# ## FIRST THINGS FIRST

Gila



**2018** NEEDS AND ASSETS REPORT

# GILA REGIONAL PARTNERSHIP COUNCIL 2018 NEEDS AND ASSETS REPORT

Prepared by

Community Research, Evaluation, and Development (CRED)

John and Doris Norton School of Family and Consumer Sciences

College of Agriculture and Life Sciences

University of Arizona

Funded by

First Things First Gila Regional Partnership Council

### LETTER FROM THE CHAIR

September 15, 2017

Message from the Chair:

Since the inception of First Things First, the Gila 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 Gila Regional Council would like to thank our Needs and Assets vendor, Community Research, Evaluation, and Development (CRED) at the University of Arizona, for their knowledge, expertise and analysis of the Gila 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 Gila 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,

Fernando Shipley, Chair

A lo Shipley

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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 Gila 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 Gila 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 Gila 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 for their contributions of data for this report, and their ongoing support and partnership with First Things First on behalf of young children. Also, a special thanks to the Gila Region caregivers/grandparents who participated in the survey process and the numerous stakeholders who attended sessions to help inform the report.

To the current and past members of the Gila 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 the challenges and opportunities facing children birth to age 5 and their families in the First Things First Gila Region.

#### **Population Characteristics**

According to the U.S. Census, 2,688 children under the age of six reside in the Gila Region, representing six percent of the regions total population. This ranges from a low of four percent of young children living in the Central sub-region, to a high of seven percent living in the South and Hayden/Winkelman sub-regions. Gila County has experienced a population decrease since the turn of the century, contrary to the population increase in the state as a whole. The population of young children is projected to fall by seven percent by 2040 and the total population to grow by less than one percent to by 2040. Thirty-six percent of young children in the Gila Region are Hispanic or Latino and 57 percent are White.

Based on data from the 2010 U.S. Census, fewer than one out of every 10 households (9%) in the Gila Region has at least one child under 6 years old. The largest concentration of these families are in the South and Hayden/Winkelman sub-regions, where 13 and 12 percent of households have a young child. The Central sub-region has relatively fewer households with young children (5%). Forty-two percent of children in the Gila Region live with a single parent, in Central and South sub-regions over half of young children live with a single parent (52% for both), and in the North sub-region 28 percent of young children live with a single parent. The proportion of young children aged birth to 5 living in a grandparent's household is slightly higher in the region (19%) than the state (14%), and in the Hayden/Winkelman sub-region, 44 percent of young children are living in a grandparent's household. Sixty-five percent of children ages birth to 17 living with grandparents in the Gila Region live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent, and 26 percent of these children who live with their grandparents do not have a parent present in the household. A higher proportion of the grandchildren living with their grandparents in the Hayden/Winkelman and Central sub-regions (48% and 39% respectively) are being raised with no parent present.

#### **Economic Characteristics**

The median income for Gila County families is \$49,427. The median income for families with married parents (husband-wife) and children under age 18 is about \$8,000 higher (\$57,344); single-parent families make less, particularly when headed by a female. The median income for households run by a single female in the Gila Region is \$18,504; households led by single males make about 130 percent more (\$42,647). Eighteen percent of the total (all-age) population of the Gila Region lives in poverty and 40 percent of the population aged birth to 5 live in poverty in the region. In the Central sub-region, both the total population (30%) and the young child population (84%) are more likely to live below the poverty level than for the region as a whole. In spite of this need, the number of young children supported by the TANF/Cash Assistance program has declined in recent years, in the region (-7%), county (-35%) and statewide (-39%). In 2016, the unemployment rate in Gila County was 7.2 percent

compared to 5.3 percent for the state. Almost three-quarters (71%) of young children in the region live in a home where all the parents participate in the labor force.

Thirty-two percent of children (those under 18 years old) are food insecure, higher than the state's 27 percent. Although the number of young children participating in SNAP has declined since 2012, this program still supports over 1,600 children in the Gila Region annually. WIC participation has also declined in the region but still serves a considerable portion of the population of women and children (76% in 2015). As of June 2016, there were only seven WIC retailers across the region. Close to twothirds (63-65%) of students in the Gila Region have been eligible for free or reduced-price lunch since 2012. The number of meals provided by the Summer Food Service Program has increased by 175 percent in Gila County, while that number has dropped by 10 percent across the state as a whole. The number of meals served by the Child and Adult Care Food Program increased substantially (+25%) between 2014 and 2015 in Gila County, whereas the number of meals had a smaller increase statewide during the same period (+9%).

Of the 18,993 occupied housing units in the Gila Region, 74 percent are occupied by home-owners, with the highest rates in the Central (88%) and Hayden/Winkelman sub-regions (83%). Homeownership across the region and all sub-regions is greater than elsewhere in the state (63%). The North and Central sub-regions have the highest proportion of seasonally vacant units (39% and 34% respectively), and the South and Hayden/Winkelman sub-regions have the lowest proportion of seasonally vacant housing units (both 7%). Within the region, the Central sub-region (34%) has the highest prevalence of housing problems of owner household units, while the Hayden/Winkelman subregion (71%) has the highest prevalence of housing problems of renter household units.

#### **Educational Indicators**

In the 2014-2015 school year, 32 percent of Gila 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 (41%). Performance on the English language arts (ELA) test was similar, with 31 percent of Gila Region students demonstrating proficiency, compared to 40 percent across the state.

The percentage of 1st through 3rd grade elementary school students who were chronically absent increased from 2014 (43%) to 2015 (48%) in the Gila Region, and were higher than those percentages across the state (34% in 2014 and 36% in 2015). The high school drop-out rate in Gila Region fell slightly to four percent in 2015, from a high of five percent in 2012. The four-year graduation rate in the Gila Region (76%) was the same as Arizona as whole (76%), and has improved slightly from previous years. Although Gila Region adults are more likely to complete high school or have a GED (30%) than adults across the state (25%), and to have some college or professional training (37% vs 34% statewide), they are less likely to have a bachelor's or higher degree (18% vs 27% statewide).

#### **Early Learning**

According to the most recent data available in 2015 and 2016, there were 22 registered child care providers approved to serve up to 645 children in the Gila Region. With a population of young children of about 2,688 in the region, there are likely to be between four and seven young children for each available child care slot in the region. In particular, the Central sub-region has a population of 124 children aged birth to 5, but total capacity to serve just 16 children, or 1 slot for every eight children. Of the 22 known child care providers in the Gila Region, six are private child care centers, nine are family

child care homes, three Head Start Centers, and four are public school preschool classes. Of the six child care providers that participate in the Quality First program in the Gila Region, all have achieved the 3-, 4- or 5- star ratings, indicating they are meeting or exceeding quality standards. Interviews with parents and grandparents revealed than many stayed home with or had a family member stay home with their children due to the cost of child care, a lack of quality providers, or a lack of trust in available and affordable providers. One of the most pressing needs families identified was for additional and affordable child care options. When asked if they would take advantage of universal pre-k if it was available, 95 percent (all but three) of interviewees said they definitely or probably would, and many responded enthusiastically to such an option.

Families in the Gila Region are paying a slightly higher proportion (15–19%, depending on the child's age) of their overall income for a child care slot as other families statewide. Single parent homes, particularly those with a single female householder, have a lower median income (\$18,504), resulting in a higher proportion of their income being spent on child care; a single-female householder making the median household income would pay 51 percent of her income on child care for one infant. The unaffordability of care was the most common barrier to accessing child care indicated by parents and grandparents interviewed in the region. The number of children receiving a Department of Economic Security child care subsidy increased from 112 in 2014 to 144 in 2015.

In the Gila Region and across Arizona, more children were referred to and served by AzEIP in FY2015 than in either of the two years prior. In 2015, 51 children ages 0 to 2 were served through the AzEIP program in the Gila Region. However, an estimated one hundred or more Gila children who are likely to benefit from early intervention services are not receiving them. The number of children aged 0 to 2, and aged 3 to 5 served by DDD in the Gila Region was less than 25 each year from FY2012 through FY2015. The number of preschoolers in special education in ADE preschools and elementary schools in Gila Region schools has decreased between 2012 (n=106) to 2015 (n=84). Among children who are in special education programs in public preschools in the Gila Region, the majority of children have either a developmental disability (49%) or speech or language impairment (35%). For older children in the region, of the 1,894 children enrolled in kindergarten through third grade in October 2015, 12 percent are enrolled in special education services in school, about three times the rate of children birth to 2 in the region being served by early intervention services (AzEIP and DDD).

#### Child Health

Both the Globe and Payson Arizona Department of Health Services designated Primary Care Areas (PCAs) are Medically Underserved Areas (MUAs). MUAs are federally designated areas that have a need for medical services due to a shortage of primary care providers. The lack of specialty providers locally, even vision or hearing practitioners, was a common theme when speaking with parents and grandparents. Travel to Mesa or Phoenix was often necessary for any type of specialty care and put additional burdens on families with financial or transportation difficulties. Children in the Central subregion had the highest estimated uninsured rate (36%), much higher than the rate of the other subregions, the county (18%) and of the state as a whole (10%). Children in the North sub-region were least likely to be uninsured, with only six percent falling into that category.

In 2014, 443 Gila Region residents gave birth, representing less than one percent of the births statewide. Over half (54%) of mothers in the region were not married (45% statewide) and 12 percent were in their teens (8% statewide). A much higher proportion of mothers in the Gila Region reported

smoking (14.7%) than across the state (4.6%), and the region fell far above the Healthy People 2020 goal of 1.4 percent or fewer. Across the Gila Region in 2014, 69 percent of pregnant women obtained prenatal care during the first trimester, higher than the proportion across Gila County (55.2%). The proportion of women of child-bearing age (18-45) who report that a doctor, nurse or other health care worker ever talked with them about ways to prepare for a healthy pregnancy and baby (that is, discussed preconception health) has been increasing in Gila County from 59 percent in 2013 to 79 percent in 2014, the highest rate in the state. In 2014, 6.1 percent of babies were low birth weight in the region, compared to seven percent across the state. The percent of premature births was even better by comparison, with 6.3 percent in the region, and nine percent across the state falling into this category.

While immunization rates vary by vaccine, over 90 percent of children in child care and kindergarten in the Gila Region had completed each of the three major (DTAP, polio, and MMR) vaccine series; the regional rates were slightly higher than those of the state. Rates of personal exemptions for vaccinations among children in child care (4.9%) and kindergarten (7.1%) in the region were higher than exemption rates at the state level (4% and 4.7% respectively).

Untreated decay and need for dental care was identified for 43 percent of kindergarteners in the region, substantially higher than the state rate (27%). For parents and grandparents interviewed throughout the region who did have dental care for their children, many traveled to Mesa or Phoenix for that care. The primary reasons were the lack of pediatric dental providers in the region, or insurance plans not covering available providers in the region. Where pediatric dental care was available, a number of respondents expressed dissatisfaction with the staff and services provided.

In the Gila Region, emergency room visits by young children due to asthma decreased by 50 percent from 2012 to 2014, a decrease more than three times the decrease across the state during the same period (16% decrease). In 2015, Gila County reported fewer than 10 deaths among its population of 11,091 children, aged 0 to 17.

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

Parents and grandparents interviewed in the Gila Region were asked to discuss what early learning opportunities were available for their families, and also where parents of young children could go for support or resources in the region; the top responses were: public library story-time (32%), Head Start (13%), or that they did not know of any (45%). Likewise, when asked where parents would go in the community to learn about parenting or ask for help or support, most respondents said either that one would turn to family and friends or that they did not know where parents could turn. At the close of interviews, parents and grandparents were asked what they would most like to see in their community that would benefit their children and family. The most frequent response by parents and grandparents in all communities was for more leisure, recreational and family activities appropriate for children five and under.

Of 223 reports of abuse and neglect of children birth to 17 received during the April 1-September 30, 2015 reporting period for Gila County, 13 (6%) resulted in a removal from the home. As of the end of June 2016, there were 14 foster homes in Gila County, eight in Payson, and six in Globe; two of those homes were licensed only for kinship care. At the same time, there were 136 children in out of home care in the county (the proportion of those children who were aged birth to five, and the number who were placed in foster homes versus other out of home placements were unavailable). In fiscal year 2015, two domestic violence shelters in Gila County, Gila County Safe Home - Horizon Human Services, and Time Out, Inc., served 233 people, 115 (49%) of whom were children.

In 2015, 104 pregnant or parenting women received publically-funded behavioral health services through Cenpatico Behavioral Health Services in the Gila Region, an increase of nine percent compared to 2012. Community members surveyed as part of the Gila County Division of Health and Emergency Management and Cobre Valley Regional Medical Center's 2015 Community Health Needs Assessment ranked drug addiction as the top health issue facing Gila County. Respondents in focus groups conducted as part of the Needs Assessment, identified the lack of specialty health care providers, including mental health support services as a key need in the county. Similarly, key informants interviewed identified the need for improved access to specialty health services, particularly mental and behavioral health services, and improved access to substance use support services as the most pressing health needs facing the county. In addition, many parents and grandparents interviewed in the region mentioned the increasing presence of drug use and the challenges that places on families and community members as one of the hardest things about raising young kids in their communities. Data from the Arizona Department of Health Services (ADHS) shows drug-induced deaths have been increasing steadily beginning in 2011 from a rate that was below the state rate, to 43.5/100,000 in 2014, a rate that was more than double that in the state (18.4/100,000).

#### 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 the Gila region, these efforts have resulted in the recruitment of 143 Friends, one Supporter and 14 Champions during the period of FY2014 through 2016. In addition to these strategic communications efforts, First Things First has also led a concerted effort of policymaker awareness-building throughout the state. Furthermore, the Arizona Early Childhood Alliance 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.

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

Three of five respondents (60%) to the Coordination and Collaboration Survey described the early childhood system in Gila County as a well-coordinated system. One additional respondent (20%) described the system as a partially-coordinated system, and another (20%) viewed the early childhood system as an uncoordinated system. Most respondents also reported that the early childhood system in Gila County effectively addresses the needs of young children and their families across three of four key areas; early learning and family support and literacy (80%, n=4 each) and children's health (60%, n=3).

# 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), the Arizona Department of Administration (ADOA), and the Arizona Department of Child Safety (DCS). Additionally, regional data from local agencies and the 2012 First Things First Family and Community Survey have been included where available and relevant. 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. The ACS is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-toface interviews. The most recent and most reliable ACS data are averaged over the past five years; from surveys conducted from 2010 to 2014. For American Community Survey (ACS) sub-region data throughout the report, estimates based on a sample of fewer than 50 were excluded from presentation. In general, the reliability of ACS estimates is greater for more populated areas. For more detailed information on data sources, methodology, suppression guidelines, and limitation, please see the Appendix.

For the 2018 cycle, the Regional Partnership Council identified the following topics as priority areas. These topics were a focus of a Data Interpretation Session held in the fall of 2016, and additional information and data are included on these topics whenever possible.

- 1) Early education and child care including resources specific to children with special needs, and
- 2) Economic indicators such as **housing**, **poverty and homelessness**.

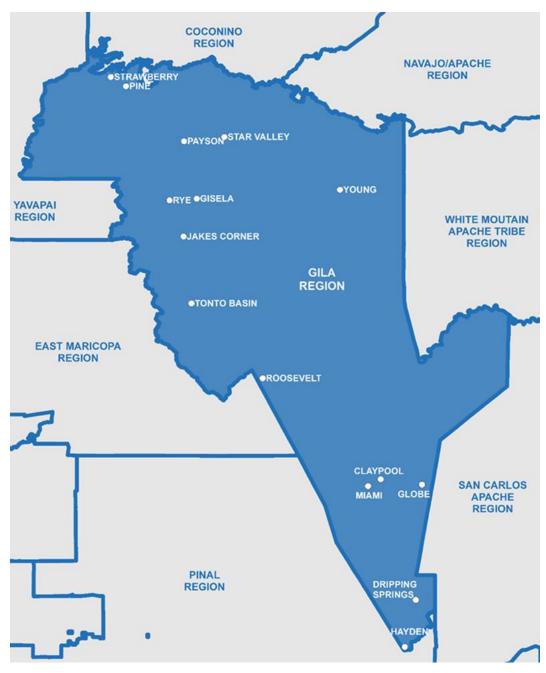
As part of the Data Interpretation Sessions, qualitative insights regarding the quantitative data presented in this report were gathered from session participants, including members of the Regional Partnership Council, local First Things First grantees, and interested members of the public. In addition, qualitative information was gathered through interviews with parents and grandparents of young children in the region. These insights are included in this report to provide further context to the data presented. Participants in the Data Interpretation Sessions are referred to as 'key informants' throughout this report.

# **Description of the Region**

The First Things First regional boundaries were initially established in 2007, creating 31 regions which were designed to (a) reflect the view of families in terms of where they access services, (b) coincide with existing boundaries or service areas of organizations providing early childhood services, (c) maximize the ability to collaborate with service systems and local governments, and facilitate the ability to convene a Regional Partnership Council, and (d) allow for the collection of demographic and indicator data. The regional boundaries are reviewed every two years. In fiscal year 2015, the boundaries were modified using census blocks, creating 28 regions. This report uses the 2015 definition of the regional boundaries.

The First Things First Gila Region is defined as Gila County, not including the lands belonging to the San Carlos Apache Tribe and the White Mountain Apache Tribe which are their own First Things First regions. The Gila Region's population is located in the small towns of Globe, Miami, Payson, Star Valley, Pine/Strawberry and Hayden/Winkelman, the unincorporated areas of Tonto Basin and Young, and a number of rural unincorporated communities. The Tonto Apache Tribe is located within the Gila Region, adjacent to the city of Payson. Figure 1 shows the geographical area covered by the Gila Region.

Figure 1. The Gila Region



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

Brief interviews were conducted with parents and grandparents of young children in the region. Those interviewed were asked to talk about the best things about raising young kids in their communities. The most common asset mentioned was the small-town, community-centered feel of their communities. "Everybody knows everybody" was a common refrain, accompanied by the idea that the

closeness of the community allows for increased support and interaction between community members. Many mentioned that their extended families live in the same city or close by, particularly in Globe, so that available family support was an asset. Many mentioned the quiet, slower pace of their cities as assets compared to living in more urban areas nearby, and the greater sense of safety this brought. Also mentioned was the proximity to outdoor recreational activities and a closeness to nature. Good weather was also discussed as one of the things families liked best about living in region.

Because communities may vary in terms of needs and assets, the Gila Regional Partnership Council requested that data be analyzed and reported at a sub-regional level in order to provide a more complete picture of the region. Dividing the region in sub-regions helps the Council target strategies to use resources effectively and efficiently. Four sub-regions within the Gila Region were identified by the Regional Partnership Council and Director as focus areas. Figure 2 shows the sub-regions in the Gila Region.

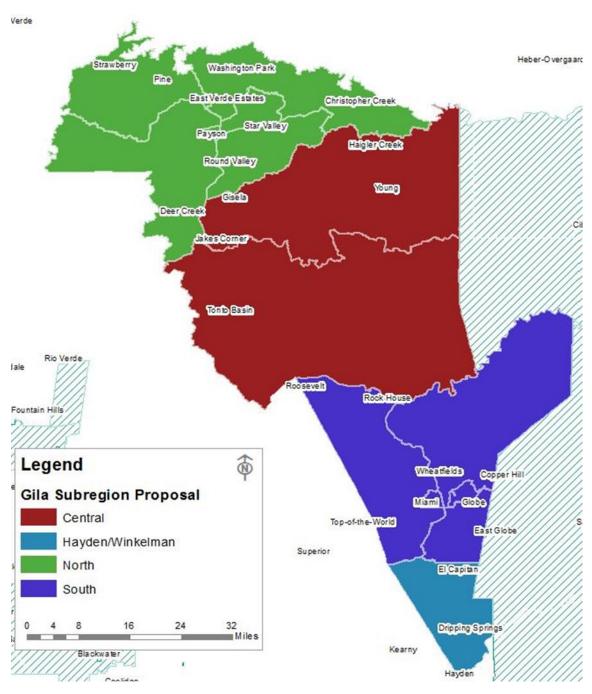
The **North** sub-region is defined as six census tracts (1, 2, 3.01, 3.02, 4, and 5) in the northern most part of Gila County, north of Hellsgate Wilderness Area. This sub-region includes the towns of Payson and Star Valley and the Census Designated Places (CDPs) of Strawberry, Pine, Geronimo Estates, Washington Park, Whispering Pines, Beaver Valley, Freedom Acres, Flowing Springs, East Verde Estates, Mesa de Caballo, Oxbow Estates, Round Valley, Rye, Mead Ranch, Tonto Village, Kohls Ranch, Bear Flat, Christopher Creek, and Hunter Creek. The North sub-region is the most populous area in the region in terms of overall population.

The **Central** sub-region is defined as two census tracts (6 and 7) in the central portion of Gila County above Lake Roosevelt, excluding the White Mountain Apache Tribe reservation. This sub-region includes the CDPs of Tonto Basin, Young, Jakes Corner, Deer Creek, Gisela, and Haigler Creek.

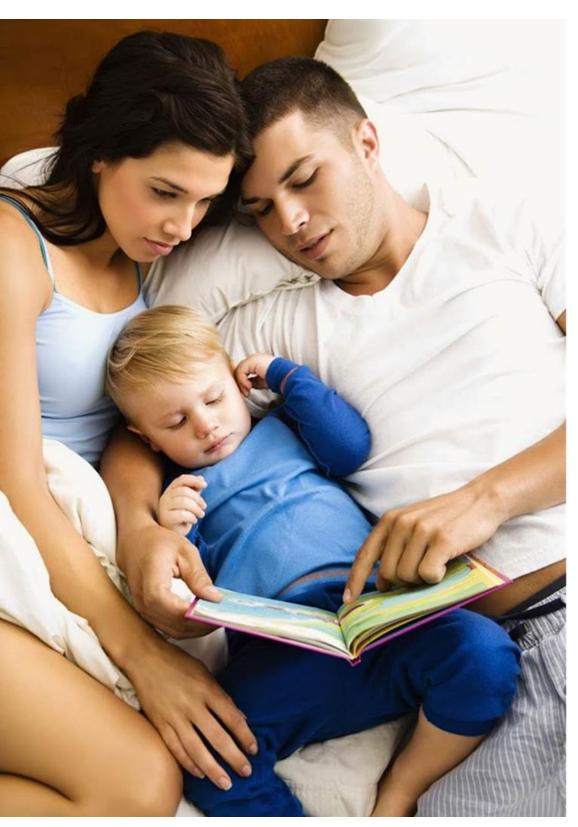
The **South** sub-region is defined as five census tracts (8, 9, 10, 11, and 12) in the south-central portion of Gila County, south of Lake Roosevelt and excluding the San Carlos Apache reservation. This sub-region includes the city of Globe, the town of Miami, and the CDPs of Claypool, Central Heights-Midland City, Copper Hill, Pinal, Icehouse Canyon, and Six Shooter Canyon, Wheatfields, and Roosevelt, as well as the portion of Top-of-the-World CDP within Gila County. The South sub-region is home to the highest number of young children in the region.

The **Hayden-Winkelman** community is defined as one census tract (13) in the southern most portion of Gila County, south of the Pinal Mountains. This sub-region includes the town of Hayden and the portion of the town of Winkelman in Gila County, as well as the CDPs of Dripping Springs and El Capitan. This sub-region is the least populous area in the region in terms of both overall population and the population of young children.

Figure 2. Sub-Regions of the Gila Region



Source: U.S. Census Bureau (2016). TIGER-Line Shapefiles. 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. 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 also 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. 5 Children living in kinship care can arrive in those situations for a variety of reasons including a parent's absence for work, military service, chronic illness, or incarceration, or due to abuse, neglect, or homelessness, among others. 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. 6 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. 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.8

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. Those children who engage in dual language learning have cognitive, social-emotional and learning benefits in early school and throughout their lifetimes. 10 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. 11 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. The U.S. Department of Health & Human Services recognizes that language preservation and revitalization are keys to strengthening culture in Native communities and to encouraging communities to move toward social unity and self-sufficiency. <sup>12</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, 2,688 children under the age of six reside in the Gila Region (see Table 1). Overall, the region's population was 46,631 in 2010, meaning that approximately six percent of the region's residents are young children. This ranged from a low of four percent of young children living in the Central sub-region, to a high of seven percent living in the South and Hayden/Winkelman sub-regions (Table 3).

Gila County has experienced a population decrease since the turn of the century, contrary to the state as a whole's population increase. Whereas Arizona saw a 19 percent increase in the number of young children, Gila County saw a three percent decrease (Table 2). The region is projected to have a continued decrease in the population of young children relative to the total population over the next several decades. The population of young children is projected to fall by seven percent to 3,424 by 2040 and the total population to grow by less than one percent to 54,531 by 2040 (see Table 4 and Table 5). Although the numbers of young children in the region are expected to decrease over the years, the percentage of the overall population to be comprised of young children is projected remain at six percent by 2040.

Thirty-six percent of young children in the Gila Region are Hispanic or Latino and 57 percent are White. The percentage of Latino children in the Gila Region is lower than that across the state of Arizona as a whole (45%) (Table 6). Within the region, the Hayden/Winkelman sub-region has a substantially higher proportion of Latino children, with 82 percent identified as Hispanic or Latino (Figure 3). Compared to children, a smaller proportion of adults (those aged 18 and older) identify as Hispanic or Latino across both the region (17%) and state (25%) (Table 7).

Arizona is increasingly a home to those displaced from other parts of the world. The national Office of Refugee Resettlement compiles an annual report of refugee arrival data by country of origin and state of resettlement.<sup>13</sup> The number of refugees resettled in Arizona has increased steadily over time, with 744 refugee entrants to Arizona in 1981, and 4,833 in 2016 (county level resettlement data are not currently available). The country of origin of resettled refugees has changed over time, with the largest number of entrants in the last decade coming from countries such as Burma, the Democratic Republic of Congo, Cuba, Iraq, and Somalia.<sup>14</sup> In Arizona, most refugees are resettled in the greater Phoenix and Tucson areas.<sup>15</sup>

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
Gila Region	2,688	462	440	468	456	414	448
North	1,148	199	183	195	195	181	195
Central	124	16	26	17	28	21	16
South	1,328	229	210	247	220	195	227
Hayden-Winkelman	88	18	21	9	13	17	10
Gila County	3,657	635	624	632	599	569	598
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
Gila Region	N/A	2,688	N/A
Gila County	3,772	3,657	-3%
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		Children (ages 0-5) as a percentage of the total population
Gila Region	46,631	2,688	6%
North	23,807	1,148	5%
Central	3,350	124	4%
South	18,134	1,328	7%
Hayden-Winkelman	1,340	88	7%
Gila County	53,597	3,657	7%
ARIZONA	6,392,017	546,609	9%

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

Table 4. Projected Population (Ages 0 to 5), 2015 to 2040

	2015	2020	2025	2030	2035	2040
Gila Region	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	3,691	3,591	3,533	3,479	3,441	3,424
ARIZONA	522,213	556,443	603,660	648,746	681,380	705,102

 $Source: Arizona\ Department\ of\ Administration,\ Employment\ and\ Population\ Statistics\ (2015).\ State\ and\ county\ population\ projections\ (medium\ series).$ 

Table 5. Projected Population (All Ages), 2015 to 2040

	2015	2020	2025	2030	2035	2040
Gila Region	N/A					
Gila County	54,406	55,145	55,416	55,327	54,976	54,531
ARIZONA	6,758,251	7,346,787	7,944,753	8,535,913	9,128,899	9,706,815

Source: Arizona Department of Administration, Employment and Population Statistics (2015). State and county population projections (medium series).

Table 6. Race and Ethnicity of the Population of Children (Ages 0 to 4) in the 2010 Census

	Population of children (ages 0-4)		White alone (not Hispanic or Latino)	American Indian	African-American	Asian or Pacific Islander
Gila Region	2,240	36%	57%	4%	1%	0%
North	953	22%	73%	3%	1%	0%
Central	108	15%	81%	2%	0%	1%
South	1,101	47%	45%	7%	0%	1%
Hayden-Winkelman	78	82%	15%	0%	3%	0%
Gila County	3,059	27%	42%	29%	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

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

O% 20% 40% 60% 80% 100%

Gila Region

North

Central

South

Hayden-Winkelman

Gila County

ARIZONA

45%

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

Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P12H

Table 7. Race and Ethnicity of the Adult Population (Ages 18 and Older) in the 2010 Census

	Number of persons (ages 18 and older)			American Indian alone (not Hispanic or Latino)	Hispanic or	Asian or Pacific Islander (not Hispanic or Latino)
Gila Region	37,725	17%	79%	2%	0%	1%
North	19,822	6%	90%	1%	0%	1%
Central	2,917	4%	94%	1%	0%	0%
South	13,939	31%	64%	3%	1%	1%
Hayden-Winkelman	1,047	72%	26%	1%	0%	0%
Gila County	42,126	15%	71%	12%	0%	1%
ARIZONA	4,763,003	25%	63%	4%	4%	3%

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

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

#### **Living Arrangements**

Based on data from the 2010 U.S. Census, fewer than one out of every 10 households (9%) in the Gila Region has at least one child under 6 years old (Table 8). The proportion of households with children

under six in Gila County is slightly higher (11%), and even higher across the state (16%). The largest concentration of these families are in the South and Hayden/Winkelman sub-regions, where 13 and 12 percent of households have a young child. The Central sub-region has relatively fewer households with young children (5%).

According to the American Community Survey, 42 percent of children in the Gila Region live with a single parent, which is lower than the proportion in Gila County (49%) and higher than the proportion statewide (38%) (Figure 4). However, in Central and South sub-regions over half of young children live with a single parent (52% for both). In the North sub-region only 28 percent of young children live with a single parent, whereas over two-thirds (69%) live with two parents. The U.S. Census Bureau has recently begun to collect data on the number of families with children (0-18) headed by same-sex parents. In Gila County, 1.0 percent of families are same-sex households, compared to 0.9 percent in Arizona as a whole.<sup>16</sup>

The proportion of young children living in a grandparent's household is slightly higher in the region (19%) than the state (14%), but lower than for Gila County (28%) (Figure 5). In the Hayden/Winkelman sub-region, 44 percent of young children are living in a grandparent's household. It is important to note that these households may be multigenerational - i.e., the grandparent is considered the head-ofhousehold, but the child's parent(s) may also live there. Table 9 provides more information about the estimated 910 children ages birth to 17 living with grandparents in the Gila Region. Sixty-five percent of these children live in multigenerational homes where the grandparent has assumed responsibility for the child, despite the presence of a parent, and twenty-six percent of these children who live with their grandparents do not have a parent present in the household. A higher proportion of the grandchildren living with their grandparents in the Hayden/Winkelman and Central sub-regions (48% and 39% respectively) are being raised with no parent present.

In the Gila Region, only eight percent of children ages birth to 5 live with a foreign-born parent. This is considerably lower than the statewide proportion (27%), but similar to the county as a whole (7%). Young children in the South sub-region are more likely to be living with a foreign-born parent (15%) (Table 10).

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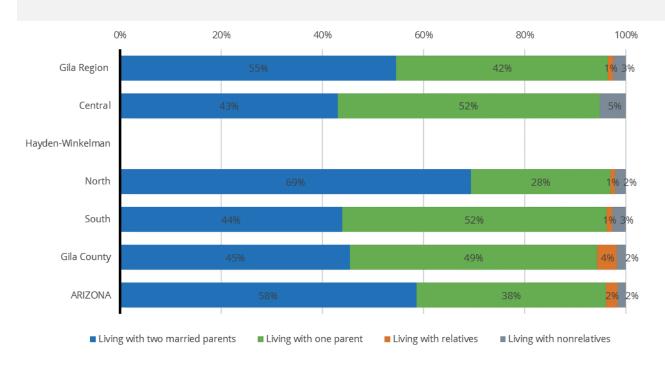
<sup>&</sup>lt;sup>i</sup> Please note that Figure 5 and Table 9 draw from two different data sources and are not directly comparable.

Table 8. Composition of Households in the 2010 Census

		households with child(ren) under 6	households with child(ren) under 6		Households with child(ren) under 6 years old, single	Households with child(ren) under 6 years old, single female householder
Gila Region	20,317	1,910	9%	58%	15%	27%
North	10,876	829	8%	62%	14%	24%
Central	1,684	83	5%	64%	20%	16%
South	7,253	938	13%	55%	16%	30%
Hayden-Winkelman	504	60	12%	58%	13%	28%
Gila County	22,000	2,488	11%	56%	14%	29%
ARIZONA	2,380,990	384,441	16%	65%	11%	24%

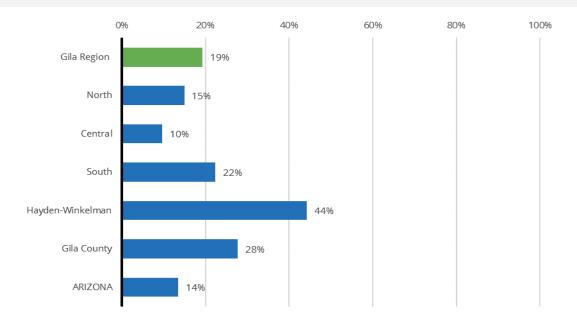
Source: U.S. Census Bureau (2010). 2010 Decennial Census, SF 1, Table P20

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 Note: Due to small sample sizes, estimates for Hayden-Winkelman cannot be reliably calculated.

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

	Number of children (ages 0-17) living in a grandparent's	Percent of children (0-17) living in a grandparent's household and the grandparent is	Percent of children (0-17) living in a grandparent's household and the grandparent is responsible for the child (with no parent present)
Gila Region	910	65%	26%
North	459	58%	19%
Central	135	80%	39%
South	260	69%	28%
Hayden-Winkelman	56	80%	48%
Gila County	1,838	61%	16%
ARIZONA	140,038	53%	14%

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

Table 10. Children (Ages 0 to 5) Living with Foreign-Born Parents

	Children (ages 0-5) living with one or two parents	Children (ages 0-5) living with one or two foreign-born parents
Gila Region	2,367	8%
North	1,067	0%
Central	128	5%
South	1,133	15%
Hayden-Winkelman	N/A	N/A
Gila County	3,354	7%
ARIZONA	510,658	27%

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

Note: Due to small sample sizes, estimates for Hayden-Winkelman cannot be reliably calculated.

#### Language Use

The vast majority of Gila Region residents age 5 and older speak English at home (88%), with 10 percent reporting speaking Spanish at home (Table 11). In the Hayden/Winkelman sub-region, almost half (45%) speak Spanish at home, and seven percent are limited-English speaking (that is, do not speak English "very well") (Table 12).

Only three percent of children enrolled in kindergarten through third grade in the region are classified as "English-language learners" (ELL) (Table 13). This is much lower than the statewide proportion of 10 percent, but similar to Gila County (2%).

At a household level, only two percent of households in the Gila Region who speak Spanish at home are classified as limited-English-speaking, which is half the proportion of households with that designation (4%) statewide (Table 14). The Hayden/Winkelman sub-region has relatively more households (6%) classified as limited-English-speaking.

Table 11. Language Spoken at Home (Ages 5 and Older)

	Estimated population (ages 5 and older)	Speak English at home	Speak Spanish at	Speak a native North American language at home	Speak another language at home
Gila Region	43,569	88%	10%	1%	1%
North	21,369	95%	4%	1%	1%
Central	2,970	96%	2%	0%	2%
South	17,981	82%	16%	1%	1%
Hayden-Winkelman	1,249	55%	45%	0%	0%
Gila County	50,205	85%	8%	6%	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.

Table 12. Proficiency in English (Ages 5 and Older)

	Population (ages 5 and older)		at home, and speak	Speak another language at home, and do not speak English "very well"
Gila Region	43,569	88%	8%	3%
North	21,369	95%	3%	2%
Central	2,970	96%	3%	0%
South	17,981	82%	13%	5%
Hayden-Winkelman	1,249	55%	38%	7%
Gila County	50,205	85%	12%	4%
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 13: English Language Learners in Kindergarten Through Third-Grade, October 2015

	Number of students enrolled (K to 3)	Number of English Language Learners (ELL)	Percent of students who are ELL
Gila Region Schools	1,894	48	3%
Globe Unified District	558	18	3%
Hayden-Winkelman Unified District	80	0	0%
Miami Unified District	332	11	3%
Tonto Basin Elementary District	27	0	0%
Gila Region Charter Schools	180	<10	DS
Gila County Schools	2,531	61	2%
All Arizona Schools	342,307	34,256	10%

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

Note: The data for the districts and schools above is only for the schools that fall within the regional boundaries and thus may differ from the data for the district as a whole.

Table 14. Limited-English-Speaking Households

			Limited-English-speaking households (Total)	Limited-English-speaking households (Spanish)
Gila Region	18,993	14%	2%	2%
North	9,783	7%	1%	1%
Central	1,513	5%	0%	0%
South	7,273	22%	2%	2%
Hayden-Winkelman	424	64%	6%	6%
Gila County	20,824	19%	2%	1%
ARIZONA	2,387,246	27%	5%	4%

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



**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. They are also more likely to remain poor later in life. More than a quarter (26%) of Arizona's children lived in poverty in 2014, compared to just over a fifth (21%) six years earlier.

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. 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. Unemployment can also put families at greater risk for stress, family conflict, and homelessness.

Housing instability and homelessness can have deleterious effects on the physical, social-emotional, and cognitive development of young children.<sup>27</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>28</sup> High housing costs, relative to family income, are associated with increased risk for overcrowding, frequent moving, poor nutrition and homelessness.<sup>29</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>30</sup>

Other public assistance programs available in Arizona impact 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. Food insecurity is also associated with overweight and obesity. 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. 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 10 to 20 percent.

In addition to SNAP, food banks and school-based programs such as the National School Lunch Program<sup>35</sup> and Summer Food Service Program<sup>36</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 and reduced-price meals at school for students whose family incomes are at or less than 130 percent of the federal poverty level (FPL) for free lunch and 185 percent of the FPL for reduced price lunch. The Arizona Department of Education's Child and Adult Care Food Program (CACFP) reimburses eligible child care centers, adult daycare centers, Head Starts, emergency shelters, and afterschool programs serving at-risk youth for providing healthier meals and snacks. Participants 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. 38 A growing body of research suggests CACFP has positive effects on young children's health and wellbeing. Children who attend care facilities that participate in CACFP have been found to have healthier diets<sup>39,40,41</sup> and decreased risk of under and overweight.<sup>42</sup>

Another food and nutrition resource, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) program, is a federally funded program that 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. 43 In Arizona in 2015, half of all children aged birth through four were enrolled in WIC. 44 Participation in WIC is 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. 45

# What the Data Tell Us

### Income

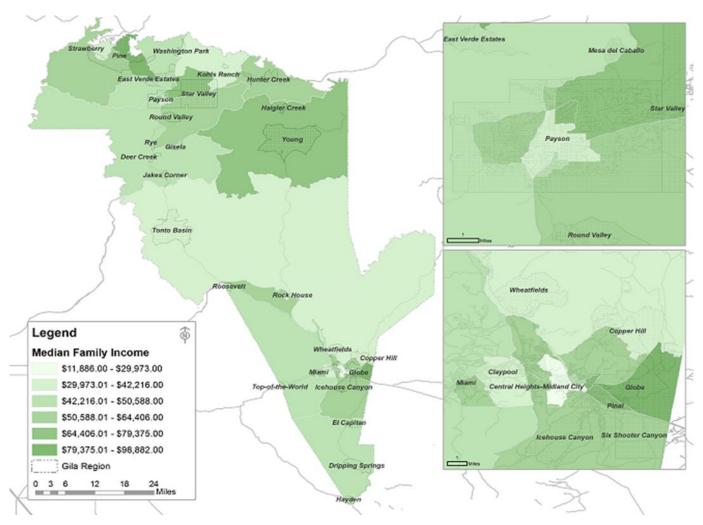
The median income for Gila County families is \$49,427. The median income for families with married parents (husband-wife) and children under age 18 is about \$8,000 higher (\$57,344); single-parent families make less, particularly when headed by a female. The median income for households run by a single female in the Gila Region is \$18,504; households led by single males make about 130 percent more (\$42,647) (Table 15). Figure 6 illustrates median household income, by census tract.

Table 15. Median Annual Family Income

	Median family income	for husband-wife families with child(ren)	single-male-householder	Median family income for single-female-householder families with child(ren) under 18
Gila Region	N/A	N/A	N/A	N/A
Gila County	\$49,427	\$57,344	\$42,647	\$18,504
ARIZONA	\$59,088	\$73,563	\$37,103	\$25,787

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

Figure 6. Map of Median Household Income in the Gila Region



 $Source: U.S \ Census \ Bureau \ (2016). \ American \ Community \ Survey, 5-year \ estimates \ (2010-2014), Table \ B19126. \ Map \ produced \ by \ CRED.$ 

### **Poverty**

Eighteen percent of the total (all-age) population of the Gila Region lives in poverty, which is slightly lower than in Gila County (22%) but the same as elsewhere in the state (18%) (Table 16). The percentage of the population aged birth to 5 in poverty in the Gila Region (40%) is substantially higher than the total population in the region in poverty (18%), and higher than the population of children aged birth to 5 living in poverty across the state (29%). Sub-regional variation in the percentage of the all-age and young child populations living in poverty exists. In the Central sub-region, both the total population (30%) and the young child population (84%) are more likely to live below the poverty level than for the region as a whole (18% and 40% respectively). Conversely, the percentage of those living in poverty in the North sub-region falls below the regional percentages (Table 16). Figure 7 illustrates the census blocks in the region with the highest concentration of young children in poverty.

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)). More than half of families (54%) in the region with children aged four and under live below 185 percent of the FPL (i.e., earned less than \$3,677 a month for a family of four), which is lower than the 61 percent across Gila County, but higher than the 49 percent across the state (Table 17).

The TANF/Cash Assistance program can be an important short-term support to families in dire financial need. The number of young children supported by this program has declined in recent years, in the region (-7%), county (-35%) and statewide (-39%) (Table 18). Between 1996 and 2015, Arizona reduced TANF benefits more than any other state in the nation, and now ranks 42<sup>nd</sup> in the level of assistance to those participating in TANF. 46 In Arizona, TANF eligibility is capped at \$335 per month, or \$4020 annually for a family of four. Beginning in 2016, Arizona became the first and only state that limits a person's lifetime benefit to 12 months. <sup>47</sup> In addition, since 2009, a steadily decreasing percentage of Arizona TANF funds have been spent on three of the key assistance categories; cash assistance to meet basic needs, helping connect parents to employment opportunities, and child care. In 2013, Arizona ranked 51st, 47th, and 46th respectively in proportional spending in those categories across all states and the District of Columbia. Meanwhile, since 2009, an increasing percentage of Arizona TANF funds have been spent on other costs such as child protection, foster care, and adoption.48

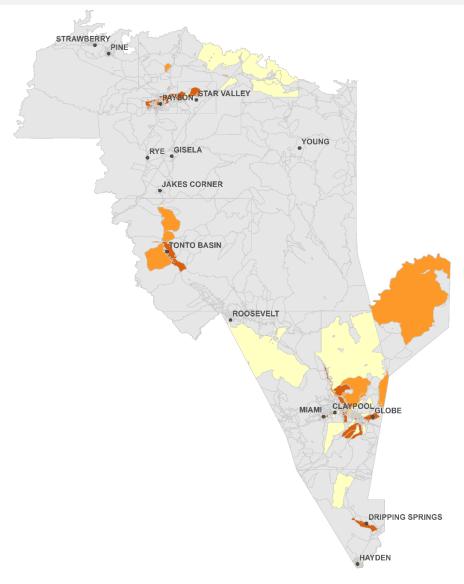
Table 16. Persons Living in Poverty

	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 status is	Older children (ages 6-17) below poverty level
Gila Region	44,728	18%	2,391	40%	5,872	27%
North	22,047	14%	1,077	33%	2,369	17%
Central	3,049	30%	128	84%	274	56%
South	18,357	21%	1,147	40%	3,007	31%
Hayden-Winkelman	1,275	23%	-	-	222	30%
Gila County	52,263	22%	3,494	45%	7,362	33%
ARIZONA	6,411,354	18%	522,513	29%	1,071,471	25%

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

 $Note: \hbox{\it Due to small sample sizes, estimates for Hayden-Winkelman\ cannot\ be\ reliably\ calculated.}$ 

Figure 7. Map of Poverty in the Gila Region



Legend	# of Census Blocks	Poverty 0-5	Population 0-5	% Poverty
High Poverty-High Population	243	708	1,776	40%
High Poverty-Low Population	86	125	144	87%
Low Poverty-High Population	96	37	414	9%
Low Poverty-Low Population	233	78	290	27%
No Poverty	3,303	0	64	0%
Total	3,961	948	2,688	35%

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

Note: In order to arrive at the 5 categories below, FTF IT utilized the number of children, birth to age 5 from the 2010 Census according to the census block data and proportionally allocated the 2007-2011 American Community Survey poverty numbers to census blocks. The decision was made to go with older ACS estimates as they better align with the population at that time (i.e. 2010 Census).

Each category is based on quartiles: 1 = top 25%, 2 = 51-75%, 3 = 25-50%, 4 = Bottom 25%. The ranking is within a single council.

Table 17. 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)		children (ages 0-4)	children (ages 0-4)	Families with children (ages 0-4) below 185% FPL
Gila Region	1,192	32%	42%	45%	54%
North	564	27%	31%	33%	47%
Central	N/A	N/A	N/A	N/A	N/A
South	569	32%	49%	53%	57%
Hayden-Winkelman	N/A	N/A	N/A	N/A	N/A
Gila County	1,735	37%	48%	53%	61%
ARIZONA	301,165	27%	35%	41%	49%

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

Note: Due to small sample sizes, estimates for the Central and Hayden-Winkelman sub-regions cannot be reliably calculated.

Table 18. Number of Children (Ages 0 to 5) Receiving Temporary Assistance to Needy Families (TANF)

	2012	2013	2014		Change from 2012 to 2015
Gila Region	113	137	106	105	-7%
Gila County	476	431	362	311	-35%
ARIZONA	26,827	24,889	19,884	16,336	-39%

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

## **Employment and Unemployment**

Unemployment rates have been dropping steadily in the state since 2010, and rates have also dropped overall in Gila County (Table 19). Unemployment rates have been consistently higher in Gila County compared to the state. In 2016, the unemployment rate in Gila County was 7.2 percent compared to 5.3 percent for the state. Differences also exist by city, with Globe, Miami, Payson and Winkelman having lower unemployment rates (between 5 and 5.8%) than Gila County as a whole in 2015 (the latest year for which city and town level data is available), while Hayden and Star Valley have higher rates (15.5% and 11.4% respectively in 2015) compared to the county.

For young children living with both parents in the region, both parents are more likely to be in the labor force (32%) than just one parent (23%) (Table 20). This pattern is the same for the state. Thirtynine percent of young children in the Gila Region live with a single parent who is employed, higher than the proportion across the state (29%). Taken together, almost three-quarters (71%) of young children in the region live in a home where all the parents participate in the labor force. Families in this situation are likely to have a high need for child care. In addition to unemployment rates, the lack of child care, or the prohibitive cost of child care, can keep parents from participating in the labor force. 49 Notably, in the Central sub-region, 43 percent of young children are living with a single parent not in the labor force.

Table 19. Annual Unemployment Rates, 2009 to 2016

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016
Gila Region	N/A							
City of Globe	N/A	N/A	7.8%	6.9%	6.5%	5.6%	5.3%	N/A
Town of Hayden	N/A	N/A	21.5%	19.2%	18.3%	15.8%	15.5%	N/A
Town of Miami	N/A	N/A	7.3%	6.4%	6.0%	5.2%	5.0%	N/A
Town of Payson	N/A	N/A	8.5%	7.5%	7.0%	6.0%	5.8%	N/A
Town of Star Valley	N/A	N/A	16.3%	14.5%	13.7%	11.9%	11.4%	N/A
Town of Winkelman	N/A	N/A	7.3%	6.6%	5.9%	5.0%	5.0%	N/A
Gila County	11.4%	12.5%	11.6%	10.2%	9.6%	8.3%	7.8%	7.2%
Arizona	9.9%	10.4%	9.5%	8.3%	7.7%	6.8%	6.0%	5.3%

Source: Arizona Department of Administration, Employment and Population Statistics (2016). Local area unemployment statistics (LAUS).

Note: Unemployment rates represent annual averages and are not seasonally adjusted

"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.

Table 20. 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, one in the labor	Children (ages 0-5) living with two parents, neither in the labor force		Children (ages 0-5) living with a single parent who is not in the labor force
Gila Region	2,367	32%	23%	1%	39%	4%
North	1,067	37%	33%	2%	28%	0%
Central	128	35%	0%	10%	12%	43%
South	1,133	28%	18%	0%	51%	3%
Hayden-Winkelman	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	3,354	28%	19%	1%	38%	14%
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: Due to small sample sizes, estimates for Hayden-Winkelman cannot be reliably calculated.

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

## **Food Insecurity**

The USDA defines food insecurity as a "household-level economic and social condition of limited or uncertain access to adequate food." In Gila County, 18 percent of the population is estimated to be food insecure, which is similar to the state as a whole (17%) (Table 21). Thirty-two percent of children (those under 18 years old) are food insecure, again, higher than the state's 27 percent. An estimated 77 percent of food insecure children in the region are likely to be income-eligible for federal nutrition assistance (Table 21). S2,53

Families' abilities to promote the health of their children is influenced by the built environment of their communities. In Gila County in 2012 (the most recent data available), there were 4.6 times as many fast-food restaurants as there were grocery stores (Table 22).<sup>iii</sup> In all of Gila County, there were only

<sup>&</sup>lt;sup>iii</sup> Based on the USDA definitions, grocery stores are defined here as "establishments generally known as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included in this industry are delicatessen-type establishments primarily engaged in retailing a general line of food. Convenience stores, with or without gasoline sales, are excluded. Large general merchandise stores that also retail food, such as supercenters and warehouse club stores, are excluded."

https://www.ers.usda.gov/webdocs/DataFiles/Data\_Access\_and\_Documentation\_Downloads\_\_18030/documentation.pdf?v=42226

four fitness and recreation facilities in 2012, iv meaning that many families cannot reasonably access one of these facilities.

Other programs, such as 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. Although the number of young children participating in SNAP has declined since 2012, this program still supports over 1,600 children in the Gila Region annually (Table 23). WIC participation has also declined in the region (Table 24) but still serves a considerable portion of the population of women and children (76% in 2015). Table 26 provides a single month snapshot of participation in the program; 87 percent of the infants and 75 percent of the children who were enrolled in WIC claimed their benefits that month (January 2015).

One challenge to participating in SNAP or WIC may be the availability of retailers where WIC vouchers or SNAP EBT are accepted. In 2016, The Gila Region had few accessible WIC retailers. As of June 2016, there were seven WIC retailers across the region, and eight across the county (Table 27). In the Central and Hayden/Winkelman sub-regions, access to both SNAP and WIC retailers is low, with only two SNAP retailers in both sub-regions, with fewer WIC retailers (none in the Central sub-region, and 1 in the Hayden/Winkelman sub-region). In order to redeem SNAP and WIC benefits, residents must travel to other cities to do their grocery shopping.

Schools are an important part of the nutrition assistance system, especially for children that may be food insecure. Close to two-thirds (63-65%) of students in the Gila Region have been eligible for free or reduced-price lunch since 2012 (Table 28). At the same time, the percent across the state has hovered between 57 and 58 percent and in Gila County has ranged between 66 and 76 percent (Figure 8). There is variability by school district; three districts in the region had over 80 percent of students eligible for free or reduced-price lunch in 2016; Tonto Basin and Young Elementary Districts (both 83%) and Hayden-Winkelman Unified District (81%) (Table 29). 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>v</sup> to provide summer meals to children of all ages. The number of meals provided by SFSP has increased by 175 percent in Gila County, while that number has dropped by 10 percent across the state as a whole (Table 30; Figure 9).

In Gila County in January 2015, there were nine sites participating in the Child and Adult Care Food Program (CACFP), not counting adult care centers or emergency shelters. Most of these sites in the county were Head Start centers (n=8, 4 of which are located in the Gila Region), in contrast to the state where most CACFP sites are child care centers and preschools (Table 31). The number of meals served increased substantially (+25%) between 2014 and 2015 in Gila County, whereas the number of meals had a smaller increase statewide during the same period (+9%) (Table 33; Figure 10). All Head Start centers in the Gila Region participate in CACFP, but there are many child care centers in the county

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<sup>&</sup>lt;sup>iv</sup> Based on the USDA definitions, these are "establishments primarily engaged in operating fitness and recreational sports facilities featuring exercise and other active physical fitness conditioning or recreational sports activities, such as swimming, skating, or racquet sports"

https://www.ers.usda.gov/webdocs/DataFiles/Data\_Access\_and\_Documentation\_Downloads\_\_18030/documentation.pdf?v=42226

<sup>&</sup>lt;sup>v</sup> For more information on the Summer Food Service Program in Arizona, visit http://www.azsummerfood.gov/

who could participate in the program. Family and home child care providers can also participate in CACFP; however no data for these providers was received for this report.

Table 21. Food Insecurity and Eligibility for Federal Nutrition Assistance

		Food insecurity		Population of children (ages 0-17)	Food insecurity	Likely eligible for Federal Nutrition Assistance (ages 0- 17)
Gila Region	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	53,242	18%	77%	11,035	32%	81%
ARIZONA	6,731,486	17%	67%	1,622,073	27%	68%

 $Source: Feeding\ America\ (2016).\ Hunger\ in\ America.\ Retrieved\ from\ map.feeding america. or g/county/2014/overall$ 

Table 22. Food Environment

			Fast-food	thousand	Recreation &	Recreation and fitness facilities per thousand residents, 2012
Gila Region	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	7	0.13	32	0.60	4	0.08
ARIZONA	825	0.13	4,238	0.65	456	0.07

 $Source: USDA\ Economic\ Research\ Service\ (2014).\ Food\ Environment\ Atlas.\ Retrieved\ from\ www.ers. usda. gov/data-products/food-environment-atlas$ 

Table 23. Numbers of Young Children (Ages 0 to 5) Receiving SNAP Benefits, 2012 to 2015

	2012	2013	2014		Change from 2012 to 2015
Gila Region	1,900	1,871	1,767	1,643	-14%
Gila County	3,134	3,148	3,047	2,879	-8%
ARIZONA	296,686	290,513	277,345	249,712	-16%

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

Table 24. Infants and Children (Ages 0 to 4) Enrolled in the WIC Program as a Percentage of the Population, 2012 to 2015

	Number of children (ages 0-4) in 2010 US Census	2012	2012	2013	2013	2014	2014	2015	2015
Gila Region	2,240	1,898	85%	1,792	80%	1,728	77%	1,697	76%
Gila County	3,059	1,911	62%	1,805	59%	1,745	57%	1,712	56%
ARIZONA	455,715	255,332	56%	243,050	53%	233,012	51%	227,321	50%

Source: Arizona Department of Health Services (2016). [WIC datasets]. Unpublished data.

Table 25. Number of Women, Infants, and Children Enrolled in the WIC Program During 2015

	Total	Women	Infants	Children
Gila Region	2,269	572	626	1,071
Gila County	2,290	578	633	1,079
ARIZONA	310,181	82,860	87,836	139,485

Source: Arizona Department of Health Services (2016). [WIC datasets]. Unpublished data.

Table 26. WIC Participation Rates During January 2015

	Total	Women	Infants	Children
Gila Region	79%		ĺ	
Gila County	79%	79%	87%	75%
ARIZONA	79%	78%	84%	77%

Source: Arizona Department of Health Services (2016). [WIC datasets]. Unpublished data.

Note: The participation rate is the number of persons receiving WIC benefits during January 2015, divided by the total number of persons enrolled in the program.

Table 27. Retailers Participating in the SNAP or WIC Programs

		•		WIC retailers per 100,000 residents
Gila Region	42	90.07	7	15.01
North	19	79.81	3	12.60
Central	2	59.70	0	0.00
South	19	104.78	3	16.54
Hayden-Winkelman	2	149.25	1	74.63
Gila County	44	82.09	8	14.93
ARIZONA	4,038	63.17	644	10.08

Source: 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; United States Department of Agriculture (2016). SNAP Retailer Locator. Retrieved from https://www.fns.usda.gov/snap/retailerlocator.

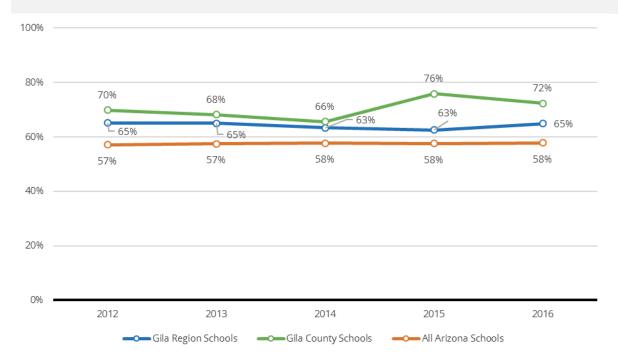
Notes: Per capita figures were calculated using the 2010 Census total population for each geography. SNAP and WIC retailers by geography account for the retailers falling within the geographic boundaries of a given area. WIC retailers account for retailers authorized through both the Arizona Department of Health Services and the Inter-Tribal Council of Arizona WIC Programs.

Table 28. Proportion of Students (Pre-kindergarten Through Twelfth Grade) Eligible for Free or Reduced-Price Lunch, 2012 to 2016

	2012	2013	2014	2015	2016
Gila Region	65%	65%	63%	63%	65%
Gila County	70%	68%	66%	76%	72%
ARIZONA	57%	57%	58%	58%	58%

Source: Arizona Department of Education (2016). [Free and Reduced Lunch dataset]. Unpublished data.

Figure 8. Proportion of Students (Pre-kindergarten Through Twelfth Grade) Eligible for Free or Reduced-Price Lunch, 2012 to 2016



Source: Arizona Department of Education (2016). [Free and reduced lunch dataset]. Unpublished data.

Table 29. Proportion of Students (Pre-kindergarten Through Twelfth Grade) Eligible for Free or Reduced-Price Lunch, 2012 to 2016

Gila Region Schools	<b>2012</b> 65%				<b>2016</b> 65%
Globe Unified District	63%				
Globe Offined District	03%	0290	0190	3790	0290
Hayden-Winkelman Unified District	68%	75%	77%	78%	81%
Miami Unified District	63%	65%	66%	64%	68%
Payson Unified District	64%	63%	60%	63%	62%
Pine Strawberry Elementary District	71%	66%	62%	67%	66%
Tonto Basin Elementary District	82%	81%	91%	86%	83%
Young Elementary District	85%	79%	90%	87%	83%
Gila Region Charter Schools	79%	79%	76%	70%	69%
Gila County Schools	70%	68%	66%	76%	72%
All Arizona Schools	57%	57%	58%	58%	58%

 $Source: Arizona\ Department\ of\ Education\ (2016).\ [Free\ and\ reduced\ lunch\ dataset].\ Unpublished\ data.$ 

Note: The data for the districts and schools above is only for the schools that fall within the regional boundaries and thus may differ from the data for the district as a whole.

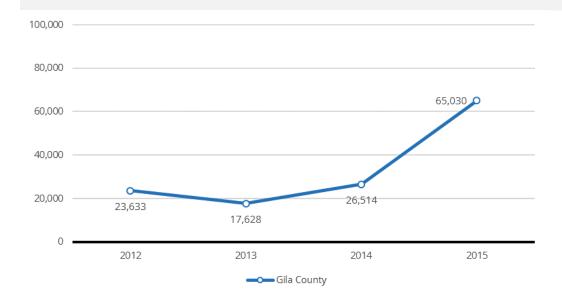
Table 30. The Summer Food Service Program (SFSP)

			Change in the number of meals from 2012 to 2015
Gila Region	N/A	N/A	N/A
Gila County	36	65,030	175%
Arizona	3,506	3,998,264	-10%

Source: Arizona Department of Education (2015). [Summer Food Service Program Dataset]. Unpublished data.

Note: The Summer Food Service Program serves children of all ages based on area eligibility. Sites must be located in the attendance area of a school or a census tract or block group where at least 50 percent of children are eligible for free or reduced price meals

Figure 9. Meals Served by the Summer Food Service Program (SFSP), 2012 and 2015



 $Source: Arizona\ Department\ of\ Education\ (2015).\ [Summer\ Food\ Service\ Program\ Dataset].\ Unpublished\ data.$ 

Table 31. Sites participating in CACFP by type, January 2015

	At-Risk Meal Service Center	Child Care Center or Preschool	Head Start Center	Outside School Hours Care Center
Gila Region	N/A	N/A	N/A	N/A
Gila County	0	1	8	0
Arizona	196	401	294	10

Source: Arizona Department of Education (2015). [Child and Adult Care Food Program Dataset]. Unpublished data.

Note: This does not include adult care centers or emergency shelters where meals were served.

Table 32. Number of Children Served by the Child and Adult Care Food Program (CACFP) in January 2015

	Breakfast	Morning snack	Lunch	Afternoon snack	Supper	Evening snack
Gila Region	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	379	109	379	379	0	0
Arizona	50,252	16,809	54,098	56,849	27,906	2,375

 $Source: Arizona\ Department\ of\ Education\ (2015).\ [Child\ and\ Adult\ Care\ Food\ Program\ Dataset].\ Unpublished\ data.$ 

Note: Meals served at adult care centers and emergency shelters were excluded from this table

Table 33. Meals Served by the Child and Adult Care Food Program (CACFP), 2012 and 2015

	Number of meals served in 2012	Number of meals served in 2015	Change from 2012 to 2015
Gila Region	N/A		
Gila County	58,611	73,304	25%
Arizona	19,923,277	21,773,052	9%

Source: Arizona Department of Education (2015). [Child and Adult Care Food Program Dataset]. Unpublished data.

100,000 80.000 73,304 64.520 61,344 58,611 60,000 40,000 20,000 2012 2013 2014 2015 Gila County

Figure 10. Meals Served by the Child and Adult Care Food Program (CACFP), 2012 and 2015

Source: Arizona Department of Education (2015). [Child and Adult Care Food Program Dataset]. Unpublished data.

### **Housing and Homelessness**

Of the 18,993 occupied housing units in the Gila Region, 74 percent are occupied by home-owners and 26 percent are occupied by renters (Table 34). Home-ownership rates are higher in two of the subregions, with the highest rates in the Central (88%) and Hayden/Winkelman sub-regions (83%). Homeownership across the region and all sub-regions is greater than elsewhere in the state (63%). The Gila Region looks slightly better than the state as a whole with regard to the cost of housing: 30 percent of Gila housing units require their residents to contribute more than 30 percent of their household income toward housing, compared to 34 percent statewide (Table 35). Housing is relatively more affordable in the Hayden/Winkelman sub-region, where only 11 percent of units cross the 30 percent cost threshold, whereas in the North sub-region, 36 percent do.

The high proportion of part-time residents in the Gila Region can be seen by the proportion of occupied vs. seasonal vacant housing units. Twenty-nine percent of all housing units in the region are seasonal vacant units, meaning they are used seasonally, compared to 62 percent of year-round occupied housing units (Table 36). The North and Central sub-regions have the highest proportion of seasonally vacant units (39% and 34% respectively), while the South and Hayden/Winkelman subregions have the lowest proportion of seasonally vacant housing units (both 7%).

The Department of Housing and Urban Development (HUD) maintains the Comprehensive Housing Affordability Strategy (CHAS) database, which tracks the share of housing units with housing problems. HUD defines four key housing problems: a lack of complete kitchen facilities, a lack of complete plumbing facilities, overcrowding, and high cost-burden (see note on Table 37). Twenty-eight percent of owner-occupied units have at least one of these problems compared to 46 percent of renteroccupied units; both these percentages are slightly lower than across the state as a whole (30% and

50% respectively) (Table 37). Within the region, the Central sub-region (34%) has the highest prevalence of housing problems of owner household units, while the Hayden/Winkelman sub-region (71%) has the highest prevalence of housing problems of renter household units. Housing problems may be particularly challenging for low-income families; with 15 percent of renter housing units having a housing problem and a low-income householder in the Gila Region, this may place an additional burden on these already stressed families. Foreclosure rates in the region as a whole (0.55 foreclosures per 1,000 housing units) and most communities in the region were lower than that of the state (0.865), whereas the foreclosure rate in the South sub-region (1.09) was higher than the state rate (Table 38).

High housing costs and foreclosures can contribute to homelessness. The Homeless Management Information System (HMIS) collects data from emergency shelters, transitional housing program, permanent supportive housing, street outreach, homeless prevention and rapid rehousing, and service providers in Arizona. While no agencies in the Gila Region are required to report data to the HMIS, and therefore no client level data is available, HMIS does track agencies providing the services listed above in the county. Information on these agencies can be found in Table 39.

Table 34. Owner- and Renter-Occupied Housing Units

	Number of occupied housing units	Owner-occupied units	Renter-occupied units
Gila Region	18,993	74%	26%
North	9,783	75%	25%
Central	1,513	88%	12%
South	7,273	69%	31%
Hayden-Winkelman	424	83%	17%
Gila County	20,824	72%	28%
ARIZONA	2,387,246	63%	37%

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

Table 35. The Cost of Housing, Relative to Household Income

	Number of occupied housing units	Occupied housing units which cost 30% of household income, or more
Gila Region	18,993	
North	9,783	36%
Central	1,513	26%
South	7,273	25%
Hayden-Winkelman	424	11%
Gila County	20,824	29%
ARIZONA	2,387,246	34%

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

Table 36. Occupied and Vacant Housing

	Total housing units	Occupied housing units		Seasonal vacant housing units
Gila Region	30,619	62%	9%	29%
North	18,446	53%	8%	39%
Central	2,646	57%	9%	34%
South	8,932	81%	11%	7%
Hayden-Winkelman	595	71%	22%	7%
Gila County	32,925	63%	9%	27%
ARIZONA	2,874,548	83%	10%	7%

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

Table 37. Owner and Renter Housing Units with Housing Problems

	Owner Household Units	Owner Household Units with housing problems	Owner Household Units with housing problems and low- income householder	Renter household Units	Renter household Units with housing problems	Renter household Units with housing problems and low- income householder
Gila Region	14,540	28%	4%	4,445	46%	15%
North	1,295	30%	2%	130	35%	0%
Central	7,485	34%	4%	2,285	47%	15%
South	5,425	21%	6%	1,960	45%	17%
Hayden-Winkelman	335	18%	6%	70	71%	6%
Gila County	15,615	29%	5%	4,990	46%	16%
ARIZONA	1,527,519	30%	5%	842,001	50%	15%

 $Source: U.S.\ Department\ of\ Housing\ and\ Urban\ Development\ (2016).\ 2009-2013\ Comprehensive\ Housing\ Affordability\ Strategy\ (CHAS)\ Data.\ Retrieved\ from\ https://www.huduser.gov/portal/datasets/cp/CHAS/bg_chas.html$ 

Notes: Households with housing problems are defined as housing units with one or more of four HUD-defined housing problems: (1) unit lacks complete kitchen facilities; (2) unit lacks complete plumbing facilities; (3) household is overcrowded (more than one person per room); (4) household is cost-burdened (monthly housing costs exceeding 30% of monthly income). Low income households are those where household income is less than or equal to 30% of the HUD Area Median Family Income (HAMFI).

Table 38. Foreclosure Rates During May 2016

	Number of housing units	Number of foreclosures	Foreclosure rate per thousand
Gila Region	30,555	167	0.55
North	18,430	91	0.37
Central	2,684	4	0.09
South	8,903	69	1.09
Hayden-Winkelman	537	2	0.03
Gila County	32,925	1,811	0.55
ARIZONA	2,874,548	250,086	0.87

Source: REALTYTRAC, May 2016

Note: The number of foreclosures and foreclosure rate were pulled by zip code from REALTYTRAC. The number of foreclosures was apportioned according to the proportion of households in each zip code belonging to a given region or sub-region (according to the 2010 Census). The foreclosure rate was apportioned by multiplying the rate by the housing units in the zip code, apportioning using the proportion of households, and dividing that final number by the housing units in each fractional zip code to result in a foreclosure rate adjusted by the proportion of households belonging to each region/sub-region. The foreclosure rate for some sub-regions could not be calculated due to a lack of data for sparsely populated areas.

Table 39. Agencies Providing Homelessness and Shelter Services In Gila County

Organization	Location	Services Provided
Time-Out, Inc.: Shelter for Victims of Domestic Violence	Payson, AZ	Time Out is shelter that serves victims of domestic violence (men, women, and children) that reside in Gila County or in other Arizona communities, as well as those who come from out of state. The shelter offers 28 emergency shelter beds and 10 transitional housing beds for women and their children. The agency provides comprehensive domestic violence services including residential programs, crisis intervention, individual and family strengthening, economic independence support, legal advocacy, as well as individual, group, and family therapy. Time Out has operators and staff that are bilingual in English and Spanish, and services are also accessible to those with speech and hearing disabilities.
Horizon Health and Wellness	Globe, AZ	Horizon Health and Wellness is a health care agency that comes from the merging of two entities: Horizon Human Services and Mountain Health and Wellness. Facilities in Pinal, Gila, and Yuma Counties provide inpatient, outpatient, and residential services. Additionally, through partnership with organizations including Cenpatico Arizona, Health Choice Integrated Care, and Mercy Maricopa Integrated Care, Horizon Health and Wellness, provides mental and behavioral health services. The agency seeks to provide a broad range of services for whole person care by integrating primary health care services with those for behavioral health in addition to promoting both wellness and prevention. Specific services include community housing, assisted living, anger management, adult day treatment, vocational rehabilitation, and many others.
Gila County Community Services Division	Globe, AZ	The Community Services Division consists of four departments that provide services to Gila County residents. The departments consist of the Community Action Program (CAP), Housing Services/Section 8 Housing Choice Program, Gila Employment and Special Training (GEST), and the ARIZONA@WORK program. Each of the programs are aimed at building resident self-sufficiency and together, the programs offer services to residents who demonstrate financial need (CAP), have a physical or mental impairment (Choice Program), and residents who may be experiencing other barriers to self-sufficiency.  Housing Services/Section 8 Housing Choice Program provides vouchers so that very low income families are able to afford housing in privately owned rentals as well as receive assistance with the cost of utilities that comes with these rentals. Those seeking services must be legal citizens, pass background and fingerprint checks, and must not have an income that exceeds 50% of the State Housing Fund Income Guidelines for Gila County.  ARIZONA@WORK is a statewide workforce development network that provides employment opportunities and partners with employers to find qualified job candidates. The program has 47 local offices throughout Arizona and offers assessments, remedial education, skills training, job search assistance, case management, and other services that foster and promote self-sufficiency.
Community Action Program (CAP)	Payson, AZ	The Community Action Program (CAP), provides a variety of housing services for those in need of financial assistance and has three office locations: Globe/Miami Area, Payson Area, and Hayden/Winkelman. The program provides utility payment and deposit assistance, eviction prevention assistance, mortgage assistance, and utility discount programs with services including Arizona Public Service Electric Company (APS), Southwest Gas, and Lifeline (phone service program for low-income consumers). Aimed at helping residents achieve self-sufficiency, the program's services are individualized through case management, and emergency assistance is offered to those who qualify. Gila County residents must meet the federal poverty income guidelines and have a documented need for assistance in order to be considered for CAP services.
The Caring Place: Advocate House	Miami, AZ	This agency serves as a shelter for women who are victims of domestic violence.
Veterans Helping Veterans	Payson, AZ	Pondersosa ManorVeterans Helping Veterans is a private rehabilitation center located in Payson, AZ. The center provides personalized substance rehab services.

Source: List of agencies provided by HMIS through personal correspondence



**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. 55,56,57,58 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>59</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>60</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>61</sup>

In 2010, the Arizona legislature, recognizing the importance of early reading proficiency, enacted Move on When Reading legislation to support building literacy skills in the early grades. Part of the legislation is Arizona Revised Statute §15-701, which states that, as of school year 2013-14, a student shall not be promoted from the third grade if the student obtains a reading score that falls far below the thirdgrade level as established by the State Board of Education. 62 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 was the Arizona's Instrument to Measure Standards (AIMS). 63 In 2014, the statewide assessment tool for English language arts (ELA) (including reading and writing) 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. 64 AzMERIT scores are now used to determine promotion from the third grade in accordance with the Move on When Reading law. New proficiency cut points were determined by grade level, <sup>65</sup> and earning a score of "proficient" or "highly proficient" indicates that a student is prepared for the next grade without requiring additional support. 66 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>67</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>68</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>69</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>70,71</sup>

# What the Data Tell Us

#### **Standardized Test Scores**

Gila Region school district boundaries are shown in Figure 11. The AzMERIT, which replaced 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 32 percent of Gila Region students attained these scores on the third grade math assessment, which was a lower passing rate than across Arizona as a whole (41%), but higher than that across the county (28%) (Figure 12). Performance on the English language arts (ELA) test was similar, with 31 percent of Gila Region students demonstrating proficiency, compared to 40 percent across the state and 25 percent across the county (Figure 13). A portion of the 48 percent of Gila Region third graders who scored minimally proficient 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. Vii

As a whole, Gila Region charter schools had the highest achievement rates in math (50% passing), surpassing the districts (Table 40). Only the Gila Region charter schools (62% passing ELA) and Pine Strawberry Elementary District (38% passing ELA) had more than one-third of third-grade students passing English language arts (Table 41). The district with the lowest proficiency rate in math was Hayden/Winkelman Unified District (15% passing math (Table 40). In ELA, Hayden/Winkelman Unified District and Miami Unified District (both 23% passing ELA) had the lowest proficiency rates (Table 41).

A sample of students in Arizona 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. 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.<sup>72</sup>

Strong disparities in NAEP scores exist in the state 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/reduced-

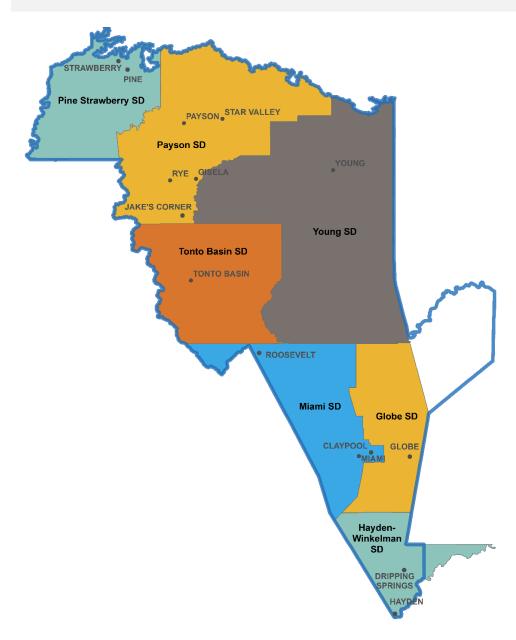
 $<sup>^{</sup>vi}$  Information on individual schools is available through the Arizona Department of Education's website: http://www.azed.gov/research-evaluation/aims-assessment-results/.

vii 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.

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.

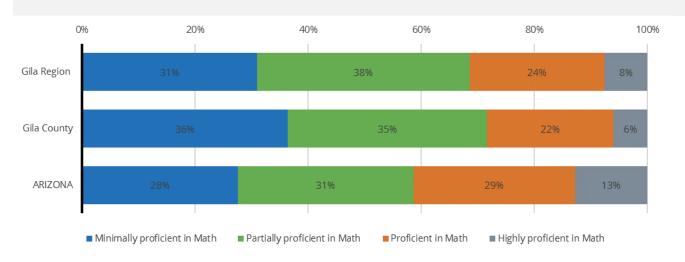
Student performance in the Gila Region, and statewide, suggests that there is much work to be done to support early literacy and to strengthen scholastic achievement, particularly among young children of color and children in poverty.

Figure 11. School Districts of the Gila Region



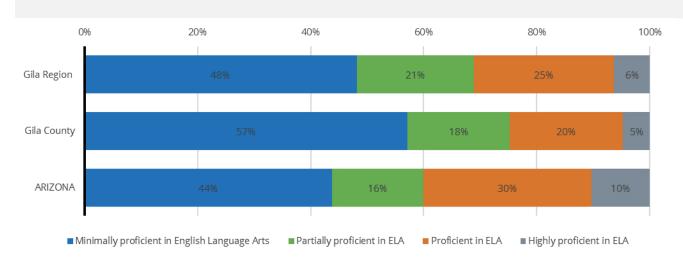
Source: First Things First (2016). Map produced by First Things First.

Figure 12. AzMERIT Math Test Results for Third-Graders in the 2014-2015 School Year



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

Figure 13. 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 40. AzMERIT Math Test Results for Third-Graders in 2014-15, by School District

	Minimally proficient in Math	•	Proficient in Math	Highly proficient in Math	Passing Math (proficient or highly proficient)
Gila Region Schools	31%	38%	24%	8%	31%
Globe Unified District	32%	35%	27%	6%	33%
Hayden-Winkelman Unified District	46%	38%	15%	0%	15%
Miami Unified District	33%	38%	25%	3%	29%
Payson Unified District	34%	39%	21%	6%	27%
Pine Strawberry Elementary District	31%	38%	8%	23%	31%
Tonto Basin Elementary District	DS	DS	DS	DS	DS
Young Elementary District	DS	DS	DS	DS	DS
Gila Region Charter Schools	9%	41%	32%	18%	50%
Gila County Schools	36%	35%	22%	6%	28%
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 above may not add to 100% due to rounding.

Table 41. AzMERIT English Language Arts Test Results for Third-Graders in 2014-15, by School District

	proficient in	English Language	Proficient in	Highly proficient in	Passing English Language Arts (proficient or highly proficient)
Gila Region Schools	48%	21%	25%	6%	31%
Globe Unified District	52%	22%	24%	3%	26%
Hayden-Winkelman Unified District	62%	15%	23%	0%	23%
Miami Unified District	55%	23%	21%	2%	23%
Payson Unified District	47%	23%	21%	9%	30%
Pine Strawberry Elementary District	54%	8%	38%	0%	38%
Tonto Basin Elementary District	DS	DS	DS	DS	DS
Young Elementary District	DS	DS	DS	DS	DS
Gila Region Charter Schools	26%	12%	44%	18%	62%
Gila County Schools	57%	18%	20%	5%	25%
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.

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

#### **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 42 shows these percentages for public school students in 1<sup>st</sup> through 3<sup>rd</sup> grades in the region. The percentage of 1<sup>st</sup> through 3<sup>rd</sup> grade elementary school students who were chronically absent increased from 2014 (43%) to 2015 (48%) in the Gila Region, and were higher than those percentages across the state (34% in 2014 and 36% in 2015). The proportion of students who were chronically absent in Gila County in 2014 (47%) and 2015 (51%) were higher than those across the Gila Region. Some variability existed across school districts in the region, with Payson Unified District having 54 percent of students chronically absent in 2015, and Pine Strawberry Elementary District chronic absences jumped from 32 percent in 2014 to 50 percent in 2015. The Young Elementary District had much lower proportions of chronic absences with 14 percent in 2014 and 33 percent in 2015. Identifying and addressing the reasons behind chronic absenteeism is important to ameliorate later effects on educational achievement and graduation rates.<sup>73</sup>

The high school drop-out rate in Gila Region fell slightly to four percent in 2015, from a high of five percent in 2012 (Table 43). The rate in the Gila Region has been similar to the county and state rate over time (Table 43). The Gila County Regional School District is the county accommodation district, established in 2005 to serve students involved in the justice system, or those who had not been successful in local schools.<sup>74</sup> Because their mission is specifically to serve students at risk of dropping out, the drop-out rate in that district is substantially higher (25% in 2015). The one charter high school in the region also has a higher drop-out rate than the district schools (10% in 2015). The four-year graduation rate in the Gila Region (76%) was the same as Arizona as whole (76%), and has improved slightly from previous years (Figure 14). Hayden-Winkelman Unified District stands out as a highperformer: 90 percent of students graduate in four years. In addition, Globe Unified District (86%) and Miami Unified District (84%) had students graduating in four years at a higher rate than the state. Fewer than half (46%) of students in the Gila County Regional School District graduated in four years (Table 43).

Educational attainment of adults aged 25 and older in the Gila Region lags behind the state as a whole. Although Gila Region adults are more likely to complete high school or have a GED (30%) than adults across the state (25%), and to have some college or professional training (37% vs 34% statewide), they are less likely to have a bachelor's or higher degree (18% vs 27% statewide) (Table 44). In addition, one in five adults in the South sub-region has less than a high school education. In 2015, unemployment rates for those with less than a high school diploma (8%) were over twice that of those with an associate's degree (3.8%) and Bachelor's degree (2.8%, decreasing for higher degrees) nationally. <sup>75</sup> The relation between unemployment and education may be complicated in areas with the highest unemployment, such as some areas of the region, with the lack of job opportunities leaving residents with little incentive to pursue higher education.<sup>76</sup>

Table 42. Chronic Absences for Students in Grade 1 to 3, 2014 and 2015

		Number of students in	Students with chronic (more than 10)	absences	Number of students	(more than 10) absences	Percent of students with chronic absences in 2015
Gila Region Schools	10	1,461	623	43%	1,475	702	48%
Globe Unified District	1	410	164	40%	432	184	43%
Hayden-Winkelman Unified District	1	50	14	28%	55	17	31%
Miami Unified District	1	274	115	42%	259	125	48%
Payson Unified District	2	573	280	49%	571	306	54%
Pine Strawberry Elementary District	1	34	11	32%	46	23	50%
Tonto Basin Elementary District	1	25	<10	32%	21	10	48%
Young Elementary District	1	<10	<10	14%	<10	<10	33%
Gila Region Charter Schools	2	137	44	32%	137	51	37%
Gila County Schools	11	1,950	912	47%	1,949	995	51%
All Arizona Schools	1,185	278,142	93,719	34%	283,147	103,078	36%

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

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.

Table 43. High School Drop-Out and Graduation Rates, 2012 to 2015

	Total number of high schools and alternative schools	Drop-out	Drop-out rate, 2013	Drop-out rate, 2014		graduatio n rate,		graduatio n rate,	Four-year graduatio n rate, 2014
Gila Region Schools	10	5%	5%	3%	4%	75%	72%	70%	76%
Gila County Regional School District	2	29%	28%	18%	25%	40%	41%	25%	46%
Globe Unified District	1	3%	3%	2%	5%	89%	87%	79%	86%
Hayden-Winkelman Unified District	2	DS	0%	DS	DS	82%	77%	74%	90%
Miami Unified District	1	DS	2%	3%	3%	75%	76%	90%	84%
Payson Unified District	3	3%	5%	3%	2%	78%	81%	74%	75%
Gila Region Charter Schools	1	13%	7%	11%	10%	57%	47%	48%	63%
Gila County Schools	17	6%	6%	5%	5%	72%	68%	68%	75%
All Arizona Schools	836	4%	3%	3%	4%	78%	77%	76%	76%

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

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 14. High School Graduation Rates, 2012 to 2015 100% 78% 77% 76% 76% 76% 80% 72% 70% 72% 68% 68% 60% 40% 20% 0% Gila Region Schools Gila County Schools All Arizona Schools

■ 2012 ■ 2013 ■ 2014 ■ 2015

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

Table 44. Level of Education for the Adult Population (Ages 25 and Older)

		Less than high school		_	Bachelor's degree or more
Gila Region	34,335	15%	30%	37%	18%
North	17,769	11%	30%	38%	22%
Central	2,557	13%	31%	42%	14%
South	13,123	21%	29%	35%	15%
Hayden-Winkelman	886	14%	33%	42%	11%
Gila County	38,319	16%	30%	36%	17%
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 brain development as well as later achievement and success. Just as rich, stimulating environments can promote development, early negative experiences can also carry lasting effects. Gaps in language development between children from disadvantaged backgrounds and their more advantaged peers are already evident by 18 months of age; those disparities that persist until kindergarten are predictive of later academic problems.

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. 80,81 This is particularly true for children from disadvantaged backgrounds. 82 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. 83

Investing 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. Experts estimate that investments in quality early learning initiatives can offer returns as high as \$16 per dollar spent. 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. 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. If not enrolled in publically-funded programs, which are often free or reduced cost, the annual cost of full-time center-based care for a young child in Arizona is nearly equal to the cost of a year at a public college (\$9,166).

Child care subsidies can be a support for families who have financial barriers to accessing early learning services. <sup>92</sup> The number of subsidies to families in Arizona through the Child Care and Development Fund (CCDF) has increased recently. In 2015, 38,855 children aged birth to 5 (about 7% of Arizona's children in this age range) received CCDF vouchers, up from 26,685 (about 5% of children aged 0–5) in 2014. With half of young children in Arizona living below the federal poverty level, the number in need of these subsidies is likely much higher than those receiving them.

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.)93 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 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 their child care as "excellent;" however, this runs contrary to research which suggests most child care across the country is not high quality. 94 How parents perceive and understand quality may differ; this points to the importance of quality rating 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 can 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 state standards and child assessment, and providing a nurturing relationships between adults and children that promote emotional, social, and academic development. The number of providers across the state that meet quality standards (threestar 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. 95

Arizona was one of five states to receive a federal Preschool Development Block Grant (PDG) in 2015, with funding totaling \$80 million over fiscal years 2017-2020. A main goal of this funding is to expand the number of quality preschools enrolled in Quality First in underserved areas through a partnership between First Things First and the Arizona Department of Education. The grant will also support early childhood infrastructure development, early-learning provider partnerships, and coordination of early childhood funding.<sup>96</sup>

The presence of qualified, well-trained, caring professionals is essential to providing quality child care and early education experiences for children. 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. 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, after adjusting for inflation. In addition, average annual wages for early education professionals in Arizona are about half that of kindergarten and elementary teachers, which may affect retention of those in early education settings, particularly after degree attainment.<sup>97</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>98,99</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." 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, and are at an increased risk for maltreatment and neglect. Almost half (46%) of families with a child with special needs in Arizona have incomes below 200 percent of the federal poverty level.

Ensuring all families have access to timely and appropriate screenings for children who may benefit from early identification of special needs is paramount to 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>105,106,107</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>108</sup> the Arizona Early Intervention Program (AzEIP), <sup>109</sup> and the Division of Developmental Disabilities (DDD). <sup>110</sup>

# What the Data Tell Us

#### **Child Care and Preschool**

According to data from the American Community Survey, 28 percent of children in the Gila Region aged 3 and 4 were enrolled in nursery school, preschool, or kindergarten, meaning that fewer participate compared to children statewide (36%) (Figure 15). The lowest rates of participation occur in the North sub-region, with only 14 percent of 3 and 4 year olds participating in school.

Enrollment in early care and education is influenced by the availability of child care in the region. According to the most recent data available in 2015 and 2016, there were 22 registered child care providers approved to serve up to 645 children in the Gila Region (Table 45). The Arizona Department of Economic Security's 2014 Market Rate Survey<sup>111</sup>, which surveyed a total of 3,717 child care providers (1,756 licensed centers, 1,552 approved family homes, 280 certified group homes, and 129 unregulated homes listed with CCR&R), found that providers typically provided care to about 58 percent of their approved capacity. This suggests that the actual availability of child care slots in the region may be closer to 374. With a population of young children of about 2,688 in the region (see Table 1), there are likely to be between four and seven young children for each available child care slot in the region. Keeping in mind the definition of a child care desert, that there are more than three times as many children under age five as there are spaces available in the child care settings, 112 it seems likely that parts of the Gila Region fall within this definition. In particular, the Central sub-region has a population

viii Note that this is a rough estimate. Not all slots are for children birth to five. For instance, some providers serve children up to 12 in after-school programs, and not all providers accept infants.

of 124 children aged birth to 5, but total capacity to serve just 16 children, or 1 slot for every eight children. Figure 16 presents a map of registered early education and child care providers located throughout the Gila Region.

Fifty-six interviews were conducted with parents (n=50) and grandparents (n=11)<sup>ix</sup> of children under the age of six, living in or near the communities of Globe, Miami and Payson, Arizona in July and September, 2016. These interviews took place at Head Start Centers, preschools, child care centers, and community events in those communities. The goal of the interviews was to gather input from parents on the availability, quality and use of child care, health care and dental care for their children in the communities in which they lived. In addition, respondents provided their perspectives on other resources available to young children and families, as well as their experiences raising young children.

Interviews with parents and grandparents revealed than many stayed home with or had a family member stay home with their children due to the cost of child care, a lack of quality providers, or a lack of trust in available and affordable providers. Those indicating a lack of trust in providers typically reported that they preferred to stay home with their child or to leave their child with a trusted family member.

The lack of child care providers, and quality providers in particular, was also commonly cited as a barrier to the use of child care in the region. Some respondents noted that a number of child care centers and providers had recently closed, limiting options, especially for parents with infants needing child care. When asked to list available child care options, most respondents could name only one or two options, and in some cases could list no other options than the program or center they were currently using. The lack of child care, particularly affordable child care and infant care, was often cited by those interviewed as one of the things that makes it hardest to raise young children in their communities.

When asked if they would take advantage of universal pre-k if it was available, 95 percent (all but three) of parents said they definitely or probably would, and many responded enthusiastically to such an option. A small minority (n=6) said they would if only a half-day option was available so that they could still care for their children part-time, or that they weren't sure and would have to know more about the quality of the teachers or teaching first. The majority, however, said a full-day option would be preferable to allow parents to work and to allow their children increased exposure to an early learning environment to better prepare them for kindergarten. Those who would not take advantage of universal pre-k were parents who home schooled their children and would prefer to continue to do that.

Of the 22 known child care providers in the Gila Region, six are private child care centers, nine are family child care homes, three Head Start Centers<sup>x</sup>, and four are public school preschool classes. About one-third of these providers (n=6) are participating in the Quality First program. Four of the Quality First sites in the Gila Region are centers and serve the majority of children in Quality First care (n=268),

<sup>&</sup>lt;sup>ix</sup> The total number of participants exceeds the number of interviews completed as some interviews were completed with multiple participants, e.g., both parents or both grandparents.

 $<sup>^{</sup>m x}$  It should be noted there is a home-based Head Start program in Winkelman that is not listed with CCR&R, details of which are included in a following section.

compared to the two Quality First home-based providers in the region with the capacity to serve 15 (Table 48). Of the six child care providers that participate in the Quality First program in the Gila Region, all have achieved the 3-, 4- or 5- star ratings, indicating they are meeting or exceeding quality standards. This represents 100 percent of all Quality First sites in the region, much higher than the equivalent across the state (48% of Quality First sites across the state have a 3-star rating or higher) (Table 47).

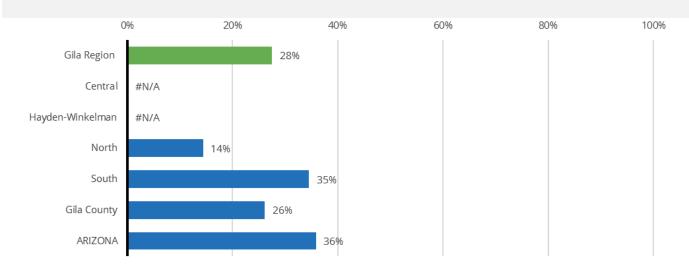
There are six schools in the Gila Region that provide preschool classes with one school providing preschool in every school district in the region except for Young School District (Figure 16). The majority of preschoolers in the region are enrolled in Globe Unified District at Copper Rim Elementary (n=63) or in Miami Unified School District at Little Vandal Preschool (n=54). There are 36 preschoolers enrolled in Payson Unified District at Julia Randall Elementary School, 20 preschoolers enrolled in Hayden-Winkelman Unified District at Leonor Hambly K-8 School, and fewer than ten preschoolers enrolled in Pine-Strawberry Elementary District at Pine Strawberry Elementary. About a third of preschool students enrolled in preschool across the region have special needs, but this percentage is higher in a few districts. Nearly three-quarters (72%) of preschoolers enrolled in Payson Unified District and nearly half (46%) of preschoolers enrolled in Miami Unified District have special needs. The preschool in Tonto Basin Elementary District only serves children with special needs.

There are nine registered child care providers, excluding Head Start centers and providers enrolled in Quality First (Table 45). Child Care Resource & Referral (CCR&R) maintains a database of child care providers serving children in Arizona through a partnership between the Arizona Department of Economic Security (DES) and Child & Family Resources, Inc.. Providers listed in this database are licensed, certified, regulated, or registered through the DES, Arizona Department of Health Services (ADHS), Arizona Department of Education (ADE), CCR&R, or a Military or Tribal Authority. The nine CCR&R providers<sup>xi</sup> in the region have a capacity to serve 150 children (Table 46). Most of these providers are family child care providers (7 sites, capacity to serve 32) or child care centers (2 sites, capacity to serve 118). Providers listed in the CCR&R database serving children in the region are located in the North or South sub-regions.

Pinal Gila Community Child Services Inc. (PGCCS) operates four Head Start sites in Gila County, centers in Globe, Miami and Payson, and a home-based provider in Winkelman. These PGCCS programs served 180 children in the Gila Region in the 2014-2015 school year, and slightly fewer, 172 in the 2013-2014 school year (Table 49). In the 2014-2015 school year, 25 children were on waitlists for Head Start and five were on waitlists for Early Head Start slots. The Globe Head Start had a total enrollment of 39 in 2014-2015 and only served children ages 2-4, with all but one aged 3 and 4 years (n=38) (Table 50). The three other sites served children younger than one through four years of age, with Miami having the highest enrollment (n=60) followed by Payson (n=55) and Winkelman (n=26). Globe Head Start offers only center-based enrollment, and Winkelman offers only home-based enrollment, whereas Miami and Payson Head Starts offer both types of services.

xi This does not include any providers that are Quality First Providers, Head Start programs, or public school preschools.

Figure 15. Estimated Numbers of Children (Ages 3 and 4) Enrolled in School



Source: U.S. Census Bureau (2016). American Community Survey, 5-year estimates (2010-2014), Table B14003

Note: Due to small sample sizes, estimates for the Central and Hayden-Winkelman sub-regions cannot be reliably calculated.

Table 45. Child care Capacity, by Type of Site

	Total nun total cap child care	acity of all	Numbe capacit Quality		Start si	y of Head tes ling any	based s	y of school-	Number capacity child care providers	of other
Gila Region	22	645	6	283	3	154	4	58	9	150
North	8	256	3	95	1	55	2	37	2	69
Central	5	15	0	0	0	0	1	1	4	14
South	8	354	3	188	2	99	0	0	3	67
Hayden-Winkelman	1	20	0	0	0	0	1	20	0	
Gila County	33	960	12	501	7	228	5	81	9	150
ARIZONA	3,053	173,566	916	75,173	201	14,665	313	10,280	1,623	73,448

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

Note: Head Start enrollment numbers for Gila County do not include enrollment data for tribal or migrant head start programs. Head Start enrollment numbers also do not include a home-based Head Start that operates in Hayden/Winkelman that has a capacity to serve 20 young children.

Table 46: CCR&R Child Care Provider Types

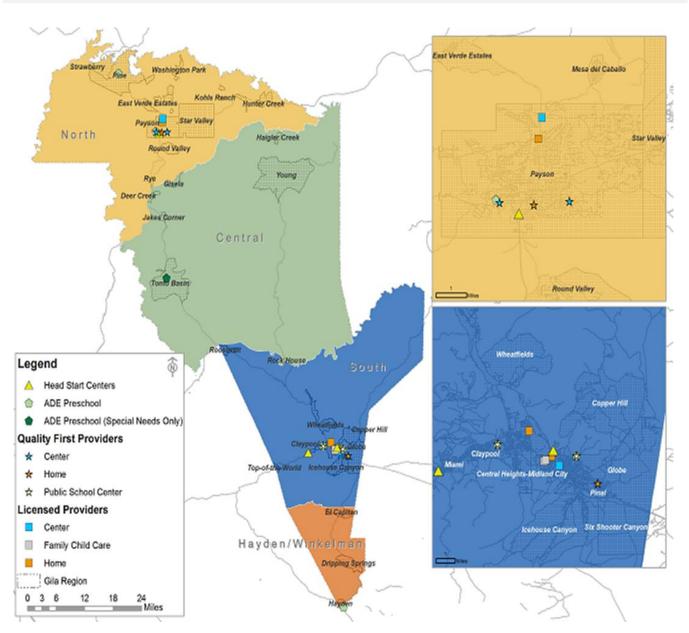
	Nanny / Indiv	ridual	Family Child	Care	Child Care Ce	nter	Total	
Gila Region	0	0	7	32	2	118	9	150
North	0	0	1	10	1	59	2	69
Central	0	0	0	0	0	0	4	14
South	0	0	6	22	1	59	3	67
Hayden/Winkelman	0	0	0	0	0	0	0	0
Gila County	0	0	7	32	2	118	9	150
Arizona	50	191	903	4,729	670	68,528	1,623	73,448

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

Note: This table does not include any providers that are Quality First Providers, Head Start program, or public school preschools. For those providers, please see earlier tables.

Note: The Child Care Resource & Referral guide is a database of child care providers serving children in Arizona that is maintained through a partnership between the Arizona Department of Economic Security (DES) and Child & Family Resources, Inc. Providers listed in this database are licensed, certified, regulated, or registered through the Arizona Department of Economic Security (DES), Arizona Department of Health Services (ADHS), Arizona Department of Education (ADE), Child Care Resource & Referral (CCR&R), or a Military or Tribal Authority. All child care facilities in the database must be licensed through DES or ADHS or regulated by a Military or Tribal Authority. Family Child Care Homes may be certified by DES, regulated by ADE as part of the Child and Adult Care Food Program, or registered with CCR&R through an application process. All individual providers listed are certified by DES. All providers and facilities listed in the database have met the basic requirements of passing a DCS background check, completing and infant/toddler CPR and First Aid certification, and maintaining an Arizona Level I Fingerprint Clearance Card.

Figure 16. Map of Early Education and Child Care Providers in the Gila Region



Source: Arizona Department of Economic Security (2016). [Child Care Resource & Referral dataset]. Unpublished data; First Things First (2016). Quality First, a Signature Program of First Things First. Retrieved from www.qualityfirstaz.com; Office of Head Start (2016). Head Start Locator. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/HeadStartOffices; Arizona Department of Education. [School Enrollment]. Unpublished data. Map produced by CRED.

Table 47. Numbers and Capacities of Quality First Sites, June 2016, by Star Rating

	Number of capacity of QF sites	of 1-star	Number of capacity of QF sites		Number of capacity QF sites	of 3-star	Number a capacity o QF sites		Number a capacity o QF sites	and of 5-star	Number a capacity o sites not publically	of QF rated	Total number and total capacity of all QF sites
Gila Region	0	0	0	0	4	268	1	10	1	5	0	0	6
Gila County	0	0	4	138	6	348	1	10	1	5	0	0	12
ARIZONA	2	96	288	27,350	262	20,978	143	10,106	36	2,350	180	13,880	911

 $Source: First\ Things\ First\ (2016).\ Quality\ First,\ a\ Signature\ Program\ of\ First\ Things\ First.\ Retrieved\ from\ www.qualityfirstaz.com$ 

Table 48. Quality First Providers by Type

	Cente	r	Head	d Start	Home		Total	
Gila Region	4	268	0	0	2	15	6	283
North	2	85	0	0	1	10	3	95
Central	0	0	0	0	0	0	0	0
South	2	183	0	0	1	5	3	188
Hayden/Winkelman	0	0	0	0	0	0	0	0
Gila County	7	388	2	80	3	33	12	501
Arizona	706	70,412	50	3,134	155	1,214	911	74,760

 $Source: Quality\ First, a\ Signature\ Program\ of\ First\ Things\ First\ (June\ 2016).\ Retrieved\ from\ www.quality first az.com;$ 

Table 49. Head Start Enrollment and Waitlist 2013-2014 and 2014-2015

Head Start Center	2013-2014 Enrollment	2014-2015 Enrollment	2014-2015 Head Start Waitlist	2014-2015 Early Head Start Waitlist
Globe	40	39	15	N/A
Miami	74	60	3	3
Payson	36	55	7	2
Winkelman	22	26	0	0
Total	172	180	25	5

 $Source: PGCCS\ data\ received\ through\ personal\ correspondence.$ 

Note: 2013-2014 Wait List numbers not available.

Table 50. Head Start Enrollment by Age 2014-2015

Head Start Center	Total Enrollment	Under 1 year Enrollment	1 year Enrollment	2 years Enrollment	3 years Enrollment	4 years Enrollment
Globe	39	0	0	1	17	21
Miami	60	9	5	8	23	15
Payson	55	3	5	4	12	31
Winkelman	26	8	2	6	4	6
Total	180	20	12	19	56	73

 $Source: PGCCS\ data\ received\ through\ personal\ correspondence.$ 

Table 51. Head Start Slots by Type of Service 2013-2014 and 2014-2015

Head Start Center	2013-2014 Center- based Enrollment	2013-2014 Home-based Enrollment	2013-2014 Combo Services Enrollment	2014-2015 Center- based Enrollment	2014-2015 Home-based Enrollment	2014-2015 Combo Services Enrollment
Globe	36	0	0	36	0	0
Miami	36	10	8	36	7	8
Payson	20	9	0	34	9	0
Winkelman	0	20	0	0	20	0
Total	92	39	8	106	36	8

Source: PGCCS data received through personal correspondence.

Note: Enrollment numbers may exceed the # of slots due to student turnover

#### Cost of Care

The cost of care in Gila County varies by the type of care and the age of the child receiving care; however, the median cost in the county relative to the cost of similar care across the state is lower for child care centers but higher for approved family homes and certified group homes. For example, residents in Gila County pay lower prices for child care centers (e.g., \$39 per day for infant care vs. \$42), but higher prices for approved family homes (e.g., \$25 per day for infant care vs. \$22), and certified group homes (e.g., \$30 vs. \$27) than parents statewide. Within the region, care in all types of settings is most expensive for infants, with care for infants in licensed child care centers highest (\$39) (Table 52), followed by certified group homes (\$30) (Table 54), and approved family homes (\$25) (Table 53). This is not surprising given that typically the lower teacher-to-child ratio needed for infant care necessitates a higher cost of care.

Families in the Gila Region are paying a slightly higher proportion (15-19%, depending on the child's age) of their overall income for a child care slot as other families statewide (Table 55). However, 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. Families in the Gila Region, in addition to paying more than across the state, are also paying more than the recommended 10 percent. Also, these percentages reflect the burden for families with only one young child in need of full-time care. Families with more children would spend a greater proportion of their income on child care. Additionally, these proportions were calculated based on the median income for all families. Single parent homes, particularly those with a single female householder, have a lower median income (\$18,504, Table 15), resulting in a higher proportion of their income being spent on child care. For example, the charge for full-time care for one infant is \$9,391 annually (Table 55), meaning that a single-female householder making the median household income would pay 51 percent of her income on child care for one infant. Additional children would make the cost higher, and in both circumstances would far exceed the recommended 10 percent of family income to be spent on child care.

The unaffordability of care was the most common barrier to accessing child care indicated by parents and grandparents interviewed in the region. Many parents reported that the family wage earner brought in minimum wage; in those situations, they noted that the cost of child care would be more than they make at that job and therefore it would be counterproductive to have their child in care. Similarly, a number of respondents noted that they would like to work outside the home, but the cost of child care doesn't make that feasible; instead, they choose to stay home with their children.

Those enrolled in Head Start or other subsidized early learning settings stated that without those options, child care would not be an option for their families. They also often stated that because subsidized programs like Head Start only provided half-day sessions, they either worked only parttime or stayed home to care for their children when not in Head Start, due to the difficulty in accommodating a half-day child care schedule with work. Those who did have child care outside of a subsidized child care option, often chose home-based care or babysitting due to the lesser cost, compared to center-based care. Given that the median cost of care in registered family homes is higher in the region than the state, and that the capacity for this type of care is low, respondents are likely to be referring to utilizing unregulated home-based care.

At the end of the interviews, parents and grandparents were asked the most important things that could be done in their community to improve the lives of young children and their families. One of the most pressing needs families identified was for additional and affordable child care options. Parents felt that adding additional child care slots to existing low-cost, quality options such as Head Start would be useful. Although some subsidized programs are available for low-income families, child care support for middle-income parents was also seen as a need, because many families just above those income cut-offs struggled to afford child care. Also mentioned was the need for full-day child care and early learning options; many programs currently available only offer half-day care which made parents' ability to work more difficult. The idea of free, universal pre-k was brought up by a number of parents as something they hope to see in the future.

Subsidies from the Department of Economic Security (DES) can help families shoulder the cost burden of child care. DES prioritizes assistance to families who receive Cash Assistance (TANF), those who are transitioning off Cash Assistance to employment, and families involved with the Department of Child Safety (DCS) for subsidies. The number of children in the Gila Region receiving a subsidy increased from 112 in 2014 to 144 in 2015 (Table 56). Almost half of the children who received subsidies in 2015 were involved with DCS; 83 percent of DCS-involved children received a subsidy, suggesting that this is an important support for children in the child welfare system (Table 57).

As of 2009, other families seeking DES subsidy support are placed on a waiting list. Statewide, 7,194 children were wait-listed as of January 6, 2017. The number of children on the waitlist in the Gila Region to receive support was less than 25 in 2013 through 2015 (Table 56).

Table 52. Median Daily Charge for Full-Time Child Care in Licensed Child Care Centers

		For one child, 1 or 2 years old	For one child, 3 to 5 years old
Gila Region	N/A	N/A	N/A
Gila County	\$39.00	\$37.40	\$31.25
ARIZONA	\$42.00	\$38.00	\$33.00

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

Note: The estimate above is a combined estimate for Gila and Pinal Counties.

Table 53. Median Daily Charge for Full-Time Child Care in Approved Family Homes

			For one child, 3 to 5 years old
Gila Region	N/A	N/A	N/A
Gila County	\$25.00	\$25.00	\$25.00
ARIZONA	\$22.00	\$20.00	\$20.00

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

Note: The estimate above is a combined estimate for Gila and Pinal Counties.

Table 54. Median Daily Charge for Full-Time Child Care in Certified Group Homes

			For one child, 3 to 5 years old
Gila Region	N/A	N/A	N/A
Gila County	\$30.00	\$29.95	\$29.95
ARIZONA	\$27.00	\$25.00	\$25.00

 $Source: Arizona\ Department\ of\ Economic\ Security\ (2016).\ [Child\ Care\ Resource\ \&\ Referral\ dataset].\ Unpublished\ data.$ 

Note: The estimate above is a combined estimate for Gila and Pinal Counties.

Table 55. Charge for Full-Time Child Care in Licensed Child Care Centers, as a Percentage of Median Annual Income

	Median family income for all families		·	For one child, 3 to 5 years old
Gila Region	N/A	N/A	N/A	N/A
Gila County	\$49,427	19%	18%	15%
ARIZONA	\$59,088	17%	15%	13%

Sources: Arizona DES (2016). [Child Care Resource & Referral dataset]. Unpublished data; and U.S. Census Bureau (2016). ACS, 5-year estimates (2010-2014), Table B19126

Table 56. Department of Economic Security (DES) Child Care Subsidies for Children (Ages 0 to 5), 2013 to 2015

	eligible for subsidy	eligible for subsidy	eligible for subsidy	receiving subsidy	receiving subsidy	subsidy	Children on waiting list during 2013		Children on waiting list during 2015
Gila Region	119	128	165	133	112	144	19	22	19
Gila County	184	181	212	181	151	182	19	29	23
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 57. DES Child Care Subsidies for Children Involved in the Department of Child Safety (DCS) During 2015

			Percent of DCS-involved children receiving subsidy
Gila Region	84	70	83%
Gila County	84	70	83%
ARIZONA	18,417	15,785	86%

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

## **Early Care and Education Professionals**

Formal education of Early Care and Education professionals is important for quality care and early learning. According to the 2012 Early Care and Education Workforce Survey, 50 percent of ECE teachers surveyed statewide had obtained an associate's, bachelor's or master's degree. Twenty-nine percent of assistant teachers had a Child Development Associate (CDA) credential, an associate's degree or higher, and 73 percent of administrative directors had an associate's degree or higher. Teachers and assistant teachers in Head Start and Early Head Start programs have higher rates of educational attainment. Across all Arizona Head Start programs, 83 percent of teachers and assistant teachers had at least one early education credential or degree, and a similar 82 percent of Early Head Start teachers and assistant teachers had at least one credential or degree.

The issues of staff retention and wages face all early care and education providers. According to the 2012 Early Care and Education Workforce Survey, the early care and education teacher turnover rate is the highest in the education field, averaging 30 percent across the nation. In spite of increasing numbers of teachers and assistant teachers obtaining a credential or college degree, early care and education teachers in Arizona in 2012 earned about half of the annual earnings for kindergarten and elementary school teachers, which translates into an hourly rate similar to that of the average high school graduate (\$9.45).

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

The Individuals with Disabilities Education Act (IDEA), mandates that all children with disabilities have a free, appropriate, public education (FAPE). IDEA incorporates an Infants and Toddlers with Disabilities Program (Part C) with the goal of enhancing the development of those young children, minimizing developmental delay, and reducing costs by lessening the need for special education services as children reach school age. IDEA Due to the plasticity of neural circuits in the first three years of life, both positive and negative experiences have a strong impact on the developing brain in the early years. Because of this, intervention is likely to be more effective and less costly if provided earlier in life. IDEA incorporates an Infants and Toddlers with Disabilities have

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 or at high risk of developmental delay. In the Gila Region and across Arizona, more children were referred to and served by AzEIP in FY2015 than in either of the two years prior (Table 58). In 2015, 51 children ages 0 to 2 were served through the AzEIP program in the Gila Region. Based on the 2010 population estimates for children birth to 2 (see Table 1), this means that AzEIP services to prevent and address developmental delay are provided to approximately four percent of children aged birth to 2 years in the Gila Region, comparable to the four percent statewide. Research suggests that about 13 percent of children from birth to 2 would typically qualify for early intervention services, <sup>120</sup> or about 178 children in the region. This suggests that over one hundred Gila children who are likely to benefit from early intervention services are not receiving them.

A small number of children in the region were served by the Department of Economic Security Division of Developmental Disabilities (DDD) in FY2015 (the most recent year of data). To qualify for DDD services an individual must have a cognitive disability, cerebral palsy, autism, epilepsy or be at risk for a

developmental disability. Children aged birth to 5 are eligible if they show significant delays in one or more of these areas of development: physical, cognitive, communication, social emotional or self-help.

The number of children aged 0 to 2, and aged 3 to 5 served by DDD in the Gila Region was less than 25 each year from 2012 through 2015 (Table 61). The number of children referred to and evaluated by DDD are too small to report because they fall between one and 24, which fall under FTF data suppression guidelines. In 2015 no children aged 0-2 in the Gila Region were evaluated by DDD, and the number of service visits for children aged 0-2 fell below 25 (from 563 in FY2014). Service visits also fell in Gila County but remained at 604 for children aged 0-2 years in FY2015. Meanwhile, service visits for children aged 3-5 increased from 463 in 2012 to 1,719 in FY2015 in the Gila Region.

The Head Start, Early Head Start, and public preschool programs are also supporting children who have disabilities. The proportion of children enrolled in either Head Start or Early Head Start in the region who had a disability decreased from 10 percent in the 2013–2014 school year to seven percent in the 2014–2015 school year (Table 63), despite a small increase in enrollment during that time period (see Table 49). The Head Start program in Winkelman had the highest proportion of students enrolled with disabilities in the 2013–2014 school year (18%) but this decreased by 10 percentage points the following year.

The number of preschoolers in special education in ADE preschools and elementary schools in Gila Region schools has decreased between 2012 (n=106) to 2015 (n=84) (Table 64). In October 2015, 61 preschool students were enrolled in special education preschool in the region, which represented 35 percent of students enrolled in preschool (Table 65). Among children who are in special education programs in public preschools in the Gila Region, the majority of children have either a developmental disability (49%) or speech or language impairment (35%) (Figure 17). There are very few children in regional schools with identified hearing impairments or vision impairments (Table 66). This may be because hearing impairments are frequently diagnosed as speech or language impairments in the preschool age group. For older children in the region, of the 1,894 children enrolled in kindergarten through third grade in October 2015, 12 percent are enrolled in special education services in school (Table 67). Given that this is about three times the rate of children birth to 2 in the region being served by early intervention services (AzEIP and DDD), it may be that children with delays are being identified and diagnosed when they are older, missing the earlier years when intervention can be more effective and less costly.

In 2015, there were approximately 150 children ages birth to five receiving services for special needs xii across AzEIP, DDD, Head Start, and public school districts in the Gila Region. This represents about 5.6 percent of all children ages birth to five in the region according to the 2010 Census (Table 1). This percentage is somewhat higher than the statewide percentage of 4.8 percent, as about 26,000 children receive special needs services across these agencies in Arizona. The National Survey of Children with Special Health Care Needs estimated that 7.6 percent of children from birth to five (and about 17% of

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xii It is important to note that this number is likely an overestimate of the children receiving special needs services due to double-counting. Children may receive services through multiple agencies (e.g., through both Head Start and a local school district) and thus this is not a count of unique children.

school-aged children) in Arizona have special health care needs. Xiii,121 The survey also estimates that nearly one in three Arizona children with special health care needs have an unmet need for health care services (compared to about one in four nationally). In the Gila Region, the two percentage point gap in estimated children with special needs and children receiving services for special needs represents over 50 young children who may need services but are not receiving them. This survey's estimate that 7.6 percent of children ages birth to 5 in Arizona have special health care needs is based on parent self-reports of special needs among children already identified as having special needs. By contrast, the estimate mentioned above, that 13 percent of children ages birth to 2 may have developmental delays that would benefit from intervention, comes from a national cohort survey with direct assessment by trained professionals. The true rate of children with special needs in the Gila Region is likely somewhere between these estimates, indicating that dozens of children may still be in need of services.

Table 58. Arizona Early Intervention Program (AzEIP) Referrals and Services for Children (Ages 0 to 2), 2013 to 2015

	referred to AzEIP	referred to AzEIP	referred to AzEIP	served by AzEIP	served by AzEIP	Children (ages 0-2) served by AzEIP during FY 2015
Gila Region	68	63	60	20 to 36	26 to 34	51
Gila County	91	80	94	33 to 41	38 to 46	80
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.

Table 59. Children (Ages 0 to 5) Referred to the Division of Developmental Disabilities (DDD), 2012 to 2015

	children (ages 0-2) referred	children (ages 0-2) referred	children (ages 0-2) referred	children (ages 0-2) referred	children (ages 3-5) referred	children (ages 3-5) referred	3-5) referred	Number of children (ages 3-5) referred in FY2015
Gila Region	<25	<25	<25	<25	<25	<25	<25	<25
Gila County	<25	<25	<25	<25	<25	<25	<25	<25
ARIZONA	1,439	2,186	2,479	2,484	1,393	1,401	1,804	1,969

xiii The survey defines children with special health care needs broadly 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."

Table 60. Children (Ages 0 to 5) Evaluated by the Division of Developmental Disabilities (DDD), 2012 to 2015

	children (ages 0-2) screened in	children (ages 0-2) screened	children (ages 0-2) screened	children (ages 0-2) screened	children (ages 3-5) screened	children (ages 3-5) screened	children (ages 3-5) screened	
Gila Region	<25	<25	<25	0	<25	<25	<25	<25
Gila County	<25	<25	<25	<25	<25	<25	<25	<25
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.

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

Table 61. Children (Ages 0 to 5) Served by the Division of Developmental Disabilities (DDD), 2012 to 2015

	children (ages 0-2) served in	children (ages 3-5) served in	children (ages 3-5) served in	children (ages 3-5) served in				
Gila Region	<25	<25	<25	<25	<25	<25	<25	<25
Gila County	30	26	<25	<25	<25	<25	<25	<25
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 62. Division of Developmental Disabilities (DDD) Service Visits for Children (Ages 0 to 5), 2012 to 2015

	service visits (ages 0-2) in	service visits	service visits (ages 0-2) in	service visits (ages 0-2) in	service visits (ages 3-5) in	service visits (ages 3-5) in	service visits (ages 3-5) in	Number of service visits (ages 3-5) in FY2015
Gila Region	1,131	1,049	563	<25	463	1,032	1,340	1,719
Gila County	1,542	1,259	803	604	463	1,032	1,341	1,733
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 63. Children with Disabilities Enrolled in Head Start 2013-2014 and 2014-2015

Center	2013-2014 Children w/ disability in Early Head Start or Head Start	2014-2015 Children w/ disability in Early Head Start or Head Start
Globe	10%	5%
Miami	9%	8%
Payson	6%	5%
Winkelman	18%	8%
Total	10%	7%

 $Source: PGCCS\ data\ received\ through\ personal\ correspondence.$ 

Table 64. Number of Preschoolers in Special Education, 2012 to 2015

		preschoolers in	Number of preschoolers in special education, 2013	preschoolers in special	Number of preschoolers in special education, 2015
Gila Region Schools	6	106	80	84	84
Globe Unified District	1	<25	<25	<25	<25
Hayden-Winkelman Unified District	1	<25	<25	<25	<25
Miami Unified District	1	46	<25	<25	<25
Payson Unified District	1	39	29	36	36
Pine Strawberry Elementary District	1	0	<25	<25	<25
Tonto Basin Elementary District	1	<25	0	<25	<25
Young Elementary District	0	0	0	0	0
Gila Region Charter Schools	0	0	0	0	0
Gila County Schools	7	128	102	110	110
All Arizona Schools	550	9,173	9,203	8,845	8,702

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.

Table 65. Pre-Kindergarten Students Enrolled in Special Education, October 2015

	Number of schools with pre- kindergarten	Number of students enrolled	Number of students in special education	
Gila Region Schools	6	175	61	35%
Globe Unified District	1	63	<25	DS
Hayden-Winkelman Unified District	1	20	0	0%
Miami Unified District	1	54	25	46%
Payson Unified District	1	36	26	72%
Pine Strawberry Elementary District	1	<10	0	0%
Tonto Basin Elementary District	1	<10	<25	DS
Young Elementary District	0	0	0	0
Gila County Schools	7	208	83	40%
All Arizona Schools	445	19,123	8,773	46%

Source: Arizona Department of Education (2016). [Enrollment 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: Data presented in the table represents a snapshot in time of enrollment in October, 2015. Therefore enrollment numbers differ than in the previous table which represents enrollment across a full school year.

Table 66. Types of Disabilities Among Preschoolers in Special Education, 2015

	Developmental Disability	Hearing Impairment	Severe Delay	0 0	Vision Impairment
Gila Region Schools	49%	0%	15%	35%	1%
Globe Unified District	55%	0%	0%	45%	0%
Hayden-Winkelman Unified District	100%	0%	0%	0%	0%
Miami Unified District	63%	0%	13%	25%	0%
Payson Unified District	33%	0%	28%	36%	3%
Pine Strawberry Elementary District	50%	0%	0%	50%	0%
Tonto Basin Elementary District	100%	0%	0%	0%	0%
Young Elementary District	N/A	N/A	N/A	N/A	N/A
Gila County Schools	49%	0%	17%	33%	1%
All Arizona Schools	41%	1%	21%	36%	1%

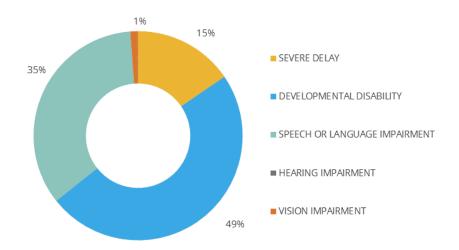
 $Source: Arizona\ Department\ of\ Education\ (2016).\ [Education\ dataset].\ Unpublished\ data.$ 

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 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).

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

Figure 17. Types of Disabilities Among Preschoolers in Special Education, 2015



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

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

Table 67: Kindergarten Through Third-Grade Students Enrolled in Special Education, October 2015

			Percent of students in special education
Gila Region Schools	1,894	233	12%
Globe Unified District	558	75	13%
Hayden-Winkelman Unified District	80	<25	9%
Miami Unified District	332	39	12%
Tonto Basin Elementary District	27	<25	4%
Gila Region Charter Schools	180	<25	DS
Gila County Schools	2,531	309	12%
All Arizona Schools	342,307	33,269	10%

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

Note: The data for the districts and schools above is only for the schools that fall within the regional boundaries and thus may differ from the data for the district as a whole.



**CHILD HEALTH** 

# Why Child Health Matters

Health encompasses not only physical health, but also mental, intellectual, social and emotional wellbeing. Optimal development brings all of these facets together. A child's health begins with its mother's health before she becomes pregnant and is influenced by early prenatal care. 122 The exposures and experiences in utero, at birth, and in early life set the stage for health and well-being throughout a child's life. 123,124 Access to health care and health insurance, 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. 125,126,127

One way to assess how well a region is faring is by comparing a set of indicators to known targets or standards. Healthy People is a federal initiative that 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.

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. 128 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. 129,130 Children who lack health insurance are also more likely to be hospitalized and to miss school. 131

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. 132 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>133</sup> and in July 2016 applications began to be accepted for the first time in six years, with coverage beginning September 1, 2016.<sup>134</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. 135

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. 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. 137,138,139

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. Babies born to obese women are at risk for chronic conditions in later life such as diabetes and heart disease. 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. 143

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>144</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. 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. Healthy People 2020 aims to increase the proportion of infants who were ever breastfed to 81.9 percent.

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. 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. Provided that the protects children from illness and protects children from ill

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. 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. More children in kindergarten in Arizona (52%) have tooth decay compared to children across the nation (36%). Within

Arizona, American Indian (76%) and Hispanic children (56%) are more likely to experience tooth decay than white children (34%).<sup>152</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 affect the well-being of children, <sup>153</sup> and injuries are the leading cause of death in children in the United States. 154 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. 155 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. 156 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>157</sup>, as well as included it as part of their Arizona Injury Prevention Plan. 158

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>159,160</sup> Obesity can have negative consequences on physical, social, and psychological well-being that begin in childhood and continue into and throughout adulthood. 161 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. One component of establishing a healthy weight – physical activity – also promotes improved visual-motor integration skills and object manipulation skills that in turn lead to improved executive function, social behaviors and ultimately school readiness for young children. 163 The availability and accessibility of recreational facilities and resources that promote physical fitness can affect the ability of both child and adult community members to reap the benefits of physical activity.

## What the Data Tell Us

## **Access to Care**

The Arizona Department of Health Services designates Primary Care Areas (PCAs) as geographically based areas in which most residents seek primary medical care from the same place. 164 There are two primary care areas that coincide with the Gila Region: Payson and Globe. Each PCA receives a score based on 13 weighted items to provide a snapshot of the health of area residents. 165,xiv In the Gila

xiv The 13 items (according to the Arizona Administrative Code R9-24-203) are population to provider ratio, travel distance to primary care provider, transportation score, percent of population under 200 percent of the federal poverty level (FPL), percent of population between 100 and 200 percent of the FPL, uninsured births, ambulatory-care admissions, low birthweight births, lack of prenatal care, percentage of

Region, both the Payson PCA and Globe PCA have a score of 34, from a range of 14 to 75, with the lower score indicating fewer public health risk factors. However, both the Globe and Payson PCAs are designated as Medically Underserved Areas (MUAs). MUAs are federally designated areas that have a need for medical services due to a shortage of primary care providers. Figure 18 shows the ratio of population to primary care providers by PCA as of July 2015. The Globe PCA had the lowest population-provider ratio, with 594 providers per person, while the Payson PCA had a slightly better ratio at 566 providers per person. Both the regions PCAs had population-provider ratios greater than that seen statewide (449 to 1), indicating a potential need for more primary care providers.

Parents and grandparents of children aged birth to 5 who participated in interviews throughout the Gila Region were asked about the availability and quality of health care providers for their children. Most parents and grandparents interviewed stated that they had a regular source of health care for their child; few said this was a pediatrician, more said they saw a family practice physician, and some saw a Physician's Assistant (PA) or Nurse Practitioner (NP) for their children. A minority of interviewees said they chose to travel to Mesa for primary care, either because they had moved from the valley and wanted to maintain their previous care, or that they wanted their child to see a particular pediatrician. Parents who had primary health care for their children also said they were happy with the quality of care their child received through that provider, although many mentioned difficulties getting appointments because there were so few health care providers in town, so patient loads for those that are available are high.

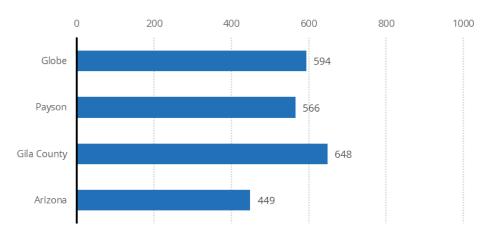
For specialty medical care the story was vastly different. The lack of specialty providers locally, even vision or hearing practitioners, was a common theme when speaking with parents and grandparents. Travel to Mesa or Phoenix was often necessary for any type of specialty care and put additional burdens on families with financial or transportation difficulties. The wait time for both primary and specialty care was also mentioned as a barrier, particularly for specialty care when referrals could be followed by waits of months to obtain an appointment.

Another key factor in health care is health insurance, and 11 percent of young children in the region were estimated to be uninsured, along with 14 percent of the total population in the Gila Region (Table 68). These proportions varied among the sub-regions. Children in the Central sub-region had the highest estimated uninsured rate (36%), much higher than the rate of the other sub-regions, the county (18%) and of the state as a whole (10%). Children in the North sub-region were least likely to be uninsured, with only six percent falling into that category. Of parents and grandparents of young children who were interviewed in the region, all but one stated that they had insurance for their young children, either through a private provider or AHCCCS (Arizona's Medicaid).

One way that children in Arizona have had access to health insurance is through the Affordable Care Act (ACA). As of February 2016, 46,700 children under 18 in Arizona were enrolled in federally facilitated marketplace plans through the ACA, representing 23 percent of those enrolled under ACA across the state. This is the highest proportion of young people enrolled in any state (tied with North Dakota and Utah); the national rate is nine percent. <sup>169</sup>

deaths before life expectancy, infant mortality rate, percent of minorities, elderly, and unemployed population, and whether the area as one or fewer full-time providers.

Figure 18. Ratio of Population to Primary Care Providers by Primary Care Area, July 2015



Source: Arizona Department of Health Services (2016). Primary Care Area Statistical Profiles. Retrieved from http://azdhs.gov/prevention/health-systemsdevelopment/data-reports-maps/index.php#statistical-profiles-pca.

Table 68. Estimated Proportion of Population Without Health Insurance

	Estimated population			Persons (all ages)
	(ages 0-5)	without health insurance	ages)	without health insurance
Gila Region	2,454	11%	44,856	14%
North	1,101	6%	22,095	12%
Central	135	36%	3,069	14%
South	1,179	14%	18,417	16%
Hayden-Winkelman	N/A	N/A	N/A	N/A
Gila County	3,557	18%	52,431	17%
ARIZONA	531,825	10%	6,453,706	16%

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

Note: Due to small sample sizes, estimates for Hayden-Winkelman cannot be reliably calculated.

## Pregnancies and Birth

In 2014, 443 Gila Region residents gave birth (Table 69). This represented less than one percent of the births statewide. Given that Gila Region residents make up less than one percent of the state population (see Table 3), this is about the number of births expected based on the size of the region's

population. Although the overall population of Gila County is expected to grow somewhat through 2040 (Table 5), the number of births in the county is expected to decrease (Table 70).

Table 69. Live Births During Calendar Year 2014, by Mother's Place of Residence

	Total number of births to Arizona-resident mothers in 2014
Gila Region	443
Gila County	649
ARIZONA	86,648

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

Table 70. Projected Number of Births Per Year, 2015 to 2040

	2015	2020	2025	2030	2035	2040
Gila Region	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	605	600	588	581	574	574
ARIZONA	86,475	94,177	102,207	108,600	112,982	116,633

Source: Arizona Department of Administration, Employment and Population Statistics (2015). State and county population projections (medium series).

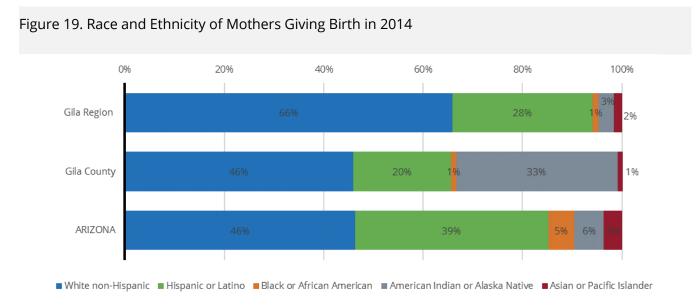
#### **Maternal Characteristics**

Of the 443 mothers who gave birth in the Gila Region in 2014, the majority (60%) were White, non-Hispanic (Figure 19). Just over one-quarter (28%) of births were to Hispanic or Latina mothers, three percent were to mothers who identified as American Indian, two percent were Asian or Pacific Islander and one percent were Black or African American. Compared to the state as a whole, mothers in the Gila Region were much more likely to be White, and less likely to be Hispanic or Latina. New mothers in the Gila Region had somewhat lower educational attainment than mothers statewide. Although over one-third (36%) had some college or professional education, only seven percent had attained a bachelor's degree or more compared to 23 percent statewide (Table 71). Over one half (56%) had a high school education or less, compared to 45 percent across the state without advanced training.

The population of new mothers in the Gila Region differed from those statewide on a number of attributes. Over half (54%) of mothers in the region were not married (45% statewide) and 12 percent were in their teens (8% statewide) (Table 72). In the Gila Region, two-thirds of births (66%) were to

mothers relying on AHCCCS or Indian Health Service (IHS) coverage, which was higher than the statewide proportion of 55 percent, although lower than the proportion across Gila County as a whole (74%). A much higher proportion of mothers in the Gila Region reported smoking (14.7%) than across the state (4.6%), and the region fell far above the Healthy People 2020 goal of 1.4 percent.

Along with smoking, 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, 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. <sup>171</sup> In the Gila Region, 26 percent of women participating in WIC were overweight, and 27 percent were obese, for a total of 53 percent who were overweight or obese before becoming pregnant (Figure 20). The rate of pre-pregnancy obesity among women participating in WIC in the region and county rose between 2012 and 2014 but then fell slightly in 2015. In Arizona this proportion has increased slightly but steadily since 2012, which mirrors national trends as well (Figure 21). 172



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

Table 71. Live Births During Calendar Year 2014, by Mother's Educational Attainment

	Less than high school		Some college or professional education	Bachelor's degree or more
Gila Region	21%	35%	36%	7%
Gila County	26%	35%	32%	6%
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.

Table 72. Other Characteristics of Mothers Giving Birth in 2014

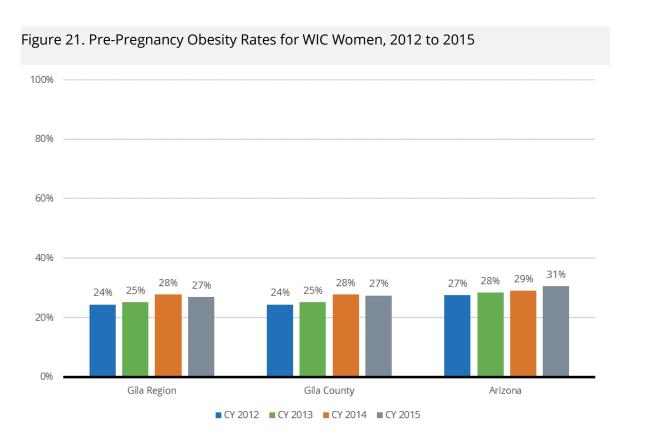
	Mother was not married		Mother was 17 or		Tobacco use during pregnancy
Gila Region	53.7%	11.7%	2.5%	66.4%	14.7%
Gila County	60.2%	12.6%	3.7%	73.8%	10.6%
ARIZONA	44.7%	7.6%	2.1%	54.5%	4.6%

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

Figure 20. Pre-Pregnancy Weight Status for WIC Women, 2015 0% 20% 40% 60% 80% 100% Gila Region 41% 26% 27% Gila County 41% 25% 27% 39% ARIZONA 27% 31%

■ Underweight ■ Normal ■ Overweight ■ Obese

Source: Arizona Department of Health Services (2016). [WIC datasets]. Unpublished data.



 $Source: Arizona\ Department\ of\ Health\ Services\ (2016).\ [WIC\ datasets].\ Unpublished\ data.$ 

## **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. 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 higher number of birth certificates with "unknown" prenatal care status (5.2% for the region). Across the Gila Region in 2014, 69 percent of pregnant women obtained prenatal care during the first trimester, meaning that the Healthy People 2020 goal was not met (Figure 22). In 2014 in Gila County 55.2 percent of pregnant women obtained prenatal care during the first trimester (Table 73). While the reason for the decline in timely prenatal care may be an artifact of the new reporting system, the data for 2014 indicate that not as many women as previously thought are obtaining prenatal care in the first trimester, which could have serious repercussions for child wellbeing. However, the decrease in the Gila Region was a smaller decline to that seen across the state (71.7% of births in 2014 were to mothers who began prenatal care in the first trimester, down from 82.6% in 2012).

However, the proportion of women of child-bearing age (18-45) who report that a doctor, nurse or other health care worker ever talked with them about ways to prepare for a healthy pregnancy and baby (that is, discussed preconception health) has been increasing in Gila County. The county rate was up from 59 percent in 2013 to 79 percent in 2014, the highest rate in the state. Statewide, this rate has fallen from 47 percent in 2011, to 35 percent in 2014. Healthcare providers in the Gila Region might be able to leverage discussions about preconception health to include stressing the importance of prenatal care.

Most mothers are receiving at least some form of prenatal care; less than seven percent (6.6%) of babies in the Gila Region were born to mothers who had had fewer than five prenatal care visits, similar to the proportion across the state (6.5%) (Table 73).

100% 82.6% 82.0% 81.9% 81.3% 20 4% 77.4% Healthy People 72.6% 80% 69.4% 2020 target 70.5% 77.9% or more 60% 40% 20% 2009 2010 2011 2013 ■ Gila Region ■ ARIZONA

Figure 22. Percent of Births With Prenatal Care Begun in First Trimester

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

Table 73. Live Births During Calendar Year 2014, by Number of Prenatal Visits

	No visits	1 to 4 visits	5 to 8 visits		13 or more	births with fewer than five prenatal care	Percent of births with prenatal care begun in first trimester
Gila Region	0.5%	6.1%	19.9%	42.7%	29.6%	6.5%	69.0%
Gila County	3.1%	10.6%	24.0%	36.2%	22.7%	13.7%	55.2%
ARIZONA	2.1%	4.4%	14.5%	46.9%	30.7%	6.5%	71.7%

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

#### **Birth Outcomes**

Babies in the Gila Region were doing somewhat better than babies born statewide in regard to perinatal health. In 2014, 6.1 percent of babies were low birth weight in the region, compared to seven percent across the state. The percent of premature births was even better by comparison, with 6.3 percent in the region, and nine percent across the state falling into this category (Table 74). 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 Gila Region has achieved both Healthy People 2020 goals (Figure 23; Figure 24). In addition, a lower proportion (4.5%) of newborns in the region were admitted to an ICU than across the state (6.7%).

Infants participating in WIC in the Gila Region (2015: 66.8%) lag behind the rates of those ever breastfed across the state (71.2%) and the Healthy People 2020 goal of 81.9 percent of babies ever being breastfed (Figure 25). Data on the complete (i.e., including those not participating in WIC) Gila Region infant population are unavailable. However, data from the National Immunization Survey on children born in 2013 estimated the Arizona statewide rate of infants ever-breastfed was 85.0 percent, suggesting that WIC participants are less likely to be breastfed than other infants.\* Thus, it is likely that the region overall is closer to the Healthy People 2020 goal. Additionally, although the rate among WIC participants (66.8%) in the region is below the target, it has increased overall since 2012, and by almost nine percent over the last two years (Figure 25).

In 2015, about five out of 100 newborns (5.1%) did not pass an initial hearing screen, slightly above the proportion across the state (3.8%). However, only 0.5 percent of those screened required a diagnostic evaluation and none were found to have confirmed hearing loss (Figure 26).

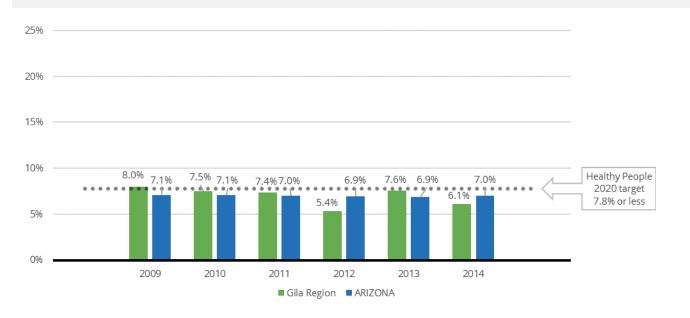
Table 74: Other Characteristics of Babies Born in 2014

	birthweight (5.5 lb. or			Healthy People 2020 target for premature births	Newborns admitted to intensive care unit
Gila Region	6.1%		6.3%		4.5%
Gila County	6.8%		8.8%		6.0%
ARIZONA	7.0%	Fewer than 7.8%	9.0%	Fewer than 11.4%	6.7%

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

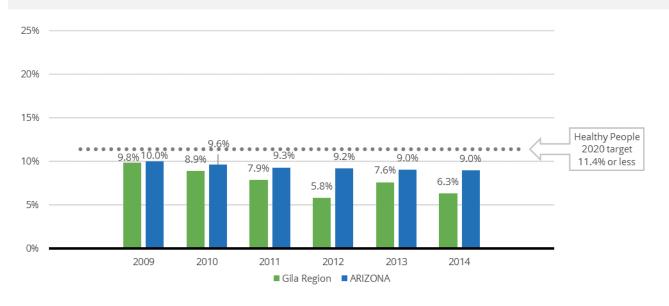
xv This estimate is based on a sample of 291 births in Arizona in 2013. Rates of Any and Exclusive Breastfeeding by State among Children Born in 2013. Data available at: https://www.cdc.gov/breastfeeding/data/nis\_data/rates-any-exclusive-bf-state-2013.htm

Figure 23. Percent of Babies Born in 2014 With Low Birthweight (5.5 Pounds or Less)



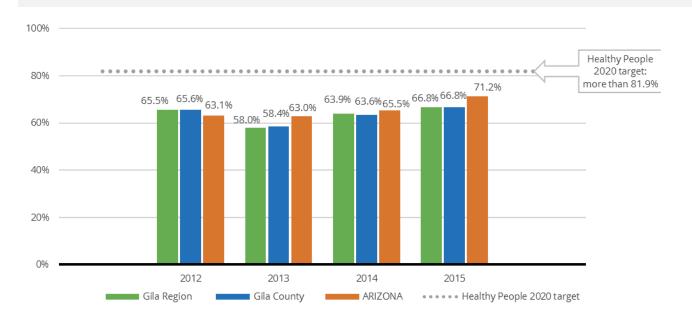
Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 24. Percent of Babies Born Premature in 2014 (37 Weeks or Less)

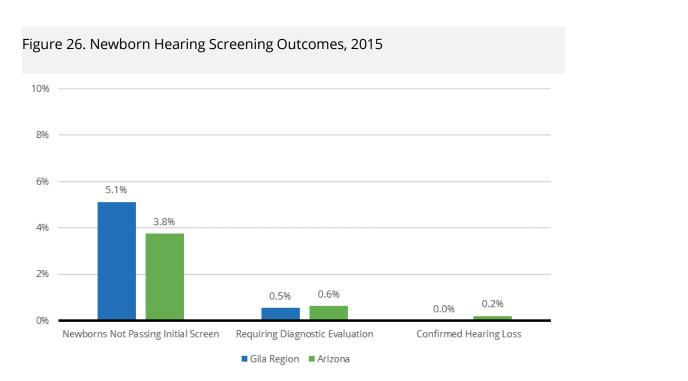


Source: Arizona Department of Health Services (2016). [Vital Statistics Births dataset]. Unpublished data.

Figure 25. WIC Infants Who Were Ever Breastfed, 2012 to 2015



Source: Arizona Department of Health Services (2016). [WIC datasets]. Unpublished data.



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

#### **Immunizations**

While immunization rates vary by vaccine, over 90 percent of children in child care in the Gila Region had completed each of the three major (DTAP, polio, and MMR) vaccine series; the regional rates were slightly higher than those of the state (Table 75). The Healthy People 2020 target for vaccination coverage for children ages 19-35 months for these vaccines is 90 percent, <sup>174</sup> suggesting the region is meeting this goal. However, given that state regulations require children enrolled in child care to be up to date on immunizations, it is possible that the rates of immunization for children in child care are higher than immunization rates for children not in child care. xvi If that is the case, the rates for the entire population of children in these areas may be lower than the Healthy People 2020 goal. One exception to the extensive vaccine coverage is Hepatitis A; only 69 percent of children in child care in the region had completed the recommended two immunizations, although this rate was much lower than across the state (81.5%). One possible explanation for this difference is that the Hepatitis A vaccine is not recommended until later in childhood, and the second dose may follow the first by as many as 18 months. xvii Rates for the three major (DTAP, polio, and MMR) vaccine series for children in kindergarten fell slightly below the rates for children in child care (Table 76). Rates of personal exemptions for vaccinations among children in child care (4.9%) and kindergarten (7.1%) in the region were higher than exemption rates at the state level (4% and 4.7% respectively) (Figure 27). A key informant<sup>xviii</sup> from an elementary school district noted that when registering their children for school, some parents opt to sign an immunization waiver when their child's immunization records are not readily available. The informant felt this action might inflate the immunization exemption rates in the region.

Table 75. Vaccination Rates and Exemption Rates for Children in Child care

				Two or more MMR	Three or more HIB		more Hep		Religious exemption	Medical exemption
Gila Region	390	92.6%	94.9%	96.2%	93.6%	69.0%	94.6%	96.2%	4.9%	0.5%
Gila County	440	92.0%	95.0%	96.6%	93.2%	70.2%	95.2%	96.6%	4.3%	0.5%
ARIZONA	92,128	92.0%	93.1%	93.6%	92.4%	81.5%	92.0%	94.6%	3.5%	0.5%

x<sup>vi</sup> For example, the National Immunization Survey (NIS) monitors vaccination coverage among U.S. children aged 19–35 months, and estimates the Arizona statewide rate for DTAP (Diphtheria, Tetanus, Pertussis, 4 or more doses) to be about 81 percent and the statewide rate for MMR (Measles, Mumps and Rubella, 1 or more doses) to be about 84 percent. Source: Hill, H., Elam-Evans, L., Yankey, D., Singleton, J., Kolasa, M. (2015). National, state, and selected local area vaccination coverage among children aged 19–35 months—United States. Morbidity and Mortality Weekly Report, 2014, 64(33), 889-896. Retrieved from: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6433a1.htm

<sup>&</sup>lt;sup>xvii</sup> The CDC immunization schedule recommends initiating the Hepatitis A vaccine at 12 through 23 months, with the second dose administered 6 to 18 months later. For more information see: https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html

xviii In attendance at the September 16, 2016 Data Interpretation Session.

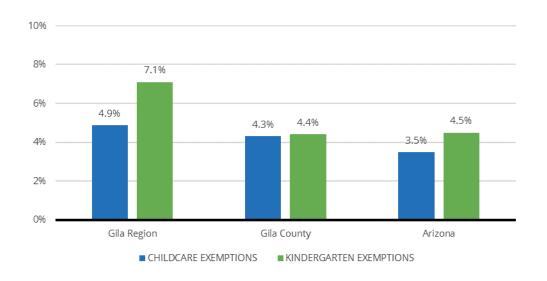
Source: Arizona Department of Health Services (2016). [Immunization Data Reports dataset]. Unpublished data.

Table 76. Vaccination Rates and Exemption Rates for Kindergarten Children

	l	Four or more DTAP	Three or more Polio		Three or more Hep B			Medical exemption
Gila Region	352	92.0%	92.6%	91.2%	94.6%	93.5%	7.1%	0.3%
Gila County	616	94.2%	94.8%	93.7%	96.8%	96.1%	4.4%	0.2%
ARIZONA	83,088	94.2%	94.6%	94.2%	95.5%	96.7%	4.5%	0.3%

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

Figure 27. Non-Medical Exemption Rates; Child care and Kindergarten



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

## Oral Health

To identify the trends in the oral health of the state's children, First Things First and the Arizona Department of Health Services administered the Healthy Smiles Healthy Bodies survey to 3,630

kindergarten children during the 2014-2015 school year.xix The survey was designed to gather information from Arizona's kindergarten children regarding prevalence and severity of tooth decay, and included dental screening and a parent and caregiver questionnaire component. 175 In the Gila Region, 173 children were screened and 55 parents or caregivers answered at least one question on the questionnaire given with their child's screening. Sixty-four percent of Gila Region's kindergarteners have experienced decay, which was slightly higher than the 52 percent of kindergarteners in Arizona. Untreated decay and need for dental care was identified for 43 percent of kindergarteners in the region, substantially higher than the state rate (27%). Although the state has met the 2020 benchmark (no more than 32% of children with untreated tooth decay) that puts it on track with the Healthy People's 2020 target of 26 percent, there remains a need for focused oral health efforts on primary prevention in the region to meet that goal.

Oral health care may be an under-emphasized issue with regards to children with special needs, because of the other, often more salient, health needs. In addition to the chronic conditions that children with special health care needs face, they also are twice as likely to have unmet oral health care needs that their typical peers, and face additional barriers to care including inaccessibility of dental offices and limited dentists willing to treat children with special healthcare needs. 176

Parents and grandparents interviewed throughout the region were also asked to discuss the availability and quality of dental care available to their young children. For those who did have dental care for their children, many traveled to Mesa or Phoenix for that care. The primary reasons were the lack of pediatric dental providers in the region, or insurance plans not covering available providers in the region. Where pediatric dental care was available, a number of respondents expressed dissatisfaction with the staff and services provided at a particular practice. Respondents reported that they switched to providers in Mesa or Phoenix, or that they continued their children's care there simply due to lack of other providers available locally. Families receiving care in other pediatric practices were more likely to be satisfied with the quality of dental providers available for their children. A small proportion of respondents also said either their children were too young for dental care, or they knew they needed it but had not yet found a dental provider for their children. In two cases, parents stated that an adult dentist had told them that their children do not need to go to the dentist until they have problems.

## Childhood Injury, Illness and Mortality

Asthma can negatively affect health in early childhood and beyond. Nationally, asthma prevalence among children aged birth to four years increased from 2001 to 2007 and then began a sustained decline through 2013. Such a decline may have an impact on the number of asthma-related health care visits with their related costs. <sup>177</sup> In the Gila Region, emergency room visits by young children due to asthma decreased by 50 percent from 2012 to 2014, a decrease more than three times the decrease across the state during the same period (16% decrease) (Table 77).

xix The full methodology for the Healthy Smiles Healthy Bodies Survey can be found in the Methods and Data Sources section of the Appendix.

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, a decrease from 834 the year prior. Of child fatalities in 2015, 74 percent (n=566) were young children from birth to age five. More than one-third of the deaths of children birth to five (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 deaths were amongst children one to four years old, an age group with high rates of fatalities due to drowning, motor vehicle accidents, and blunt force trauma. 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, local 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.

In 2015, Gila County reported fewer than 10 deaths among its population of 11,091 children, aged 0 to 17. The overall Arizona rate for 2015 was 47.3 child deaths per 100,000 residents. Across the state, the two leading causes of death were those classified as home-safety related (rate of 7.9 per 100,000 children) and maltreatment (rate of 5.3 per 100,000 children). Additionally, fatalities were overrepresented among African American children (9% of child deaths) and American Indian children (9% of child deaths).

2013 2014 Change from 2012 to 2014 30 30 Gila Region -50% Gila County 36 32 <25 -50% ARIZONA 5,450 4,890 4,560 -16%

Table 77. Emergency Department Visits by Children (Ages 0-5) Due to Asthma

Source: Arizona Department of Health Services (2016). [Asthma ED Visits Dataset]. Unpublished data

### Weight Status

Based on data from the Centers for Disease Control and Prevention (CDC), adult obesity has remained relatively stable overall in Gila County between 2011 and 2013 (from 27.1% to 27.5%) (Table 78). This

means that as of 2012, Gila County has met the Healthy People 2020 goal of having no more than 30.5 percent of the population have obesity. xx Although adult obesity rates for Gila County have been consistently higher than those for the state, state rates increased from 25.1 to 26.8 percent over the same period.

Compared to adults, children are less likely to have obesity. Healthy People 2020 has set a goal of no more than 9.4 percent of children having obesity. Among children participating in WIC in the Gila Region, 11.2 percent have obesity and an additional 13 percent have overweight (Figure 28). The obesity rate has been decreasing, dropping from 15.8 percent in 2012 to 11.2 percent in 2015 (Table 79). This pattern mirrors national patterns, <sup>180</sup> Based on these data, the Gila Region is not meeting the Healthy People 2020 target, but is showing a downward trend towards that target. It is also important to note that these data only reflect one segment of the population of the region, and low-income populations, i.e., those receiving WIC benefits, are at an elevated risk for obesity.

Table 78. Adult Obesity Rate, According to the CDC

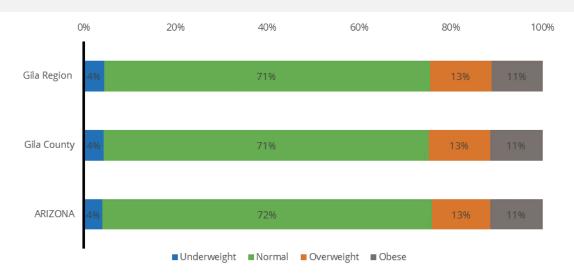
	CDC adult obesity rate, 2011	CDC adult obesity rate, 2012	CDC adult obesity rate, 2013
Gila Region	N/A		·
Gila County	27.1%	26.8%	27.5%
ARIZONA	25.1%	26.0%	26.8%

 $Source: CDC \ (2016). \ Diabetes \ Data \ and \ Statistics. \ Retrieved \ from \ www.cdc.gov/diabetes/atlas/countydata/atlas.html$ 

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xx Note that the Centers for Disease Control now use language consistent with the perspective that obesity is a disease state. We have adopted that language. See https://www.cdc.gov/obesity/data/adult.html.

Figure 28. WIC Children's Weight Status, 2015

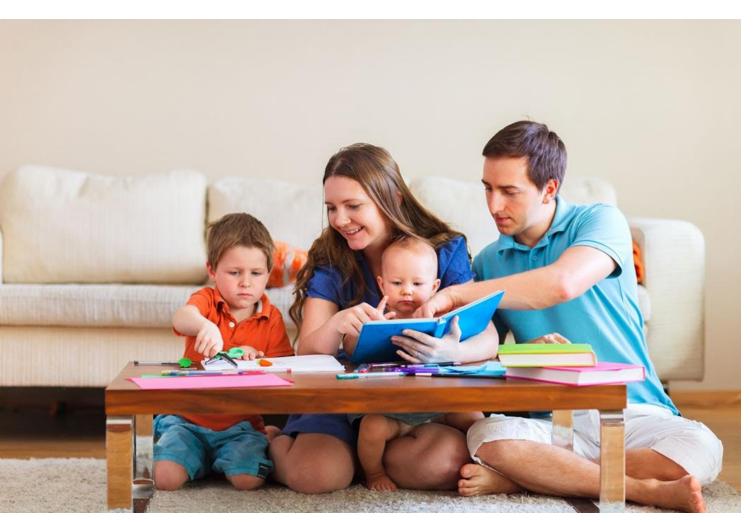


Source: Arizona Department of Health Services (2016). [WIC datasets]. Unpublished data.

Table 79. WIC Children's Obesity Rates, 2012 to 2015

	Childhood obesity rate, 2012	•		Childhood obesity	Healthy People 2020 Target for Childhood Obesity
Gila Region	15.8%	14.3%	12.9%	11.2%	9.4%
Gila County	15.9%	14.4%	13.0%	11.4%	9.4%
ARIZONA	12.7%	12.3%	11.1%	11.4%	9.4%

Source: Arizona Department of Health Services (2016). [WIC datasets]. 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 181,182 and promote better social, physical, academic and economic outcomes later in that child's life. 183,184 Parental and family involvement is positively linked to academic skills and literacy in preschool, kindergarten and elementary school. 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. 186 Reading aloud, singings songs, practicing nursery rhymes, and engaging in conversation primes children to reach their full potential. To assess the degree to which these activities are happening across the state, the First Things First designed the phone-based Family and Community Survey to measure many critical areas of parents' knowledge, skills, and behaviors related to their young children. Among other topics, the 2012 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. 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. Examples of these community-level resources in Arizona include Read On Arizona, a partnership of agencies, philanthropic organizations, and community stakeholders committed to creating a continuum of services to improve language and literacy outcomes<sup>187</sup>; and the national "Reach Out & Read" program, in which close to 200 clinics and pediatric practices across the state seeing children for a well-child visit provide them with a book to take home. 188

Not all children are able to begin their lives in the most positive, stable environments. Adverse Childhood Experiences (ACEs)xxi 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. 189 Children in Arizona are more likely to have experienced two or more ACEs (31.1%) than children across the country (21.1%). 190 Reports of child maltreatment grew by 44 percent in Arizona between 2010 and 2014, fueled in part by an increasing number of children, in particular poor children, living in the state; cut backs in child care subsidies during the same period; and a decrease in the size of the state child welfare workforce. During the same period, the percentage of reports being substantiated, i.e., verified, also increased. Arizona places more children with a substantiated case of maltreatment in foster care than many other states across the country, and with an increase in the number of substantiated reports, there is an increasing demand on the foster care system. <sup>191</sup> Children involved in the foster care system often have physical and behavioral health issues, in addition to the social needs brought on by being removed from a parent's care. Nationally and in Arizona, very young children are at most risk for child abuse, neglect and fatalities from abuse and neglect; in 2013 children five and under made up more than half (53.3%) of cases of child maltreatment and of children waiting for adoption (52.1%) in Arizona.<sup>192</sup>

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<sup>&</sup>lt;sup>xxi</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.

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. 193 Referrals are the most common method of entry into the juvenile justice system and can be made by police, school officials and parents, among others. In Arizona, between 2010 and 2014, the number of juveniles referred to juvenile court decreased from 24,074 in 2010 to 15,193 in 2014. 194 Like many other states in the nation, Arizona has moved from sentencing juveniles to prison or corrections settings, to applying probation or community-service sentences. 195

Children who are exposed to domestic violence, either as direct victims or witnesses, are subject to short and long term negative consequences including physical health problems, behavioral issues, and emotional impacts such as depression, anxiety and post-traumatic stress. <sup>196</sup> Fortunately, the effects of observing domestic violence can be mitigated to some extent through strong relationships and attachments to supportive adults and timely intervention and support. 197 The need for increased focus on the issue of domestic violence in Arizona is evidenced by results from a statewide needs assessment, in which domestic violence was the second most often cited top health priority, after access to health services, by Arizonans surveyed. 198

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." 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 behavioral and other concerns. 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>200</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. 201 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 skills that children develop between birth and five years of age can have profound effects on early and later literacy. The six most important of these skills are alphabet knowledge, phonological awareness, rapid automatic naming of letters or digits and objects or colors, writing and phonological memory. 202 Interventions known to have a positive impact on these skills include shared-reading interventions, parent and home programs, and preschool and kindergarten programs.<sup>203</sup>

In the Gila Region, 90 people responded to the 2012 First Things First Family and Community Survey. Among other topics, the 2012 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. Families in the Gila Region were more likely to report reading to their children (56%) and telling stories to their children (60%), but less likely to report drawing with their child (42%) six or seven days a week compared to families across the state (51%, 51% and 47% respectively) (see Figure 29, Figure 30, and Figure 31). A majority of parents (78%) in the Gila Region showed an understanding that brain development can be impacted prenatally or right from birth, similar to respondents across the state as a whole (80%) (Figure 32).

Parents and grandparents interviewed in the Gila Region were asked to discuss what early learning opportunities were available for their families, and also where parents of young children could go for support or resources in the region. When asked what early learning opportunities were available for young children in their communities, the top responses were: public library story-time (32%), Head Start (13%), or that they did not know of any (45%). Other responses, provided by just one parent each, included: a home-schooling group, the Dolly Parton Library, AzEIP, WIC and First Things First. Whether or not these responses reflect a lack of information about what is available, or an actual lack of opportunities, the number of resources that families are aware of is low. The Gila Region is home to three Read On communities, Globe/Miami, Northern Gila and Copper Corridor, but these resources were not familiar to parents as early literacy resources in the region.

Likewise, when asked where parents would go in the community to learn about parenting or ask for help or support, most respondents said either that one would turn to family and friends or that they did not know where parents could turn. Some parents were able to give other examples, such as the internet, mom groups on Facebook, or WIC, DES and the Health Department. Those that mentioned the latter three were more likely to be enrolled in Head Start, whereas the former were more often enrolled in private child care centers or home-schooling their children. Additional or different forms of outreach or educational efforts to inform the public about available resources may be needed to more effectively reach parents.

At the close of interviews, parents and grandparents were asked what they would most like to see in their community that would benefit their children and family. The most frequent response by parents and grandparents in all communities was for more leisure, recreational and family activities appropriate for children five and under. Respondents desired not only age-appropriate activities for their young children to be able to participate in, but also activities or events that were family-focused to bring families and the community of families together. A number of parents mentioned the need to drive to Mesa or Phoenix for age-appropriate recreational and learning activities such as splash pads, or the Arizona Science Center. Options such as a community center, YMCA, Boys & Girls Club, young child friendly playgrounds, a bowling alley, and family and play-themed restaurants such as Chuckie Cheese were mentioned as desired resources. The need for indoor locations for these activities was also cited due to heat in summer and cold in winter, as was the need for these activities to be free or low cost so that low-income families could take advantage of them.

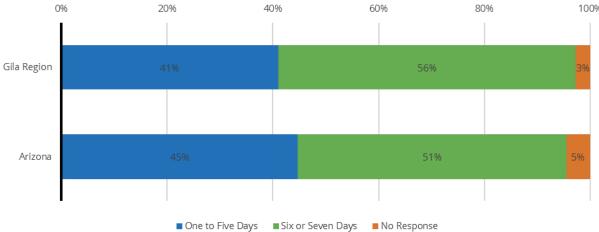
xxii The full methodology for the First Things First Family and Community Survey can be found in the Methods and Data Sources section of the Appendix.

Many who commented on the lack of activities available for young children also mentioned the lack of local volunteers or advocates to get community activities started. The need for families to invest in their own communities to increase opportunities for young children and their families was seen as a requirement to move communities forward. Other parents also cited the need for more parental involvement within families themselves, saying families would benefit if parents spent more quality time with their own children.

A number of parents interviewed also talked more generally about the gaps in resources for families in need. In addition to more slots in subsidized child care and early learning settings (discussed above in Early Learning), parents also spoke about the needs of families in the region dealing with substance use issues, homelessness, and a lack of employment options. Short-term supports for those with shortterm needs due to lay-offs or illness were specifically mentioned.

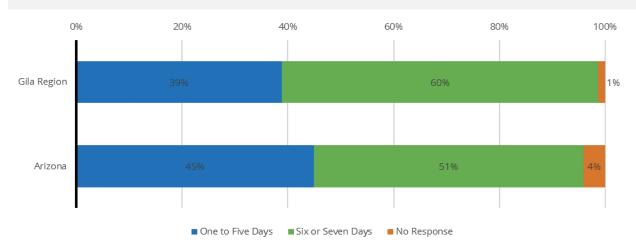
Parents and grandparents were also asked what made it hard to raise young children in their communities. Those interviewed noted that besides the lack of early childhood activities and resources, some additional challenges made it more difficult to raise young children in the area, including a lack of jobs and economic opportunity, the remoteness of some families with fewer young children nearby for interaction, and the lack of public transportation.

Figure 29. Responses to "During the past week, how many days did you or other family members read stories to your child?" 0% 80% 20% 40% 60% 100%



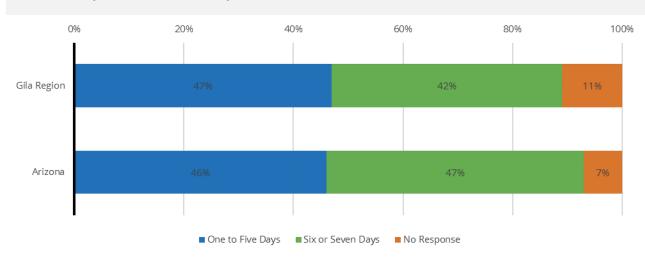
Source: First Things First (2014). [2012 Family and Community Survey dataset]. Unpublished data.

Figure 30. Responses to "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 31. Responses to "During the past week, how many days did your child scribble, pretend draw, or draw with you or another family member?"



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

20% 80% 0% 40% 60% 100% Gila Region Arizona 1% Prenatal ■ Right From Birth ■ Two Weeks to Six Months ■ Seven Months or Later ■ No Response

Figure 32. 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.

#### Child Welfare

The Arizona Department of Child Safety produces a semi-annual report on child welfare services. Statewide, reports of child abuse and neglect had been increasing from 2013 through 2015 to a high of 26,455 reports during the April 1-September 30, 2015 reporting period. Reports decreased across the most recent periods, with 24,787 reports between April 1-September 30, 2016. 204 Of 223 reports of abuse and neglect of children birth to 17 received during that period for Gila County, 13 (6%) resulted in a removal from the home (Table 80). The proportion of reports resulting in removal were higher (12%) across the state as a whole. For reports of maltreatment that were substantiated during that period, most (92%) were cases of neglect, followed by physical and sexual abuse (4% each) (Table 81).

Statewide, the number of children entering out-of-home care has been decreasing since the April 1-September 30, 2015 reporting period; from 6,819 then to 5,669 during April 1-September 30, 2016. The total number of children entering out-of-home care in Gila County for the April 1- September 30, 2016 reporting period (n=32) is higher than the number of removals resulting from substantiated reports of abuse (n=13) due to several things. One, a report focuses on the family unit, and thus could concern multiple children; two, these removals are also the result of reports prior to the current reporting period, and three, the children entering out-of-home care include children in voluntary foster care agreements (Table 82).

A key informant in the region provided county level foster care data and insight into foster care in the region. As of the end of June 2016, there were 14 foster homes in Gila County, eight in Payson, and six in Globe; two of those homes were licensed only for kinship care. At the same time, there were 136 children in out of home care in the county (the proportion of those children who were aged birth to five, and the number who were placed in foster homes versus other out of home placements were unavailable). The number of children in the county in out of home care, compared to the number of foster homes available indicate a need for more foster homes in the region. A particular barrier to

increasing the number of foster homes in the Globe area is the requirement that potential foster homes pass a housing inspection including a home safety inspection.  $x^{xxiii}$ 

Table 80. Department of Child Safety Reports and Removals, April to September 2016

	Number of reports received, April to September 2016	assigned, April to	Number of reports with removal, April to September 2016	Removal rate
Gila Region	N/A	N/A	N/A	N/A
Gila County	223	203	13	6%
ARIZONA	24,787	24,403	2,967	12%

 $Source: \ Department \ of \ Child \ Safety \ (2016). \ Child \ welfare \ reporting \ requirements \ semi-annual \ report for \ the \ period \ of \ April \ 1, \ 2016 \ through \ September \ 30, \ 2016. \ Tables \ 5, \ 15. \ Retrieved \ from \ https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirments\_Apr16\_Sept16.pdf$ 

Table 81. Department of Child Safety Substantiated Maltreatment Reports, April to September 2016

	Number of substantiated maltreatment reports	Neglect	Physical Abuse	Sexual Abuse	Emotional Abuse
Gila Region	N/A	N/A	N/A	N/A	N/A
Gila County	25	92%	4%	4%	0%
ARIZONA	2,823	87%	10%	2%	0%

Source: Department of Child Safety (2016). Child welfare reporting requirements semi-annual report for the period of April 1, 2016 through September 30, 2016. Tables 19. Retrieved from https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirments\_April6\_Sept16.pdf

Table 82. Children Entering Out-of-Home Care, April to September 2016

		removal within the previous 24	Percent of children with a prior removal within the previous 24 months
Gila Region	N/A	N/A	N/A
Gila County	32	<10	DS
ARIZONA	5,669	715	13%

Source: Department of Child Safety (2016). Child welfare reporting requirements semi-annual report for the period of April 1, 2016 through September 30, 2016. Tables 31. Retrieved from https://dcs.az.gov/sites/default/files/DCS-Semi-Annual-Child-Welfare-Reporting-Requirements\_Apr16\_Sept16.pdf

xxiii Data provided via a key informant telephone interview in July 2016.

#### **Domestic Violence**

The Arizona Department of Economic Security produces an annual report on domestic violence shelters including county-level data on the populations served and services provided. <sup>205</sup> In fiscal year 2015, two domestic violence shelters in Gila County, Gila County Safe Home - Horizon Human Services, and Time Out, Inc., served 233 people, 115 (49%) of whom were children (Table 83). The average length of stay for those served was 24 days at Gila County Safe Home, and 38 days at Time Out, Inc., both shorter than the statewide average of 39 days. 206 Additionally, 801 calls were made to hotline and information and referral (I&R) numbers for the county, representing three percent of such calls statewide (Table 83). It should be noted that another domestic violence shelter, The Caring Place: Advocate House in Miami, was listed as a shelter providing domestic violence services in Gila County by the Homeless Management Information System. xxiv

Table 83. Domestic Violence Shelters

	l .	Number of adults served	Number of children served	Number of bed- nights	Average length	support	Number of hotline and information-and- referral (I&R) calls
Gila Region	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	233	118	115	7,496	31 days	4,812	801
ARIZONA	7,567	3,862	3,705	293,970	39 days	144,025	25,185

Source: Arizona Department of Economic Security (2015). Domestic Violence Shelter Fund Report for SFY 2015. Retrieved from des.az.gov/digitallibrary/domestic-violence-shelter-fund-report-sfy-2015

#### **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. XXV Most of Gila County is served by the North GSA, which is serviced by Health Choice Integrated Care (HCIC), and a small portion of the southern end of the county is served by the South GSA, serviced by Cenpatico Integrated Care. Prior to October 2015, all of Gila County was serviced by Cenpatico Behavioral Health Services (CBHS). The data received for this report is for the period before the change to HCIC and Cenpatico Integrated Care.

In 2015, 104 pregnant or parenting women received publically-funded behavioral health services through CBHS in the Gila Region (Table 84). This represents an increase of nine percent from the 95

xxiv Information provided by HMIS through personal correspondence.

xxv Arizona Regional Behavioral Health Areas. See https://www.azahcccs.gov/img/BehavioralHealth/ARBHAMap.jpg

women who received services in 2012. Across the state the opposite trend occurred, with 24 percent fewer women receiving these services in 2015 compared to 2012. The number of children ages birth to 5 receiving behavioral health services in the Gila Region also increased by one percent from 2012 (n=101) to 2015 (n=102) (Table 85). This represents roughly nine percent of young children in poverty in the Gila Region, similar to the same rate of young children in poverty receiving services statewide. It is estimated that about 13 percent of low-income children aged 6 to 11 years old covered by Medicaid have mental health problems<sup>207</sup>, suggesting that although there is improving coverage in the Gila Region, there may be an unmet need for services for about 38 additional young children.<sup>xxvi</sup>

According to a 2015 AHCCCS report, 67 percent of children in foster care in Arizona in FY2014 were enrolled in behavioral health services, compared to just one in 15 children (7%) enrolled in AHCCCS, not in the foster care system. <sup>208</sup> This suggests that there may be a higher proportion of children not in the child welfare system who would benefit from behavioral health services statewide, and likely in the Gila Region, as well. Beginning in 2015, each Regional Behavioral Health Authority (RBHA) was contractually required to ensure that children in Department of Child Safety (DCS) custody and their families are referred for ongoing behavioral health services, suggesting that rates of both mothers and children being provided services are likely to increase going forward.

A continuum of services to address infant and toddler mental health promotion, prevention and intervention has been proposed by a number of national organizations. Recommendations to achieve a comprehensive system of infant and toddler mental health services include 1) the integration of infant and toddler mental health into all child-related services and systems, 2) ensuring earlier identification of and intervention for mental health disorders in infants, toddlers and their parents by providing child and family practitioners with screening and assessment tools, 3) enhancing system capacity through professional development and training for all types of providers, 4) providing comprehensive mental health services for infants and young children in foster care, and 5) engaging child care programs by providing access to mental health consultation and support.<sup>209</sup>

Community members surveyed as part of the Gila County Division of Health and Emergency Management and Cobre Valley Regional Medical Center's 2015 Community Health Needs Assessment<sup>210</sup> ranked drug addiction as the top health issue facing Gila County, followed by obesity and overweight and diabetes. Respondents in focus groups conducted as part of the Needs Assessment, identified the lack of specialty health care providers, including mental health support services as a key need in the county, which necessitated the need to travel long distances to access these services. Similarly, key informants interviewed identified the need for improved access to specialty health services, particularly mental and behavioral health services, and improved access to substance use support services as the most pressing health needs facing the county. The consensus among community members providing perspectives for the Needs Assessment is striking.

In addition, many parents and grandparents interviewed in the region mentioned the increasing presence of drug use and the challenges that places on families and community members as one of the hardest things about raising young kids in their communities. The lack of activities in communities across the region was seen as a driver of drug use, particularly among teens.

xxvi Representing the difference between the 102 low-income children (9%) currently served, and the estimated 140 (13%) likely in need.

Data from the Arizona Department of Health Services (ADHS) shows drug-induced deaths have been increasing steadily beginning in 2011 from a rate that was below the state rate, to 43.5/100,000 in 2014, a rate that was more than double that in the state (18.4/100,000) and almost quadruple the Healthy People 2020 target of 11.3/100,000 (Figure 33). ADHS data on substance use morbidity rates (use resulting in disability, or ongoing illness)<sup>211</sup> for barbiturate use (29/100,000) and alcohol use (1,602.7/100,000) in Gila County were also higher than those rates across the state as a whole in 2013 (barbiturate use 17.5/100,000; alcohol use 950.5/100,000) (Table 86). Accidental deaths, accidental injuries, suicide, and chronic physical health conditions can be impacted by substance use, abuse and dependence. The high rates of drug-induced deaths and alcohol use morbidity in the county, together with the insights of key informants, points to the need for additional prevention and treatment services in that area.

The issue of alcohol abuse can also be seen in the rate of fetal alcohol syndrome in the county. The rate of fetal alcohol syndrome across the years 2008 through 2013 in the county (0.32/1,000 births) is slightly higher than across the state as a whole (0.27/1,000 births) (Table 87). Although the rate of neonatal abstinence syndrome in the county is lower than across the state, there is a higher rate of narcotic exposure (7.36/1,000 births) compared to the state (5.19/1,000 births), which, taken in the context of other indicators of increasing substance use in the county, is cause for concern.

Gila County is not alone in these concerns. In a recent study, researchers found that neonatal abstinence syndrome (NAS) and maternal opioid use have increased rapidly across the United States, and that much of this increase has been seen in rural counties. <sup>212</sup> From 2004 to 2013, incidence rates of NAS increased from 1.2 cases per 1,000 births to 7.5 cases per 1,000 births in the rural United States, a much greater increase than seen in urban counties (1.4 to 4.8 cases per 1,000 births). In this same period, complications of hospital deliveries related to maternal opioid use increased from 1.3 to 8.1 cases per 1,000 hospital deliveries in rural counties. This increase was more than twice that seen in urban counties (1.6 to 4.8 per 1,000 deliveries). There is a distinct need for more prevention and treatment services for women and infants affected by opioid use in rural areas.

Table 84. Number of Pregnant or Parenting Women Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014		Change from 2012 to 2015
Gila Region	95	93	108	104	9%
Gila County	102	98	110	109	7%
ARIZONA	19,134	17,731	13,657	14,546	-24%

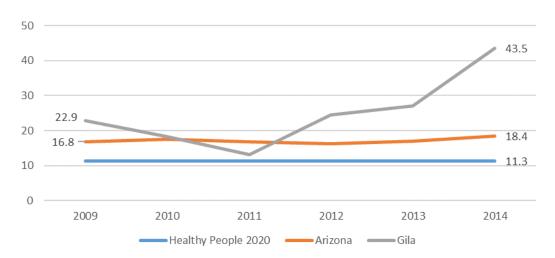
Source: Arizona Department of Health Services (2016). [Behavioral Health dataset]. Unpublished data.

Table 85. Number of Children (Ages 0 to 5) Receiving Behavioral Health Services, 2012 to 2015

	2012	2013	2014		Change from 2012 to 2015
Gila Region	101	117	118	102	1%
Gila County	104	118	118	102	-2%
ARIZONA	13,110	14,396	12,396	14,374	10%

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

Figure 33. Drug Induced Deaths, per 100,000



 $Source: ADHS, Community\ Profiles\ Dashboard.\ Retrieved\ from\ http://www.azdhs.gov/preparedness/public-health-statistics/profiles/index.php.$ 

Table 86. Substance Use Morbidity Rates (Per 100,000 Persons)

	Amphetamine use, 2013		Cocaine use, 2013		Cannabis use, 2013	Alcohol use, 2013
Gila Region	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	152.1	29	7.2	156.9	74.8	1602.7
ARIZONA	208.2	17.5	17.5	216.1	174.1	950.5

 $Source: ADHS, Community\ Profiles\ Dashboard.\ Retrieved\ from\ http://www.azdhs.gov/preparedness/public-health-statistics/profiles/index.php$ 

Table 87. Newborns with Issues Related to Drug Exposure, 2008 To 2013

	Number of births with neonatal abstinence syndrome	per thousand	Number of births with fetal alcohol	per thousand		Narcotic exposure, rate per thousand births
Gila Region	N/A	N/A	N/A	N/A	N/A	N/A
Gila County	<25	1.92	<25	0.32	<25	7.36
ARIZONA	1,472	2.83	140	0.27	2,702	5.19

 $Source: ADHS, \, Neonatal \, Abstinence \, \, Syndrome: \, 2008-2013 \, \, Overview.$ 



# COMMUNICATION, PUBLIC INFORMATION, AND AWARENESS\*\*\*\*

xxvii 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 88. First Things First Engagement of Early Childhood supporters, SFY2014 through SFY2016

			Champions
Gila Region	143	1	14
ARIZONA	21,369	3,102	908

Note: Gila Region receives limited Community Outreach coverage through agreement with San Carlos Apache region.

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

xxviii To build on this progress and focus on priorities for the next phase of its mission, beginning in November 2016, FTF convened a new statewide Early Childhood Task Force. In June 2017, this new Taskforce will help set the strategic vision for the next five years.

## Coordination and Collaboration Survey:

To gain a better understanding of the coordination and collaboration occurring among early childhood system partners within FTF regions, First Things First developed the Coordination and Collaboration Survey that was disseminated to non-tribal system partners in 18 FTF county-based regions via an online survey in October of 2016. \*\*xix\*\*

The Coordination and Collaboration survey asked system partners about their organization's role in the Early Childhood System; the system building efforts within each area of the Early Childhood System in the region/county (i.e., Family Support and Literacy, Early Learning, Child's Health and Professional Development); the level of collaboration that is occurring among system partners; the sectors engaged in system building work; and perceptions of the FTF regional partnership councils' role in system building efforts.

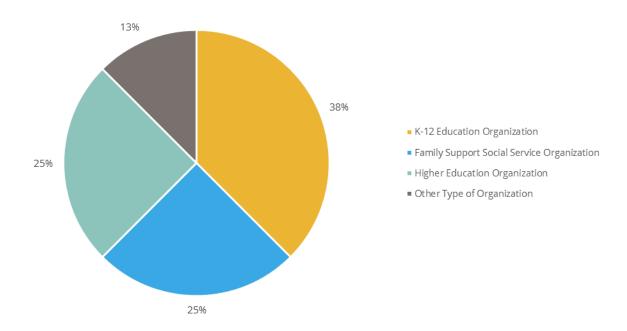
## What the Data Tell Us

The results are based on the responses from eight respondents that participated in the survey from Gila County out of 14 who were contacted to participate, for a 57 percent overall survey response rate. However, please note that not all respondents answered each question, and that the number of respondents varies by question a single organization's response can carry different weights. For example, if all eight respondents answered a question, each response carries a weight of 12.5 percent, so if 50 percent agree with something, that represents the opinion of four people. However, if only four people respond, then each person's answer has a response of 25 percent, so if 50 percent agree with something, then in this case, that's only the opinion of two people. Each figure or table indicates the number of people responding to that particular question.

Respondents represented many sectors of the early childhood system in the region. The most common organization type among respondents was K-12 Education Organization (38%), followed by Family Support/Social Service agencies (25%), and Higher Education Organizations (25%) (Figure 34). The participant who indicated they were an "other" sector identified as a preschool.

xxix Partners located on tribal lands will be surveyed at a later date after tribal approvals are requested and received.

Figure 34. Sectors with which organizations work (N=8)



## System Partners' View of Their Role in the Early Childhood System

The majority of respondents (86%) consider themselves to be a part of the early childhood system in Gila County. Although they were from diverse types of organizations, the area respondents most reported engaging with was Early Learning (75%) (Figure 35). The majority (63%) of respondents reported engaging with multiple key areas of the early childhood system. For example, although no organizations identified their primary sector as health care, 38 percent of organizations reported engaging with child health.

Figure 35. Area(s) of the early childhood system that organizations engage with (N=8)

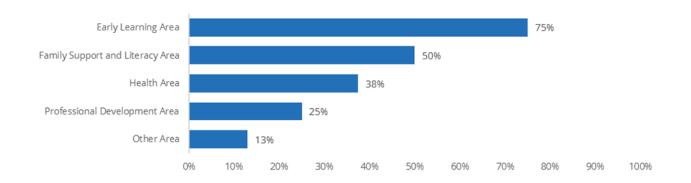
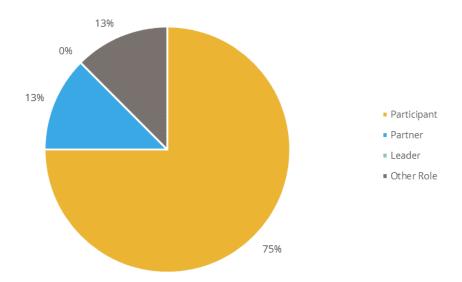


Figure 36. Role of organization in the development and advancement of the Early Childhood System in Gila County (N=8)



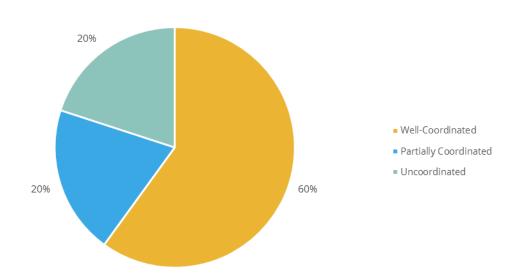
When asked about their organization's role in the development and advancement of the early childhood system in Gila County, respondents most commonly viewed their organization's role as a Participant (75%), i.e., one of many community organizations involved in supporting the early childhood system (Figure 36). One respondent (13%) described their organization's role as Partner, i.e., part of a group responsible for co-convening and/or facilitation and one of many community members involved in a community-based initiative. No one indicated their organization was a Leader, i.e., they take the lead for convening and facilitating a group of community members. One (13%) respondent considered their organization's role in the development and advancement of the Early Childhood System as something "other" than the already-defined roles of participant, partner, or leader, explaining that "we provide preschool opportunities for children."

In their role as participant, partner, or a leader, survey respondents noted several successful partnerships. Organizations that identified their role as that of a participant described partnering with other groups to provide professional development in the area of early learning, provide developmental screenings (ASQ) for children, and participate in professional development in the area of early learning. Organizations that identified their role as that of a partner also indicated that they are working to establish partnerships with local schools, Head Start programs, and health care providers, while also conducting parenting education throughout Gila County using the Triple P and Nurturing Parenting curriculum. Another organization provided preschool opportunities for children in the region through the Quality First Scholarships.

## System Partners' Perspective on Systems Building

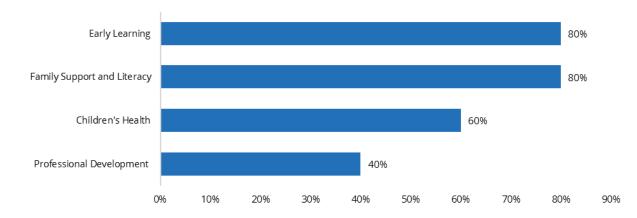
Respondents were also asked to provide their perspective on the existing early childhood system and systems building. Early childhood systems building is the ongoing process of developing approaches and connections that make all the components of an early childhood system operate as a whole to promote shared results for children and families. In Arizona, early childhood system partners work to promote and establish a seamless, coordinated, and comprehensive array of services that can meet the multiple and changing needs of young children and families to help ensure that kids arrive at school healthy and ready to succeed.

Figure 37. Describe the Early Childhood System in Gila County (N=5)



A majority (60%) of survey respondents described the early childhood system in Gila County as a wellcoordinated system, with one respondent (20%) describing the system as a partially-coordinated system, and one respondent (20%) viewing the early childhood system as a group of separate, uncoordinated system partners working in isolation (Figure 37).

Figure 38. Percent agreeing that the Early Childhood System in Gila County effectively addresses the needs of young children and their families across key areas (N=5)



The majority of respondents reported that the early childhood system in Gila County effectively addresses the needs of young children and their families across three of four key areas (Figure 38). Most respondents (80%) agreed that young children's early learning needs, and family support and literacy needs are effectively addressed by the system in the region. More than half (60%) felt the same for young children's health needs. However, 60 percent felt the professional development system is not effective in meeting young children's needs.

Continuum of Collaboration in the Early Childhood System Areas

In order to understand the current system and to track progress, First Things First uses a five-level continuum of collaboration model. The model consists of five levels describing progressively more intensive levels of collaboration: No Interaction, Networking, Cooperation, Coordination and Collaboration (Figure 39).

Figure 39. The five levels of the Continuum of Collaboration

No Interaction	Networking	Cooperation	Coordination	Collaboration
Lower Intensity —			→ H	igher Intensity

These stages, as described by Frey and colleagues, <sup>213</sup> are:

- **No Interaction**: No interactions occurring at all.
- **Networking**: Activities that result in bringing individuals or organizations together for relationship building and information sharing. Networking results in an increased

- understanding of the current system of services. There is no effort directed at changing the existing system. There is no risk associated with networking.
- **Cooperation**: Characterized by short-term, informal relationships that exist without a clearly defined mission, structure, or planning effort. Cooperative partners share information only about the subject at hand. Each organization retains authority and keeps resources separate. There is very little risk associated with cooperation.
- **Coordination**: Involves more formal relationships in response to an established mission. Coordination involves some planning and division of roles and opens communication channels between organizations. Authority rests with individual organizations, however, risk increases. Resources are made available to participants and rewards are shared.
- **Collaboration**: Collaboration is characterized by a more durable and pervasive relationship. Participants bring separate organizations into a new structure, often with a formal commitment to a common mission. The collaborative structure determines authority and leadership roles. Risk is greater. Partners pool or jointly secure resources, and share the results and rewards.

Respondents were asked to refer to the Continuum of Collaboration and to indicate the level of collaboration that is occurring among partners in Gila County for each area of the Early Childhood System. Only half of the respondents chose to complete this section (n=4). In accordance with respondents' view of the early childhood system as only a partially coordinated system (Figure 37), the results did not indicate strong support for a high level of collaboration, the highest and most intense level of system partners working together along the Continuum of Collaboration. Each of the early childhood system areas were given the same level of collaboration (25%) (Figure 40). The only Continuum of Collaboration stage to receive a higher percentage was cooperation; a relationship characterized by short-term, informal relationships that exist without a clearly defined mission. Fifty percent of respondents (n=2) indicated the systems areas of Early Learning and Family Support and Literacy fall within the mid-range level of systems partners working together along the Continuum of Collaboration. Conclusions about the state of collaboration among systems partners in Gila County based on these results are difficult to draw due to the very small number of respondents to these items.

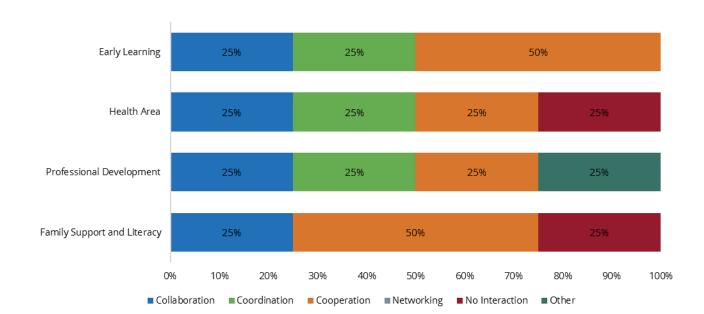


Figure 40. Continuum of Collaboration in the Early Childhood System Areas (n=4)

## Sectors involved in the Early Childhood Building

Within each of the four areas of the Early Childhood System, survey participants were asked to indicate which sectors are involved in building systems for that area. Again, only three or four respondents provided answers to these questions, meaning that each response carries a weight of at least 25 percent. In the area of Family Support and Literacy, respondents felt that Public Entities (75%) or K-12 Education, Philanthropy, Family Support/Social Service, and Early Care and Education (50% for each) agencies were most involved in system building work in Gila County (Figure 41).

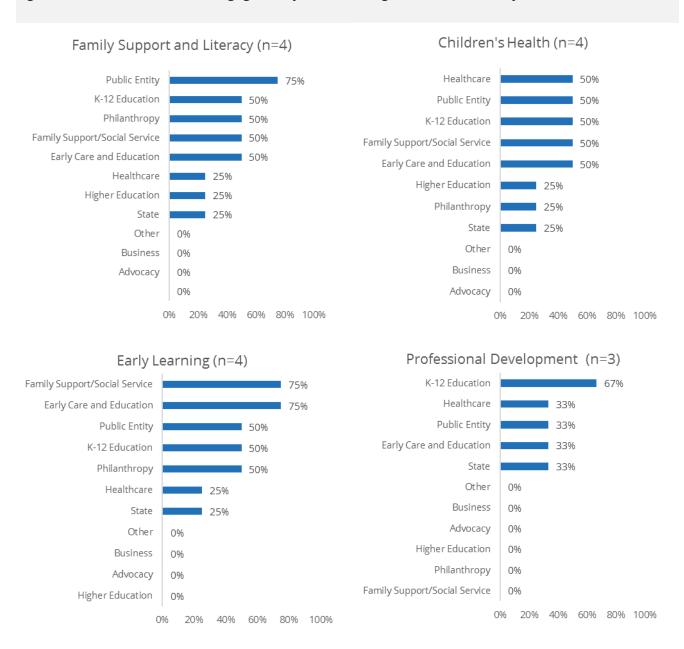
In the area of Children's Health, respondents indicated that the Health Care/Medical Sector, Public Entities, K-12 Education, Family Support/Social Service, and Early Care and Education (50% each) sectors were the most engaged in systems buildings.

In the area of Early Learning, most respondents (75%) noted that the Family Support and Social Services and Early Care and Education sectors played a role in systems building.

Finally, in the area of Professional Development, most participants (67%) indicated that K-12 Education were involved in system building work in Gila County.

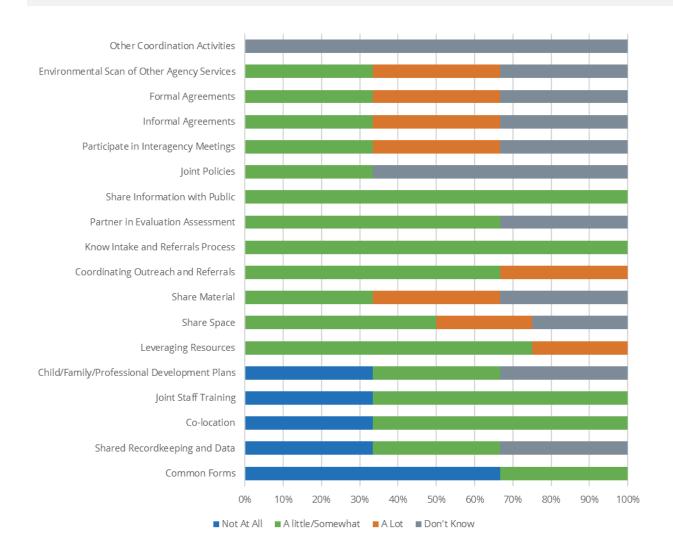
Across all four areas, the Business and Advocacy sectors were judged to play no role in system building work in Gila County (Figure 41).

Figure 41. Sectors involved in/engaged in system building work in Gila County



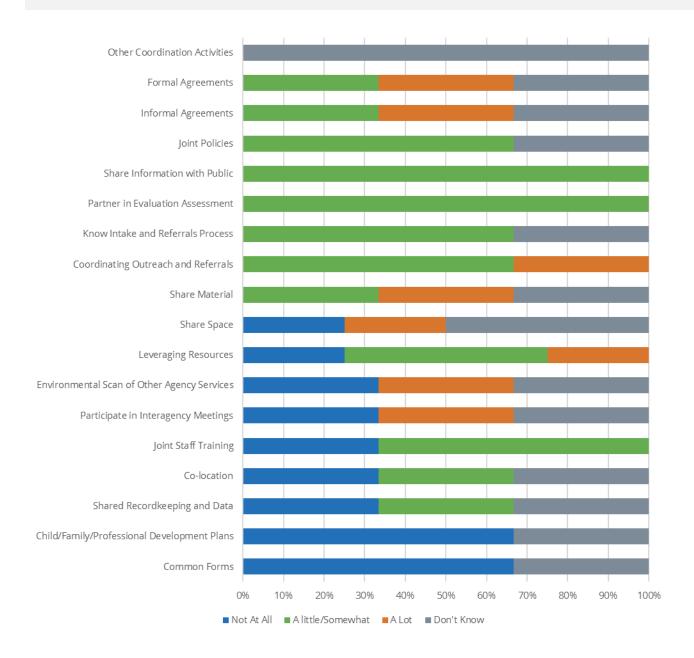
The following data reflect questions asking respondents about how frequently key activities that are known indicators of collaborative work were occurring. It should be noted that at least half of those who agreed to take the survey opted not to respond to this portion of the survey; for most items below, only three respondents rated frequency of activities.

Figure 42. Frequency of Activities: Family Support & Literacy (n=4)



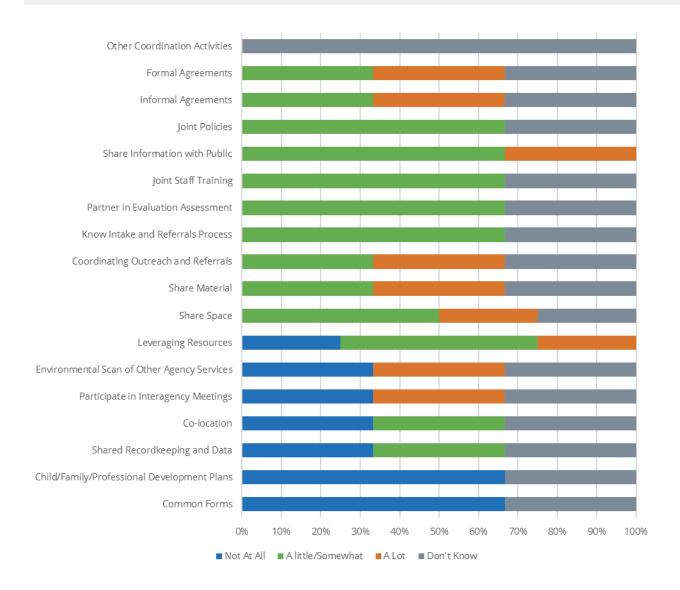
Based on the answers of those who did respond, activities that system partners within Family Support and Literacy most often use include: coordination of outreach and referrals, leveraging resources/funding across partners, shared approach to informing the public of available services, and knowledge of other programs' intake requirements/referral process (Figure 42). The area where there is the lowest perceived level of activity is: common forms (e.g., intake and/or referral forms). This activity represents opportunities for continued growth for system partners.

Figure 43. Frequency of Activities: Children's Health (n=4)



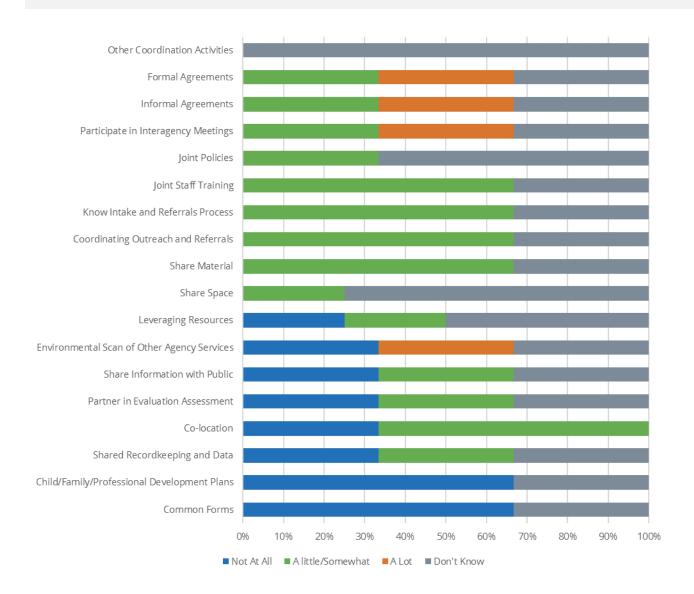
In the area of Children's Health, all respondents thought that there was at least a modest level of activity with regard to coordination of outreach and referrals, using a shared approach to informing the public of available services, and partnering in program evaluation and/or assessment (Figure 10). Areas where there is a low perceived level of activity include: common forms (e.g., intake and/or referral forms), and developing child and family service plans and/or professional development plans. These activities may be opportunities for system partners to collaborate on in the future.

Figure 44. Frequency of Activities: Early Learning (n=4)



With regard to Early Learning, all respondents thought that there was at least a modest level of activity with regard to using a shared approach to informing the public of available services (Figure 44). Activities where there is a low perceived level of use include: common forms (e.g., intake and/or referral forms) and developing child and family service plans and/or professional development plans.

Figure 45. Frequency of Activities: Professional Development (n=4)



There are few activities that system partners within the Professional Development area are perceived to be actively engaged in. A single respondent indicated "A lot" of activity in formal and informal agreements, participation in interagency meetings, and environmental scans of other agency services (Figure 45). Activities where there is a low perceived level of use again include: common forms (e.g., intake and/or referral forms), developing child and family service plans and/or professional development plans.

#### **Barriers and Future Directions**

Participants were also asked to reflect on barriers in moving the system forward with other Early Childhood System Partners. The most commonly cited barrier was a lack of cohesion across partners and services. Additionally, respondents also identified parent participation and education (especially in prenatal health) as barriers, and noted that not all families have access to health services. It was also noted that there is a lack of cohesion amongst partnered agencies and that "finding time for agencies to come together to support each other" was currently missing in the system.

Finally, participants were asked to reflect on the role of the FTF Regional Partnership Council in supporting Early Childhood System Building and collaboration efforts in Gila County. Noted is the contribution of the UA Cooperative Extension's partnership with early childhood programs and schools in Gila County to provide parenting education to any parent willing to participate.

Additional ideas for ways that the Regional Partnership Council could support Early Childhood System Building and partner collaboration efforts in the Gila Region included creating a shared mission across all partnered agencies which could improve the cohesion of agencies and services, and emphasize the "whole picture of health which starts at pregnancy." Additional ideas also included evaluating funded programs to identify ways to increase child/parent participation, emphasizing parent involvement in pregnancy, increasing First Things First presence in the K-12 levels, and establishing more pre-school opportunities for the community.



**SUMMARY AND CONCLUSIONS** 

## **Summary and Conclusions**

This needs and assets report is the sixth biennial assessment of early education, health, and family support in the Gila Region. In addition to providing an overview of the region, this report looks more closely at some of the community-level variation within it.

It is clear that the region has substantial strengths. We base this conclusion on the quantitative data reported here, as well as additional qualitative data gathered through parent and grandparent interviews and key informants in the region. A summary of identified regional assets is included below.

## **Population Characteristics**

• The close-knit, small-town, community-centered feel of communities in the region.

#### **Economic Characteristics**

- A substantial increase (+175%) in the number of meals provided by the Summer Food Service Program in the region (-10% across the state).
- High rates of home ownership across the region.

## **Educational Indicators**

• The four-year graduation rate in the Gila Region (76%) has improved slightly from previous years.

## **Early Learning**

• All six Quality First sites in the region have achieved the 3-, 4- or 5- star ratings, indicating they are meeting or exceeding quality standards (Only 48% have the equivalent across the state.

### Child Health

- Only six percent of children in the North sub-region were uninsured.
- The proportion of women of child-bearing age (18-45) who report that a doctor, nurse or other health care worker ever talked with them about ways to prepare for a healthy pregnancy and baby (that is, discussed preconception health) increased in Gila County from 59 percent in 2013 to 79 percent in 2014, the highest rate in the state.
- Fewer babies were born with low-birth weight (6.1%) or premature (6.3%) in the region than the state and fewer newborns in the region were admitted to an ICU (4.5%) than across the state.
- Emergency room visits by young children due to asthma decreased by 50 percent from 2012 to 2014 in the region, a decrease more than three times the decrease across the state during the same period.

## **Family Support and Literacy**

- More pregnant or parenting women and young children are receiving behavioral health services in the region.
- The Gila Region has three Read On communities; Globe/Miami, Northern Gila and Copper Corridor.

## Communication, Public Information and Awareness

In the Gila region, community engagement efforts have resulted in the recruitment of 143 Friends, one Supporter and 14 Champions during the period of FY2014 through FY2016.

## System Coordination among Early Childhood Programs and Services

Three of five respondents (60%) to the Coordination and Collaboration Survey described the early childhood system in Gila County as a well-coordinated system.

However, there continue to be challenges to fully serving the needs of families with young children throughout the region. It is particularly important to recognize that there is considerable variability in the needs of families across the region. Although the population centers of Globe/Miami and Payson are more likely to have resources and opportunities for young children and their families, there are continuing needs across all areas of the Gila Region. These areas run the risk of being overlooked for services if only regional or county-level "averages" are examined. Many of these have been recognized as ongoing issues by the Gila Regional Partnership Council and are being addressed by current First Things First-supported strategies in the region. These include:

- A need for affordable, high quality and accessible child care A number of factors point to a shortage of affordable, accessible and quality early care and learning opportunities in the region.
  - There are between four and seven young children for each available child care slot in the region.
  - Families in the Gila Region are paying a slightly higher proportion (15-19%, depending on the child's age) of their overall income for a child care slot as other families statewide and more if they need care for more than 1 child.
  - Almost three-quarters (71%) of young children in the region live in a home where all the parents participate in the labor force.
  - Single parent homes, particularly those with a single female householder, have a lower median income resulting in an even higher proportion of their income being spent on child care. The median income for households run by a single female in the Gila Region is \$18,504, substantially lower than households headed by a single male of married parents, and over a quarter (27%) of young children in the region live in single female householder families.
  - o Interviews with parents and grandparents revealed than many stayed home with or had a family member stay home with their children due to the cost of child care, a lack of quality providers, or a lack of trust in available and affordable providers.
- The need for additional early intervention services -While approximately four percent of young children in the region are receiving early intervention services, 10 percent of children enrolled in kindergarten through third grade are enrolled in special education, indicating that increased availability of and access to early intervention services in children's youngest years may be needed.

• A need for additional early literacy opportunities and parent resources in the region – Parents and grandparents interviewed were often unable to cite examples of either resources in their communities. Almost half (48%) of Gila Region third graders who scored minimally proficient on the AzMERIT English Language Arts exam are at risk for retention in third grade. Providing greater opportunities for early literacy and parental support in the region will help ensure that children do not lag behind by the time they reach 3rd grade.

A full list of regional challenges highlighted in this report is shown below.

#### **Economic Characteristics**

- Forty percent of young children live in poverty in the region. In the Central sub-region, 84 percent of the young child population lives in poverty. Over a quarter (27%) of young children in the region live in single female householder families. The median income for households run by a single female in the Gila Region is \$18,504, substantially lower than households headed by a single male of married parents.
- In the Central and Hayden/Winkelman sub-regions, access to both SNAP and WIC retailers is low, with only two SNAP retailers in both sub-regions, and fewer WIC retailers (none in the Central sub-region, and 1 in the Hayden/Winkelman sub-region).

## **Educational Indicators**

• Almost half (48%) of Gila Region third graders who scored minimally proficient on the AZMERIT English Language Arts exam are at risk for retention in third grade.

## **Early Learning**

- There is a lack of child care providers, particularly affordable child care and infant care and quality providers in the region; there are between four and seven young children for each available child care slot in the region. Almost three-quarters (71%) of young children in the region live in a home where all the parents participate in the labor force. Families in this situation are likely to have a high need for child care and the lack of child care, or the prohibitive cost of child care, can keep parents from participating in the labor force.
- Families in the Gila Region are paying a slightly higher proportion (15-19%, depending on the child's age) of their overall income for a child care slot as other families statewide and more if they need care for more than 1 child. Single parent homes, particularly those with a single female householder, have a lower median income resulting in an even higher proportion of their income being spent on child care.
- Over one hundred Gila children who would benefit from early intervention services are not receiving them.

#### Child Health

• Both the Globe and Payson PCAs are designated as Medically Underserved Areas (MUAs). There is a need for pediatricians and specialty health care providers in the region. There is also low availability of and satisfaction with pediatric dental care in the region.

- Over a third (36%) of children in the Central sub-region are uninsured.
- A much higher proportion of mothers in the Gila Region reported smoking (14.7%) than across the state (4.6%), and the region fell far above the Healthy People 2020 goal of 1.4 percent.
- Untreated decay experience and need for dental care was reported for 43 percent of kindergarteners in the region, which was higher than the state (27%). In overall decay experience, 64 percent of kindergarteners evidenced decay experience compared to Arizona's 52 percent.

## **Family Support and Literacy**

- There is low availability of and/or knowledge of early learning opportunities and parent support resources in the region.
- The number of children in the county in out of home care, compared to the number of foster homes available indicate a need for more foster homes in the region.
- The high rates of drug-induced deaths and alcohol use morbidity in the county, in addition to community and parent input, points to the need for additional substance use prevention and treatment services in that area.
- The most cited wish for young children and their families made by parents and grandparents interviewed in all communities were more leisure, recreational and family activities appropriate for children five and under. Wishes included both age-appropriate activities for young children to be able to participate in alone, and also activities or events that were family-focused to bring families and the community of families together, all of which were preferred to be free or lowcost.

Successfully addressing the needs outlined in this report will require continued concentrated effort and collaboration among First Things First and other state agencies, the Gila Regional Partnership Council and staff, local providers, and other community stakeholders in the region. Families are drawn to the Gila Region for the close-knit, supportive nature of many of its communities. Continued collaborative efforts have the long-term potential to strengthen these communities and make opportunities available to more families across the Gila Region.

# **APPENDICES**

# **Table of Regional Strategies**

# Gila Regional Partnership Council Planned Strategies for Fiscal Year 2017

Strategy Parenting Education	Strategy description  The intent of this evidence based strategy is to offer learning activities designed to increase the knowledge and skills and promote positive parenting practices for parents and caregivers that result in enhanced child health and development when utilized by parents and caregivers. The expected results of effective parenting education programs are increased parental knowledge of child development and parenting skills, improved parent and child interactions, and more effective parental monitoring and guidance, decreased rates of child maltreatment, and better physical, cognitive and emotional development in children (Lundahl, Nimer & Parsons, 2012).
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.
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.
Developmental and Sensory Screening	The intent of this evidence based strategy is to support routine and appropriate screening of all young children. The expected result is early identification of a developmental, hearing or vision concern, and referral for further evaluation if necessary. This can be a stand-alone strategy or it is a secondary strategy associated with other First Things First (FTF) strategies.

## **Methods and Data Sources**

#### **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). In addition, regional data from the 2012 First Things first Family and Community Survey (FCS), 2015 Healthy Smiles Healthy Bodies Survey, and 2016 Coordination and Collaboration Survey are included. Methodologies for those surveys are included on the following pages.

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

The U.S. Census<sup>214</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. The 2010 U.S. Census data are available by census block. There are about 115,000 inhabited blocks in Arizona, with an average population of 56 people each. The Census data for the Coconino Region presented in this report were calculated by identifying each block in the region, and aggregating the data over all of those blocks. (Note that the Census 2010 data in the current report may vary to a small degree from census data reported in previous Needs & Assets reports. The reason is that in the previous reports, the Census 2010 data were aggregated by zip code; the current report uses aggregation by census blocks.)

The American Community Survey<sup>215</sup> is a survey conducted by the U.S. Census Bureau each month by mail, telephone, and face-to-face interviews. It covers many different topics, including income, language, education, employment, and housing. The ACS data are available by census tract. Arizona is divided into about 1,500 census tracts, with an average of about 4,200 people in each. The ACS data for the Gila Region were calculated by aggregating over the census tracts that are wholly or partially contained in the region. The data from partial census tracts were apportioned according to the percentage of the 2010 Census population in that tract living inside the Gila Region. The most recent and most reliable ACS data are averaged over the past five years; those are the data included in this report. They are based on surveys conducted from 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 estimates.

#### **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:

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

#### School District 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) and by regional portions of districts (e.g., the sum all students in special education preschool in a particular school district in the region) as well as by the county and state. Since ADE school districts do not follow FTF regional boundaries, district data may not represent the school district as a whole but rather the portion of that district which falls within a given region. School districts that straddle regional boundaries can be identified in Figure 11. For these districts, only the data for schools falling within regional boundaries was included in the district calculation. Data for charter schools were aggregated to a single number for all charter school located within a given region.

## **Child Care Capacity Calculations**

One key indicator used in this report is the overall childcare and early education capacity in the region. This measure was calculated by summing the childcare and early education slots available in the region. However, some child care and early education providers may appear in multiple data source (e.g., a provider may be listed with both Quality First and the Child Care Resource and Referral guide). To avoid duplication of providers, a table with exclusive columns proceeding from left to right was created. Since high quality early education is a priority in the region, the number and capacity of Quality First providers has been included as the first category of provider. Each column from left to right excludes any provider already accounted for in a preceding column. Thus, the Head Start column counts all Head Start centers that are not Quality First providers (since all Quality First-enrolled Head Starts were counted in the Quality First column). The Public School provider column similarly excludes all Head Start centers operating in public schools and all Quality First-enrolled public school early care

programs. The Other Child Care provider column provides the balance of child care and preschool providers that are listed in the Child Care Resource and Referral (CCRR) guide that are not Quality First providers, Head Start centers, or Public School providers. Unlicensed or unregulated care providers could not be included in calculations of child care capacity as information on the location and capacity of these providers is not collected in a systematic way at a county or state level.

Child care and early education sites were assigned to regions by loading them into a GIS. Locations were determined using latitude and longitude pairs where available or addresses. Locations for tribal and rural communities where addresses may be less than accurate were corrected using satellite imagery and local knowledge. For centers from the CCRR dataset, centers were located through address geocoding using the Google Maps platform. Once the centers were loaded in the GIS, they were assigned to region and sub-region using the ArcGIS Identity tool and a set of sub-regional shapefiles, regional shapefiles, and county shapefiles. These centers were then summed by region, sub-region, county, and state.

## **Parent Interviews**

Fifty-six interviews were conducted with parents (n=50) of children under the age of six, and grandparents who were caring for their grandchildren (n=11), living in or near the communities of Globe, Miami and Payson, Arizona. These interviews took place in July and September 2016, at Head Start Centers, preschools, child care centers, and community events in those communities. The goal of the interviews was to gather input from parents on the availability, quality and use of child care, health care and dental care for their children in the communities in which they lived. In addition, perspectives were gathered on other resources available to young children and families, as well as their experiences raising young children in their communities. Interviews lasted between 10 and 45 minutes depending on the time parents and grandparents had available to participate, but most interviews were in the 10 to 20 minute range. Participants were given First Things First bags with a book and First Things First information and branded items, such as outlet covers or infant onesies. Parent and grandparent responses were recorded on paper, responses per interview site were later typed and saved, then summaries per topic area were created incorporating common responses and themes per site. Results of these interviews were incorporated throughout this report.

## **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 Gila Regional Partnership Council has identified the following topics as priority areas: early education and health (particularly in relation to children with special needs) and early literacy.

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 June 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 Gila Region Data Interpretation Session was held in Roosevelt on September 16, 2016 and included invited community members as well as the members of the Regional Partnership Council and the Regional Director. Feedback from

participating session members are included as key informant citations within the report, as appropriate.

## Family and Community Survey 2012 Survey Methodology

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>xxx</sup>. Survey items explored multiple facets of parenting. The FTF Family and Community Survey had six major areas of inquiry:

- Early childhood development
- Developmentally appropriate child behavior
- Child care and sources of parenting advice and support
- Family literacy activities
- Perceptions of early childhood services
- Perceptions of early childhood policies

A total of 3,708 parents with children under six (FTF's target population) responded to the 2012 survey. The majority of respondents (83%) were the child's parent. The remaining respondents were grandparents (13%) or other relatives (4%). In the Gila Region, 90 parents participated in the survey.

The sample data were weighted so that the sample would match the population of the state on four characteristics: Family income, Educational attainment, Sex, and Race-ethnicity. Data was weighted at both the statewide level to arrive at the Arizona results and at the regional level to arrive at the regional results. Please note that regional estimates are necessarily less precise than the state estimates; i.e. small differences observed might easily be due to sampling variability.

## **Oral Health Survey Methodology**

The Healthy Smiles Healthy Bodies Survey was designed to obtain information on the prevalence and severity of tooth decay among Arizona's kindergarten children. In addition, the survey collected information on behavioral and demographic characteristics associated with this condition. Healthy Smiles Healthy Bodies included the following primary components – (1) a dental screening and (2) an optional parent/caregiver questionnaire. During the 2014–2015 school year, Healthy Smiles Healthy Bodies collected information from children at 84 non-reservation district and charter schools throughout Arizona. A total of 3,630 kindergarten children in Arizona received a dental screening. In the Gila Region, 173 children received a dental screening.

xxx CIVITAS Initiative, ZERO TO THREE, and BRIO Corporation, Researched by DYG, Inc. 2000. What Grown-ups Understand About Child Development: A National Benchmark Survey. Online, INTERNET, 06/20/02. http://www.civitasinitiative.com/html/read/surveypdf/survey\_public.htm

xxxi Using another funding source, ADHS expanded data collection to include 3<sup>rd</sup> grade children but that information is not included in this report.

xxxii Schools serving children with special needs and schools located in tribal communities were excluded.

## Sampling

Healthy Smiles Healthy Bodies sampled children in kindergarten and third grade. District and charter elementary schools with at least 20 children in kindergarten were included in the sampling frame. The following were excluded from the sampling frame: (1) alternative, detention, and state schools for the deaf and the blind plus (2) schools located in tribal communities (based on the Arizona Department of Health Services list of tribal communities). To ensure a representative sample from every county and FTF region, the sampling frame was initially stratified by county. Where a county included more than one FTF region (Maricopa and Pima), the sampling frame was further stratified by FTF region. This resulted in 21 sampling strata; 13 county-level strata, 2 FTF strata within Pima County, and 6 FTF strata within Maricopa County. Within each stratum, schools were ordered by their National School Lunch Program (NSLP) participation rate. A systematic probability proportional to size sampling scheme was used to select a sample of five schools per stratum. xxxiii Three counties (Apache, Greenlee, and La Paz) had fewer than five schools in the sampling frame. For these counties, all schools in the sampling frame were asked to participate. If a selected school did not have kindergarten or third grade, the appropriate feeder school was added to the sample. A systematic sampling scheme was used to select 99 schools. Of these, five did not have kindergarten or third grade so five feeder schools were added to the sample resulting in 104 schools representing 99 sampling intervals, of which 84 agreed to participate.

## **Survey Limitations**

Although the original sample was representative of the state, not all schools participated, which may bias the results. The percentage of children eligible for the NSLP was 58% for schools in the sampling frame but was 72% for schools that participated, suggesting that lower income schools were more likely to participate. Given that lower income children have more disease; this survey may overestimate the prevalence of disease in the non-tribal communities in the state. Another limitation was the exclusion of tribal communities resulting in small sample sizes for the American Indian/Alaska Native population.

The parent/caregiver questionnaire was optional and was returned for only 44% (N=1,583) of the children screened. Because of this, information obtained from the questionnaire may not be representative of the state. In addition, the information was self-reported and may be affected by both recall and social desirability bias. Because of small sample sizes, caution should be taken when interpreting results at the regional and county level.

## **Coordination and Collaboration Survey Methods**

System partners in 18 First Things First county-based regions were asked by First Things First to participate in the Coordination and Collaboration Survey in an effort to learn more about how system partners view their role in the region's early childhood system and to what extent they collaborate and coordinate with other system partners. Ten regions elected to conduct region-specific surveys including, Cochise, Coconino, Gila, Graham/Greenlee, La Paz Mohave, Navajo Apache, Pinal, Santa

xxxiii Prohability proportional to size samplina: a samplina technique where the probability that a particular school will be chosen in the sample is proportional to the enrollment size of the school

Cruz, Yavapai, and Yuma. Additionally, the six FTF regions in Maricopa County (i.e., Phoenix North, Phoenix South, East Maricopa, Northwest Maricopa, Southeast Maricopa, and Southwest Maricopa), and the two FTF regions in Pima County (Pima North and Pima South), elected to conduct combined county-wide surveys. Partners located on tribal lands will be surveyed at a later date after tribal approvals are requested and received.

FTF regional staff identified potential respondents of the survey. Each region was asked to determine who (across the categories listed below) the early childhood system stakeholders were in their communities that would be able to speak to their experience in the system. If there were no stakeholders representing a category, it was acceptable to not have representation from that category. Surveys on tribal lands were not conducted because tribal approvals for this survey have not yet been requested. Thus, the list of possible respondents was not a systematic or exhaustive list of potential respondents, and the pool of system partners who were invited to participate is not necessarily comparable across different regions.

## Possible stakeholder areas:

- Potential Categories
- Higher Education
- K-12 Education
- Community Family Support Programs
- Public/Community Health Programs
- Child Care/Early Learning/Head Start programs
- Professional Development
- State/City/County Governments
- Public Library
- Philanthropy/Foundations
- Faith Based Organizations
- Military
- Coalition/Networking groups (including Read On)
- Community Service Groups
- FTF Grant Partner
- Other

Prospective participants received an email invitation to participate from the First Things First Regional Directors in October of 2016 and given three weeks to respond. Potential respondents were also contacted to remind them about the participation either via email and/or phone call.

Responses were collected via Survey Monkey. Data were then cleaned and compiled by region by the First Things First Evaluation team for inclusion in the report.

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