, but rather to over-stretched police resources. Key informants noted that a high call volume may result in police officers not being able to respond to all incident reports.

Services for victims of domestic violence in the community are available through Apache Behavioral Health Services. The White Mountain Safe House is a non-tribal agency located in Pinetop, which provides referrals, support services

and housing those affected by domestic violence. Table 55 shows that 235 individuals received services from White Mountain Safe House in 2015, 109 of which were minors.

Data on juvenile arrest were also available from the White Mountain Apache Tribe Police Department (Figure 50). Counter to the decrease in domestic violence reports, the number of juvenile arrests increased dramatically from 2013 to 2015.

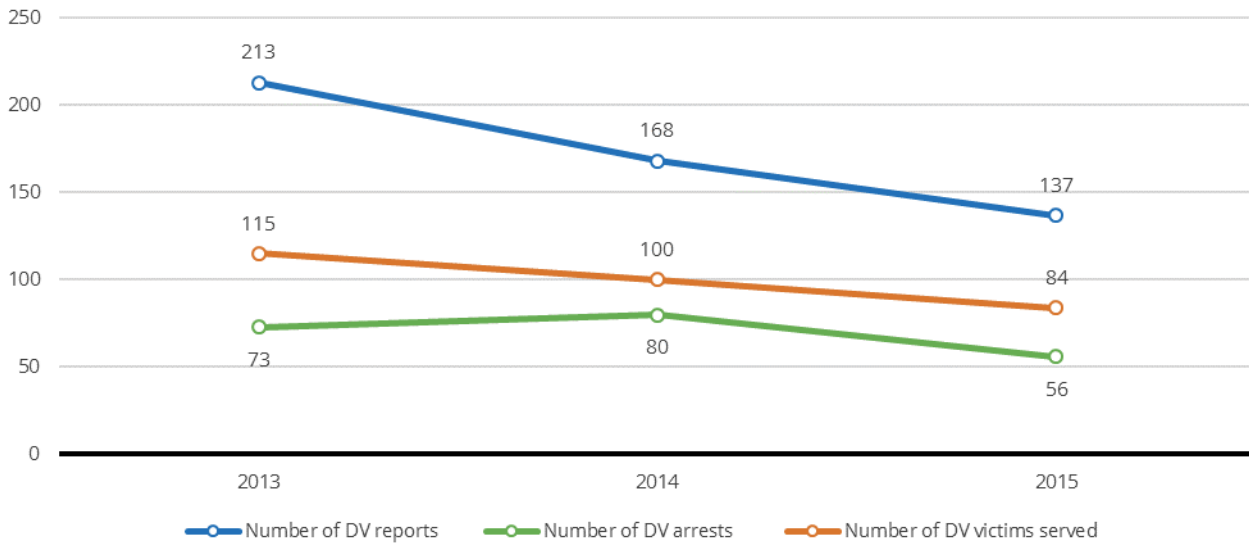
Figure 50. Juvenile Arrests, 2013 to 2015



Source: White Mountain Apache Tribe Police Department (2016). [Arrest data]. Unpublished data.



Figure 51. Domestic Violence Offenses and Arrests, 2013-2015



Source: White Mountain Apache Tribe Police Department (2016). [Arrest data]. Unpublished data.

Table 55. Domestic Violence Shelters

	Total served	Adults served	Children served	Bed nights	Average length of stay	Hours of support services	Hotline and I&R Calls
White Mountain Safe House	235	126	109	7,145	30 days	4,116	312
ARIZONA	7,567	3,862	3,705	293,970	39 days	144,025	25,185

Source: Arizona Department of Economic Security (2016). Domestic Violence Shelter Fund Report

### Behavioral Health

In Arizona, the Arizona Health Care Cost Containment System (Arizona’s Medicaid program) contracts with community-based organizations, known as Regional Behavioral Health Authorities (RBHAs) and Tribal Regional Behavioral Health Authorities (TRBHAs), to administer publically-funded behavioral health services. Arizona is divided into separate geographical service areas (GSAs) served by various RBHAs.<sup>xx</sup> Apache Behavioral Health Services (ABHS) serves as the TRBHA for the White Mountain Apache Tribe. ABHS provide individual and group counseling services to residents of the White Mountain Apache community, as well as White Mountain Apache Tribe members and their families that live outside the reservation. ABHS provides services through three community

<sup>xx</sup> Arizona Regional Behavioral Health Areas. See <https://www.azahcccs.gov/img/BehavioralHealth/ARBHAMap.jpg>

locations: the Cibecue Behavioral Health Center, the McNary Wellness Center, and the main Apache Behavioral Health Services Center in Whiteriver. ABHS provides behavioral health services such as case management, evaluation and diagnosis, residential treatment, group home treatment, 24-hour crisis management, and traditional healing. The ABHS Child Adolescent and Family Services (CAFS) team specializes in working with children who are at risk for out-of-home placements with the goal of maintaining family stability and reducing out-of-home-placements. The team provides evaluations, individual, family, and group therapy, and case management.<sup>168</sup>

No data on the services provided by the ABHS were available to be included in this report. Table 56, however, shows that each year from 2012 to 2015, fewer than 25 pregnant or parenting women in the White Mountain Apache Tribe Region received publically-funded behavioral health services through the non-tribal RBHA servicing the region.<sup>xxi</sup> Fewer than 25 children ages 0 to 5 in the region received behavioral health services by the non-tribal RBHA in that same period (Table 57).

Key informants in the region note that while Apache Behavioral Health Services (ABHS) does not have any therapists specializing in providing care for young children birth to 5. However, there are plans to start a support group for families of young children. ABHS is currently seeking to hire a Birth to 5 Child and Family Team Therapist and Team Facilitator to provide assessment, counseling, and clinical support for children birth to 5, as well as to assist with referrals to other entities.<sup>169</sup>

Parents and caregivers surveyed in the 2016-2017 Head Start Community Assessment identified alcohol and substance abuse, suicide, and depression as the most damaging to mental health in their community (Figure 52). Alcohol and substance abuse were also identified as the social problem that should be given top priority for improvement (Figure 53). Alcohol and substance abuse were named by key informants as one of the greatest challenges for families in the region. Children exposed to alcohol or other substances in utero or children growing up in homes with substance abuse often have significant social, emotional and behavioral health issues that require extra support, and some fear that there are not sufficient resources to currently support these children.

The Celebrating Life surveillance system also tracks binge substance and alcohol abuse. Several studies conducted through the John Hopkins University Center for American Indian Health found that young people attending school, with close family relationships, traditional American Indian values, and strong cultural identity were at less risk of binge drinking.<sup>170,171</sup> A past partnership between the Colorado School of Public Health's Centers for American Indian and Alaska Native Health and the White Mountain Apache Tribe through the Healthy Nationals Initiative, funded by The Robert Wood Johnson Foundation, is supported a four phase strategy to reduce alcohol and substance abuse in the region. The strategy included the following approaches: a mass media campaign called "N'dee Beinadesh: The People's Vision," which aims to raise awareness around substance abuse, support Apache identity, and publicize programs and resources available; a school-based prevention program with student peer counseling training and community recreation opportunities for young people; a data system to strengthen referrals between agencies around substance-abuse related issues; and finally opening of the Rainbow Treatment Center.<sup>172</sup> Key informants in the region named the tribally-operated Rainbow Treatment Center as an ongoing asset in the community, as it provides training, job placement, family outings, conferences, and more as well as treatment for their clients. However, they also noted the people have to be willing to seek help and want to change in order for such programs to be effective.

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<sup>xxi</sup>As of October 1, 2015, Navajo and Apache Counties -where the White Mountain Apache Tribe is located- are served by the North GSA, which is serviced by Health Choice Integrated Care. Prior to this date, the RBHA servicing the region was the Northern Arizona Behavioral Health Authority

Table 56. Number of Pregnant or Parenting Women Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014	2015	Change from 2012 to 2015
White Mountain Apache Tribe	<25	<25	<25	<25	DS
All Arizona Reservations	N/A	N/A	N/A	N/A	N/A
ARIZONA	19,134	17,731	13,657	14,546	-24%

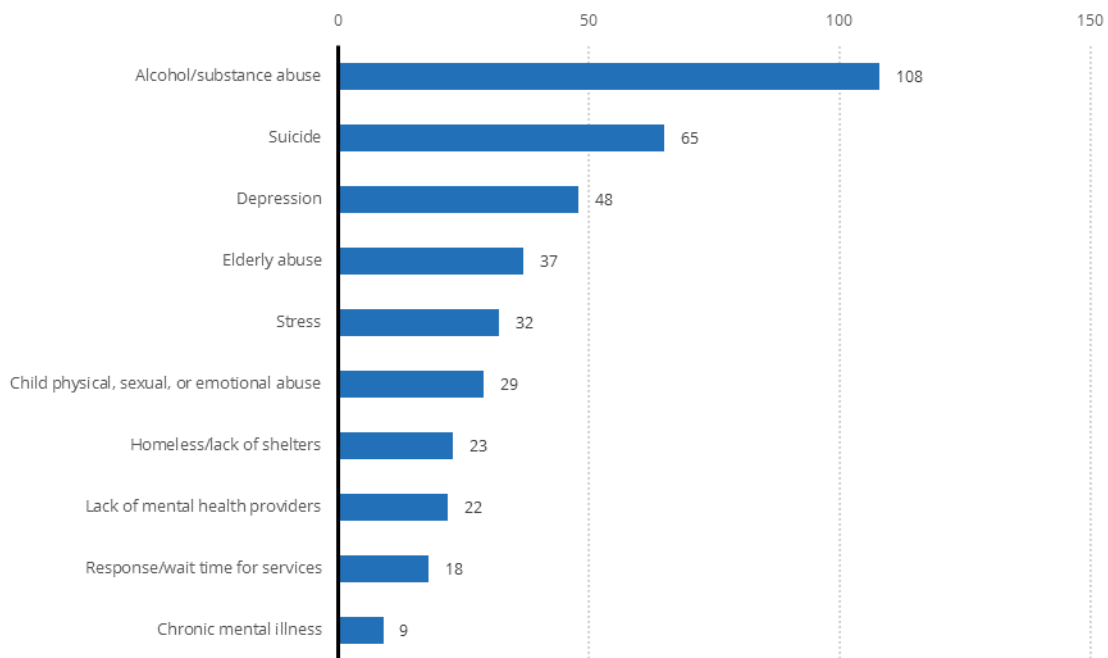
Source: Arizona Department of Health Services (2016). [Behavioral Health dataset]. Unpublished data.

Table 57. Number of Children (Ages 0 to 5) Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014	2015
White Mountain Apache Tribe	<25	<25	<25	<25
All Arizona Reservations	N/A	N/A	N/A	N/A
ARIZONA	13,110	14,396	12,396	14,374

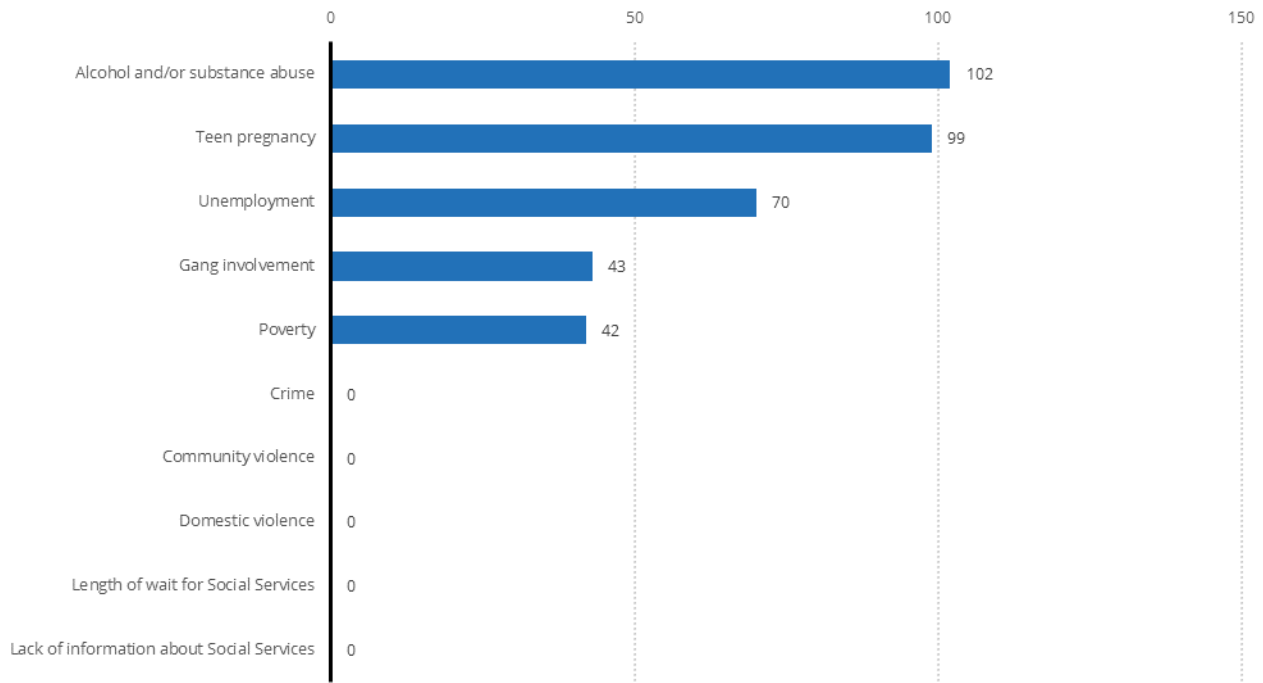
Source: Arizona Department of Health Services (2016). [Behavioral Health dataset]. Unpublished data.

Figure 52. Responses to “Choose the 3 that you feel are the most damaging to mental health in our community.”



Source: White Mountain Apache Head Start (2016). 2016-2017 Head Start Community Assessment. Received by request.

Figure 53. Responses to “From the following list of 10 social problems choose 4 that you feel are should be given top priority for improvement.”



Source: White Mountain Apache Head Start (2016). 2016-2017 Head Start Community Assessment. Received by request.



## COMMUNICATION, PUBLIC INFORMATION, AND AWARENESS<sup>xxii</sup>

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<sup>xxii</sup> This section of the report was prepared by the First Things First Communications Division.

## Why Communication, Public Information, and Awareness Matter

Public awareness of the importance of early childhood development and health is a crucial component of efforts to build a comprehensive, effective early childhood system in Arizona. Building public awareness and support for early childhood is a foundational step that can impact individual behavior 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, whether that is influencing others by sharing the information they have learned within their networks or taking some higher-level action such as elevating the public discourse on early childhood by encouraging increased support for programs and services that impact young children. For parents and other caregivers, awareness is the first step toward engaging in programs or behaviors that will better support their child's health and development.

Unlike marketing or advocacy campaigns which focus on getting a narrowly-defined audience to take short-term action, communications efforts to raise awareness of the importance of early childhood development and health focus on changing what *diverse* people across Arizona *value* and providing them multiple opportunities over an extended time to act on that commitment.

There is no one 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 earned media to grassroots, community-based tactics such as community outreach – ensures that diverse audiences are reached more effectively wherever they are at across multiple mediums. Other communications strategies include: strategic consistent messaging, brand awareness, community awareness tactics such as distribution of collateral and sponsorship of community events, social media, and paid media which includes both traditional and digital advertising. Each of these alone cannot achieve the desired outcome of a more informed community, so a thoughtful and disciplined combination of all of these multiple information delivery vehicles is required. The depth and breadth of all elements are designed to ensure multiple touch-points and message saturation for diverse audiences that include families, civic organizations, faith communities, businesses, policymakers and more.

## What the Data Tell Us

Since state fiscal year 2011, First Things First has led a collaborative, concerted effort to build public awareness and support across Arizona employing the integrated communications strategies listed above.

Results of these statewide efforts from SFY2011 through SFY2016 include:

- More than 2,000 formal presentations to community groups which shared information about the importance of early childhood;
- Nearly 230 tours of early childhood programs to show community members and community leaders in-person how these programs impact young children and their families;
- Training of almost 8,700 individuals in using tested, impactful early childhood messaging and how to best share that message with others;
- The placement of more than 2,400 stories about early childhood in media outlets statewide;

- Increased digital engagement through online platforms for early childhood information, with particular success in the growth of First Things First Facebook Page Likes, which grew from just 3,000 in 2012 to 124,000 in 2016.
- Statewide paid media campaigns about the importance of early childhood from FY10 through FY15 included traditional advertising such as television, radio and billboards as well as digital marketing. These broad-based campaigns generated millions of media impressions over that time frame; for example in FY15 alone, the media campaign yielded over 40 million media impressions.

In addition, First Things First began a community engagement effort in SFY2014 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 First Things First Community Outreach strategy. This effort focuses on engaging individuals across sectors – including business, faith, K-12 educators, and early childhood providers – in the work of spreading the word about the importance of early childhood since they are trusted, credible messengers in their communities. FTF characterizes these individuals, depending on their level of involvement, as Friends, Supporters, and Champions. Friends are stakeholders who have a general awareness of early childhood development and health and agree to receive more information and stay connected through regular email newsletters. Supporters have been trained in early childhood messaging and are willing to share that information with their personal and professional networks. Champions are those who have been trained and are taking the most active role in spreading the word about early childhood.

Supporters and Champions in the engagement program reported a total of 1,088 positive actions taken on behalf of young children throughout Arizona as of the end SFY16. These actions range from sharing early childhood information at community events, writing letters to the editor to connecting parents to early childhood resources and more. The table below shows total recruitment of individuals in the tiered engagement program through SFY2016.

Table 58. First Things First Engagement of Early Childhood supporters, SFY2014 through SFY2016

	Friends	Supporters	Champions
ARIZONA	21,369	3,102	908

In addition to these strategic communications efforts, First Things First has also led a concerted effort of policymaker awareness-building throughout the state. This includes meetings with all members of the legislature to build their awareness of the importance of early childhood. FTF sends emails to all policymakers providing information on the impact of early childhood investments (such as the FTF annual report) and also has instituted a quarterly email newsletter for policymakers and their staff with the latest news regarding early childhood.

Furthermore, the Arizona Early Childhood Alliance – comprised of early childhood system leaders like FTF, the United Ways, Southwest Human Development, Children’s Action Alliance, Read On Arizona, Stand for Children, Expect More Arizona and the Helios Foundation – represent the united voice of the early childhood community in advocating for early childhood programs and services.



Finally, FTF recently launched enhanced online information for parents of young children, including the more intentional and strategic placement of early childhood content and resources in the digital platforms that today's parents frequent. Future plans for this parenting site include a searchable database of early childhood programs funded in all the regions, as well as continuously growing the amount of high-quality parenting content available on the site and being "pushed out" through digital sources.



# SYSTEM COORDINATION AMONG EARLY CHILDHOOD PROGRAMS AND SERVICES

## Why System Coordination Matters

The partners in Arizona’s early childhood system encompass a diverse array of public and private entities dedicated to improving overall well-being and school readiness for children birth to 5 statewide. Together they strive to develop a seamless, coordinated, and comprehensive array of services that can meet the multiple and changing needs of young children and their families.

In January 2010, First Things First (FTF) convened the first Arizona Early Childhood Task Force, comprised of a diverse group of leaders from across Arizona. The goal of this inaugural Task Force was to establish a common vision for young children in Arizona and to identify priorities and roles to build an early childhood system that would enable this vision to be realized. The Task Force identified six outcomes to work towards, including that the “early childhood system is coordinated, integrated and comprehensive.” First Things First’s role in building this system is to foster cross-system collaboration among and between local, state, federal, and tribal organizations to improve the coordination and integration of Arizona programs, services, and resources for young children and their families.

Through strategic planning and system-building efforts that are funded through both FTF and other mechanisms, FTF is focused on developing approaches to connect various areas of the early childhood system. When the system operates holistically, families should experience a seamless system of coordinated services that they can more easily access and navigate in order to meet their needs. Agencies that work together and achieve a high level of coordination and collaboration help to establish and support a coordinated, integrated, and comprehensive system. At the same time, agencies also increase their own capacity to deliver services as they work collectively to identify and address gaps in the service delivery continuum.

Service coordination and collaboration approaches work to advance the early childhood system in the following ways:

- Build stronger collaborative relationships among providers
- Increase availability and access of services for families and children
- Reduce duplication
- Maximize resources
- Assure long term sustainability
- Leverage existing assets
- Improve communication
- Reduce fragmentation
- Foster leadership capacity among providers
- Improve quality
- Share expertise and training resources
- Influence policy and program changes

## What the Data Tell Us

Overall, key informants in the region felt that efforts were being made toward coordination and collaboration between early childhood education programs and services but that there was room for improvement. The strongest coordination was seen between providers of services for children with special developmental and health care needs. There is a robust system of referrals between health care providers at IHS, service providers at Whiteriver Unified School District, the WMAT Child Find Program, and early care and education providers in the region. The relationship

between Whiteriver School District and AzEIP and Child Find and AzEIP were described as professional, but key informants indicated that the communication with the AzEIP provider could be improved. Whiteriver Unified School District's Special Needs program was identified as providing much of the backbone support for coordination between special needs service providers. The school district was seen as the communication hub between IHS, Child Find, and other early education providers. Key informants expressed a need for more data sharing to allow better tracking of students across service providers in order to provide more effective care and support.

Key informants also pointed out that increased collaboration between Apache Behavioral Health Services and early care and education providers would benefit children with special needs in the region. Specifically, trainings for staff in how to work with children with special behavioral, emotional, and social needs would be particularly helpful. One of the current barriers to such collaboration has been the lack of an early childhood specialist at Apache Behavioral Health Services. The potential new position in the agency that would specialize on this age group may help expand the coordination and collaboration among these different programs.

One challenge mentioned by many key informants was a lack of time for additional meetings and a sense of 'meeting fatigue,' particularly among early childhood education providers. Nearly all of the early care and education providers in the region provide in-house trainings and in-services for their staff, and there are many conferences and workshops open to all providers in the region. Many key informants felt that with all of the requirements placed on staff by their own agencies, there is not much time left for inter-agency coordination or collaboration efforts. One suggestion was to have a person in the region whose job would be to facilitate coordination and collaboration and to serve as the point person for inter-agency efforts. The availability of such a facilitator would help take some of the burden from service providers. Another strategy mentioned in the region was calendar coordination to try to avoid scheduling conferences or inter-agency meetings during providers' in-services or events.

Overall, key informants indicated that service providers in the region have a good awareness of each other's programs and services and that there is a regular practice of referring families within the region. Further work is needed in facilitating inter-agency meetings in a way that does not burden staff who already have extensive time commitment.

# SUMMARY AND CONCLUSIONS

This Needs and Assets Report is the sixth biennial assessment of the challenges and opportunities facing children birth to age 5 and their families in the First Things First White Mountain Apache Tribe Region.

The data presented in this report, both quantitative and qualitative, show that the region has substantial strengths. There are a number of high quality early care and education providers in the region. Child care professionals in the early learning programs in the community have high education attainment and a number of opportunities to pursue continuing education. A wide range of services are available to support children with special developmental and health care needs. A strong system of referrals between providers ensures that children are able to access the help they may need.

A summary of identified regional assets has been included below.

## *Population Characteristics*

- More young children live in a grandparent's household in the region than in all Arizona reservations combine. Multigenerational families may help support young parents and pass on cultural values.
- There are multiple programs for language preservation and revitalization in the region and plans to expand the current programs in the Whiteriver Unified School District.

## *Economic Circumstances*

- The number of meals provided through the Summer Food Service Program increased in 2015, and many early education providers in the region are participating in the Child and Adult Care Food Program.

## *Educational Indicators*

- Four-year high school graduation rates increased between 2011 and 2014.

## *Early Learning*

- There are a wide range of early education providers in the region, and between all of them there is capacity for all four-year-olds to be enrolled in early education programs. Many of these providers are Quality First programs.
- Educational attainment of teachers and staff providing early care and education is a considerable asset in the region. At most child care providers in the region, nearly all staff have at least a Child Development Associate's (CDA) credential, and many teachers and directors have Bachelor's or advanced degrees in early childhood education or are working toward these degrees.
- The early childhood program at Alchesay High School and Alchesay Beginnings Child Development Center is allowing high school students to graduate with a CDA credential and be hired right out of high school, contributing to the high education attainment of early childhood teachers in the region.
- There is a wide continuum of services available to serve children with special developmental and health care needs in the region.

## *Child Health*

- Breastfeeding rates in the region for infants enrolled in WIC have increased steadily between 2011 and 2015. About 1 in 4 infants were breastfed for 6 months in 2015. Key informants indicate that there is strong

support for breastfeeding in the community. Whiteriver Indian Hospital is a Baby-Friendly hospital, and Alchesay Beginnings Child Development Center and Chaghache Day Care can store breastmilk and allow moms to come in to breastfeed their infants.

- Health fairs, WMAT Child Find screening events, and Head Start screening events remain important sources of health services and information for young children and their families.
- A high percentage of children in the region received topical fluoride applications, and key informants in the region indicate that the First Things First Oral Health strategy in the region has broad community buy-in. Still, many parents rank dental decay and oral health among their top health concerns.

#### *Communication, Public Information, and Awareness*

- Service providers in the region feel that there is good public awareness around many of the services available in the region, particularly those for children with special health care needs.
- There is a high level of trust between the community and service providers in the region.

#### *System Coordination Among Early Childhood Programs and Services*

- Key informants indicated that communication and collaboration between early childhood care and education providers is strong and that the referral process works well for serving children with special needs.

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

- **A lack of affordable, high quality and accessible child care, in particular for children birth to 2** –Quality First provides supports so that participating centers in the region can continue to improve the quality of the care they provide. To address the burden of child care cost as a high proportion of the family’s income, child care scholarships allow parents to afford the services of a licensed, quality early child care and education center. The 42 scholarships funded in fiscal year 2017 have the potential to support enrollment of children in the Quality First child care and education partner in the region that can care for infants and toddlers.
- **Continued support for professional development opportunities** – The White Mountain Apache Tribe Regional Partnership Council is currently funding strategies to promote the availability of a skilled early childhood workforce through scholarships for higher education and credentialing for early care and education teachers. Although many early care and education professionals do utilize professional development and credentialing resources, key informants reported that it can be difficult for some to access some of these opportunities because of the complexity of the application process. Additional assistance with and support for teachers interested in enrolling in the Early Workforce Registry and applying for college scholarships may help increase uptake of these programs.
- **High need for services for children’s special developmental and health care needs** – Providers in the region indicate that there is a high need for special needs services in the region, with particularly high need for hearing and speech and language services. The White Mountain Apache Tribe Regional Partnership Council has recognized this and is allocating funding to several strategies that meet these needs. The Family Support for Children with Special Needs strategy promotes physical, social, and emotional development support for young children and their families to improve families’ knowledge about developmental concerns and connect families to services. The Care Coordination and Medical Home Strategy helps families of young

children navigate the health care system to ensure that children receive the services they need. This strategy can help encourage parent follow-up on referrals and ensure that children do not fall through the cracks.

- **Improving oral health in young children** – Parents and caregivers of young children in the region named dental decay and oral health as one of their top health concerns. In the White Mountain Apache Tribe Head Start, there were high rates of children of children needing dental care. The Oral Health Strategy funded by the White Mountain Apache Tribe Regional Partnership Council provides funding for oral health screenings, referrals, fluoride varnishes, oral health education, Teledentistry and outreach.
- **Supporting parent involvement and education** – Key informants pointed out that parents and caregivers in the region can benefit from increased awareness of the importance of engagement in their children’s education. The Parenting Outreach and Awareness strategy promotes parent awareness of positive parenting and child development as well as services and supports available in the community.

This report also highlighted some additional areas that could be considered as targets by stakeholders in the region. A full list of regional challenges is provided below:

#### *Population Characteristics*

- Most families in the region do not primarily speak Apache at home, which makes language revitalization among the younger generation more difficult.
- A shortage of housing in the region may be leading to more families living together instead of renting or owning their own homes. Housing improvement was the number one social service priority indicated by the majority of respondents to the Head Start Community Assessment survey.
- Key informants emphasized transportation as an ongoing challenge for families with young children in the region. Lack of transportation was cited as reason for poor attendance of community events and parenting education events. Exploring ways to provide additional transportation opportunities would benefit families in the region who struggle to keep appointments, participate in community events and take advantage of the services available to them due to lack of transportation.

#### *Economic Circumstances*

- The number of children receiving Tribal TANF in the region decreased between 2014 and 2015 despite rates of poverty and unemployment in the region remaining high.

#### *Educational Indicators*

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

#### *Early Learning*

- There are a very limited number of child care slots for infants and children younger than three in the region.
- There is a lack of ongoing support for home-based child care providers. In the past, the First Things First Regional Partnership Council has funded strategies to support home providers. A high percentage of parents and caregivers surveyed in Head Start Community Assessments indicated that they rely on informal care arrangements for additional child care support. Providing additional training and support for home care providers could improve access to quality care for young children in the region.

- There is a much higher number of children with hearing impairments and speech and language impairments in the region than elsewhere in Arizona. The Whiteriver School District has specialized providers to serve these children, but key informants in the region expressed concern for children who have impairments but not to the extent that they meet eligibility requirements for special needs services.
- There is a need for social, emotional, and behavioral health services for young children. Currently there are no therapists at Apache Behavioral Health Services who specialize in working with young children. However, Apache Behavioral Health Services is starting a therapeutic group for parents and children ages 0 to 5.

#### *Child Health*

- Rates of mothers accessing prenatal care in the first trimester of pregnancy were low, and a high percentage of women had less than five prenatal care visits, suggesting that many women in the region are not getting sufficient prenatal care.
- Apache children are at a higher risk than other children for recurring ear infections, and with high rates of hearing and speech and language impairments in the region, there is a particular need for continued services and outreach around hearing services and ear infection management.
- One in four young children in the region is obese, and nearly 20 percent of the adults seen at IHS have been diagnosed with Type II Diabetes. Diabetes and obesity prevention remain a continued need in the community.

#### *Family Support and Literacy*

- There is a need for more community events for young children and their families, particularly in the summer.
- A lack of parental involvement was named as a major challenge for service providers in the region by many key informants. One of the reasons for this may be the difficulties of accessing transportation.
- Key informants in the region were concerned that child welfare and police resources may not be sufficient to meet the demand for their intervention in the region.
- High rates of alcohol and substance abuse remain a serious challenge in the region. There are community efforts to reduce substance abuse through partnerships and services in the region.

#### *System Coordination Among Early Childhood Programs and Services*

- Although most of the programs that target young children in the region have good working relationship with one another, key informants suggested that the level of collaboration among these providers could be improved. Service providers in the region reported feeling over-burdened by the number of meetings and trainings they attend. More coordination of calendars is needed to facilitate inter-agency meetings, and key informants indicated that it would be helpful to have a person whose job it was to facilitate coordination and collaboration efforts. Exploring a strategy to streamline the meetings and trainings in the region and support inter-agency collaboration in the region could help ease the burden on service providers and spur further coordination and collaboration.

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



# APPENDICES

## Table of Regional Strategies

### White Mountain Apache Tribe Regional Partnership Council Planned Strategies for Fiscal Year 2017

Strategy	Strategy description
Parenting Outreach and Awareness	The intent of this promising practice strategy is to increase families' awareness of positive parenting; child development including health, nutrition, early learning and language acquisition; and, knowledge of available services and supports to support their child's overall development. The expected result is an increase in knowledge and a change in specific behaviors addressed through the information and activities provided.
Family Support for Children with Special Needs	The intent of this evidence informed strategy is to promote healthy physical, social and emotional developmental support to children and their families. The expected result is that families will gain knowledge about developmental concerns they may have and the child's development will progress as a result of the supportive interactions. The target population for this strategy is children with mild to moderate developmental concerns, and their families, who do not qualify for services through the Arizona Early Intervention Program (AzEIP) for birth to age 3, or preschool special education services for ages 3 to 5 provided through public school districts. These programs are also known as Individuals with Disabilities Education Act (IDEA) Part C and Part B programs respectively.
Quality First	Quality First – a signature program of First Things First – partners with regulated early childhood providers to make quality improvements that research proves help children birth to 5 thrive, such as education for teachers to expand their expertise in working with young children. It also supports parents with information about what to look for in quality early childhood programs that goes beyond health and safety to include a nurturing environment that supports their child's learning. Quality First includes multiple components to support early care and education program quality improvement, including: valid and reliable program assessment, on-site technical assistance, and financial incentives. The Quality First Academy is included to support the assessors and technical assistance providers in their work with program staff.
Quality First Scholarships	The intent of this promising practice strategy is to provide financial support through scholarships for children to attend quality early care and education programs in order to assist low income families (200% of Federal Poverty Level and below) to afford a quality early care and education setting. The expected result is that more children will receive quality early childhood programs and services that will impact their learning and development and promote readiness for kindergarten.
Child Care Health Consultation	The intent of this evidence based strategy is to provide statewide health and safety consultation specific to early care and education settings for children birth to age 5. The expected results are improved overall quality of care, reduced illness, and increased school readiness by supporting best practices that increase provider knowledge and promote behavior change, policy development and improvements in program environments
Registry and College Scholarships	The intent of this evidence informed Professional Development strategy is to provide access to higher education for the early childhood workforce working directly with or on behalf of young children birth to age five. The expected results of supporting continuing education and degree completion is elevating and professionalizing the field, recruiting and retaining a quality early childhood workforce and supporting and increasing the quality of services provided to young children.
FTF Professional REWARD\$	The intent of this promising practice strategy is to provide financial incentives to early care and education teachers for children birth to age 5, and is dependent on the teacher's educational attainment, continued educational progress and commitment to continuous employment. The expected result is improved retention rates of highly qualified teachers, an improvement in the educational level of the professional workforce and continuity of care for young children enrolled in early care and education programs.

## White Mountain Apache Tribe Regional Partnership Council Planned Strategies for Fiscal Year 2017

Strategy	Strategy description
Oral Health	The intent of this evidence-based strategy is to provide best practice approaches that enhance the oral health status of children birth through age 5. The expected results are prevention of tooth decay and reduction in the prevalence of early childhood tooth decay and the associated risks for pain and infections that can lead to lifelong complications to health and wellbeing. The approaches for this strategy include: oral health screening for children and expectant mothers with referrals to oral health providers for follow up care as needed; fluoride varnishes for children; oral health education for families and other caregivers; and, outreach to families, other caregivers including early learning and care providers, and oral health and medical professionals.
Care Coordination/Medical Home	The intent of the evidence-based Care Coordination/Medical Home strategy is to embed a care coordinator into a clinical practice to assist at-risk families with young children to navigate the complex health care and social service systems. The expected result of effective care coordination is that children receive well child visits, the services that they need, and that they use services efficiently to avoid duplication and unnecessary stress on their families. An important component of care coordination is its association with a medical clinic that is designated as a "medical home" for the child and their family.

## Methods and 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 publically available sources, including the 2010 U.S. Census, the American Community Survey (ACS), the Arizona Department of Administration (ADOA), and the Arizona Health Care Cost Containment System (AHCCCS). Data were also provided to First Things First by the Indian Health Service. Tribal data were obtained from various departments at the White Mountain Apache Tribe. Qualitative data were also gathered through key informant interviews with services providers in the region and through group discussions with community stakeholders in the early childhood system. In addition, regional data from the 2014 First Things First Parent and Caregiver Survey are included. Methodology for this survey is included below.

### **U.S. Census and American Community Survey Data.**

The U.S. Census<sup>173</sup> is an enumeration of the population of the United States. It is conducted every ten years, and includes information about housing, race, and ethnicity. Census data presented in the report is drawn from the Census Geography for the Fort Apache Reservation.

The American Community Survey<sup>174</sup> is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-to-face interviews. It covers many different topics, including income, language, education, employment, and housing. The ACS data are available by census tract. 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 2010 to 2014. In general, the reliability of ACS estimates is greater for more populated areas. Statewide estimates, for example, are more reliable than county-level or estimates or estimates for small tribal communities.

These data sources are important for the unique information they are able to provide about children and families across the United States, but both of them have acknowledged limitations for their use on tribal lands. Although the Census Bureau asserted that the 2010 Census count was quite accurate in general, they estimate that “American Indians and Alaska Natives living on reservations were undercounted by 4.9 percent.”<sup>175</sup> According to the State of Indian Country Arizona report<sup>176</sup> there are particular challenges in using and interpreting ACS data from tribal communities and American Indians in general. There is no major outreach effort to familiarize the population with the survey (as it is the case with the decennial census). Most important, the small sample size of the ACS makes it more likely that the survey may not accurately represent the characteristics of the population on a reservation. The State of Indian Country Arizona report indicates that at the National level, in 2010 the ACS failed to account for 14% of the American Indian/Alaska Native (alone, not in combination with other races) population that was actually counted in the 2010 decennial census. In Arizona the undercount was smaller (4%), but according to the State of Indian Country Arizona report, ACS may be particularly unreliable for the smaller reservations in the state.

While recognizing that estimates provided by ACS data may not be fully reliable, this report includes these estimates because they still are the most comprehensive publically-available data that can help begin to describe the families that First Things First serve. Considering the important planning, funding and policy decisions that are made in tribal communities based on these data, however, the State of Indian Country report recommend a concerted tribal-federal government effort to develop the tribes’ capacity to gather relevant information on their populations. This information could be based on the numerous records that tribes currently keep on the services provided to their

members (records that various systems must report to the federal agencies providing funding but that are not currently organized in a systematic way) and on data kept by tribal enrollment offices.

A current initiative that aims at addressing some of these challenges has been started by the American Indian Policy Institute, the Center for Population Dynamics and the American Indian Studies Department at Arizona State University. The Tribal Indicators Project<sup>177</sup> begun at the request of tribal leaders interested in the development of tools that can help them gather and utilize meaningful and accurate data for governmental decision-making. An important part of this effort is the analysis of Census and ACS data in collaboration with tribal stakeholders. We hope that in the future these more reliable and tribally-relevant data will become available for use in these community assessments. Another important initiative currently undergoing to help improve the collection, use and interpretation of data related to tribal communities is the U.S. Indigenous Data Sovereignty Network (USIDSN) hosted by the Native Nations Institute at the University of Arizona. According to its website "USIDSN's primary function is to provide research information and policy advocacy to safeguard the rights and promote the interests of Indigenous nations and peoples in relation to data."<sup>178</sup>

### Data Suppression

To protect the confidentiality of program participants, the First Things First Data Dissemination and Suppression Guidelines preclude 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 twenty-five. In addition, some data received from state agencies may be suppressed according to their own guidelines. The ADHS, for example, does not report non-zero counts less than six, and DES does not report non-zero counts less than 10. Throughout this report, information which is not available because of suppression guidelines will be indicated by entries of "<10" or "<25" for counts or "DS" for percentages in the data tables.

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 ten or twenty-five may still be included if the upper limit of the range is above ten or twenty-five. Since a range is provided rather than an exact number, the confidentiality of program participants is preserved.

### Reporting Data over Time

To show changes over time, a percent change between two years is sometimes reported to show the relative increase or decrease during that period. Percent change between two years is calculated using the following formula:

$$\% \text{ Change} = \frac{(\# \text{ in Year 2} - \# \text{ in Year 1})}{\# \text{ in Year 1}}$$

### School Data

A number of educational indicators were included in this report based on data received from the ADE at the school level. These data were then aggregated by region (e.g., the sum of all students in special education preschool in the region) as well as by the county and state. Data are also presented at the school level for schools with a presence in

the region. Please note that data for schools managed by the Bureau of Indian Education (BIE) were not available for this report.

### **Indian Health Services Data**

The Indian Health Service (IHS) provided data to be included in this report through a special request submitted by First Things First. These data cover fiscal years 2013 and 2014 (October 2013 to September 2015) and represent those patients seen during this time frame who were identified as members of the White Mountain Apache Tribe by IHS and received services in the IHS Whiteriver Service Unit, regardless of their place of residence. This means that, at the time of receiving services, patients represented in this dataset may or may not have lived within the reservation boundaries. It is important to note that the methodology that IHS used to compile data for this report differs from that used during the 2014 cycle of the 2014 White Mountain Apache Tribe Regional Needs and Assets Report. In 2014, the data provided by IHS were based on the patient's place of residence and *not* on where the services were provided. The 2014 Needs and Assets Report includes information about the specific communities that were included in the data extraction process. These were communities that lied fully or mostly within the reservation boundaries. Because the IHS data included in the 2014 and 2018 reports represent different populations, they should not be compared or used to determine trends overtime.

### **2018 Report Process**

For the 2018 Needs & Assets Report cycle, Regional Partnership Councils were asked to identify areas of particular focus, or priority areas. These priorities were developed during the spring of 2016, and potential data sources to address these priorities were identified collaboratively among the Council, The Regional Director, FTF Research and Evaluation staff, and CRED staff. For the current report, the White Mountain Apache Tribe Regional Partnership Council selected the information on services for children with special needs, awareness of resource available to parents, with specific emphasis on developmental stages and health-related issues, and communication and collaboration among service providers working with young children as the regional priorities.

In the fall of 2016, a participatory Data Interpretation Session was held to review preliminary results of the data received, compiled and analyzed as of September 2016. Regional Partnership Council members and other participating key stakeholders were involved in facilitated discussion to allow them to share their local knowledge and perspective in interpreting the available data. The White Mountain Apache Tribe Region Data Interpretation Session was held on October 3, 2016 as part of the Regional Partnership Council meeting. Feedback from participating session members are included within the report, as appropriate.

### **2014 Parent and Caregiver Survey Methodology**

First Things First collects data from parents and caregivers of children birth to 5 through its Family and Community Survey, a statewide survey that has been conducted by phone every two years since 2008. The Family and Community Survey was designed to measure many critical areas of parent knowledge, skills, and behaviors related to their young children. The survey contained over sixty questions, some of which were drawn from the national survey, *What Grown-Ups Understand About Child Development*.<sup>179</sup> Survey items explored multiple facets of parenting.

After receiving feedback about phone-based surveys not being the most appropriate method of collecting data in tribal communities, First Things First allocated additional resources to gather data from a subset of survey items in a face-to-face manner as part of the Needs and Assets data collection effort. This report refers to this subset of items as the Parent and Caregiver Survey.

A total of nine core items from the Family and Community Survey were included in the Parent and Caregiver Survey. The Norton School team obtained input from First Things First Regional Partnership Council members and other stakeholders in tribal communities regarding the wording of the items, its cultural appropriateness and its reading level to make sure the items would be well received by parents and caregivers in tribal communities. The wording of the items was subsequently modified in a way that could still be comparable to the original Family and Community Survey but that could also be more accessible to survey participants.

Eligibility for participation was based on parents or caregivers having a child under the age of six living in their household, even if they were not the main caregiver. A total of 295 surveys with parents and caregivers were conducted in the White Mountain Apache Tribe Region in the spring of 2014.

Results from a selected set of individual items are presented in the Family Support section of this report. Please note that this report refers to the face-to-face survey as the Parent and Caregiver Survey in order to distinguish it from the statewide Family and Community Survey.

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